

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

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SEP 28 2017

Ref: 8P-AR

Nancy E. Vehr Administrator, Air Quality Division Wyoming Department of Environmental Quality 200 West 17th Street, Third Floor Chevenne, Wyoming 82002

Re: Fourth Round Title V Program Review – Final Report

Dear Ms. Vehr:

Enclosed is our fourth round program review final report for Wyoming's Clean Air Act title V permitting program. This report incorporates comments submitted by your office on the draft report. The objective of the fourth round title V program review was to follow up on issues raised during the third round program review, identify good practices that other agencies can learn from, document any areas needing improvement, and learn how the EPA can help improve state and local title V programs and expedite permitting. We greatly appreciate the cooperation of your office in the preparation of this report.

If you have any questions concerning the enclosed report, please contact me at (303) 312-6936 or your staff may contact Donald Law, of my staff, at (303) 312-7015.

Sincerely.

Monica S. Morales
Director, Air Program

Office of Partnerships and Regulatory Assistance

Enclosure

cc: Lori Bocchino, Title V Program Manager

Air Quality Division, Wyoming Department of Environmental Quality

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Wyoming Department of Environmental Quality Air Quality Division Title V Program Review

Conducted by

United States Environmental Protection Agency Region 8

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Executive Summary

In August 2017, the United States Environmental Protection Agency (EPA) conducted the fourth round review of the Wyoming Department of Environmental Quality Air Quality Division's (WYAQD) Clean Air Act title V operating permits program. This review consisted of a conference call with WYAQD as well as document review. The first round program review was conducted in fiscal year 2004. The EPA issued the final report for the first round in September 2005. The second round program review was conducted in fiscal year 2008. The EPA issued the final report for the second round in September 2008. The third round program review was conducted in fiscal year 2011. The EPA issued the final report for the second round in September 2011. The fourth round program review (like the previous reviews) consisted of a discussion of WYAQD's responses to the program evaluation questionnaire and fiscal tracking questionnaire.

The goal of the fourth round review was to examine any concerns raised by WYAQD or the EPA in the prior evaluation, to determine how any unaddressed concerns might be addressed, to identify any good practices developed by WYAQD that may benefit other state and local title V permitting authorities and the EPA, document any areas needing improvement and learn what assistance the EPA can provide.

EPA Concerns from the Third Round Review:

The EPA did not have any listed concerns in the third round, but did list several areas for improvement. WYAQD has addressed many of these areas in the adoption of a standardized "Engineer's Notebook" used to prepare title V permits. This notebook is discussed in "Follow-up to Third Round Review." See below for details.

EPA and State Concerns from the Fourth Round Review:

The EPA has no new concerns. The WYAQD's own concerns may be found in "Fourth Round Review's Findings and Comments" below.

Conclusions:

WYAQD has provided all of the necessary information to the EPA during this review and has addressed issues raised by the EPA. WYAQD's field experience and knowledge of air permitting has assisted the EPA in understanding the challenges faced by the state. No new issues or concerns were noted during this review.

Introduction

The EPA conducted this program review as part of its obligation to oversee and review state programs that have been approved by the EPA, and in response to recommendations from an audit of the EPA's operating permits program conducted in July 2002 by the Office of Inspector General.

The state of Wyoming operates a fully EPA-approved program that allows it to implement the requirements of title V of the Clean Air Act (CAA), including the issuance of operating permits. The EPA has a statutory responsibility to oversee the programs it has approved by performing oversight duties, including occasional program reviews. Such responsibilities include overseeing the activities of the state program to ensure that local, regional and national environmental goals and objectives meet minimum requirements outlined by the federal regulation.

Objective of the Program Review

Following the completion of the first through third round reviews for states in Region 8, the EPA nationally committed to a fourth round of reviews. While the questionnaire used for the first round review was developed by a "national workgroup" for national consistency, the subsequent review questionnaires were developed by the Regions to emphasize regional priorities that were identified during the first round reviews.

Region 8 consulted with other Regions about the approach and format of the questionnaire and the extent of the follow-up review of state programs. Region 8 concluded that the follow-up reviews do not need to be as extensive as the first round reviews, but should build on the findings and recommendations of the first round review.

The main objectives of the fourth round reviews are to conduct a follow-up to the first and second round reviews by: 1) ensuring that areas of concern identified by the EPA during previous rounds have been addressed or are being addressed satisfactorily; 2) ensuring that the WYAQD concerns have also been addressed or are being addressed to WYAQD's satisfaction; 3) identifying and documenting additional good practices that can benefit other state and local title V permitting authorities and the EPA; 4) identifying and documenting any areas of concern that need improvement; and 5) getting feedback on how the EPA can be of service to the permitting authorities.

Program Review Process

In August 2017, the EPA conducted the fourth round review of WYAQD's title V operating permits program, consisting of a conference call with WYAQD and document review. Donald Law, Environmental Engineer and Stuart Siffring, Environmental Engineer, participated from Region 8. Lori Bocchino, Title V Permit Program Manager and Melissa Meares, Operating Permit Program Supervisor participated for WYAQD. Previous final reports were issued in September 2005, September 2008, and September 2011.

The format of the 2017 fourth round review differs slightly from the previous rounds. The EPA provided a standard title V questionnaire (Attachment 1) and fiscal tracking questionnaire

(Attachment 2) to WYAQD, as has been done in the previous reviews, but with some revisions. Also, the fourth round review included a conference call rather than an on-site visit.

As mentioned above, a separate questionnaire was provided by the EPA to WYAQD for the title V fee audit ("State/local Title V Program Fiscal Tracking Evaluation Document"). The purpose of the fee audit is to determine whether the following are satisfied:

- Sources are being billed in accordance with fee requirements and are paying the required fees;
- Division of expenses is identified by WYAQD between title V and non-title V programs;
- Features are integrated into WYAQD's accounting/financial management system which will identify title V revenue and expenditures separate from other funding, and which certify the disposition of title V funds;
- title V fees collected from sources are used by WYAQD to pay for the entire title V program; and
- No such fees are used as CAA Section 105 grant matching.

As also mentioned above, the EPA finds that WYAQD has substantially addressed the improvement suggestions identified by the EPA during the third round review. These are discussed in "Follow-up to Third Round Review" below. There were no issues pertaining specifically to the fee audit.

Program Review Procedure

The EPA sent the fourth round program review questionnaire and the title V fiscal tracking questionnaire to WYAQD on May 23, 2017. WYAQD submitted an electronic copy of the completed questionnaires to the EPA on June 21, 2017. WYAQD's response is included as Attachment 1 to this report. The response to the fiscal tracking questionnaire is included as Attachments 2 and 3 to this report.

The EPA then prepared a draft title V program review report and emailed it to WYAQD on 09/26/2017 for review. WYAQD responded with comments on 09/27/2017. The EPA then made appropriate edits to the report to incorporate the comments. The final report was sent to WYAQD on 09/28/2017.

The main objectives of conducting on-going reviews of states' programs are twofold. First, the EPA seeks to continue to effectively perform its regulatory oversight obligation under the Clean Air Act. Second, the EPA hopes such periodic reviews will improve communication and the relationship between the agency and WYAQD and thus continue to improve the state's title V operating program.

Follow-up to Third Round Review

While the EPA had no stated concerns from the third round program review, there were numerous areas that the EPA listed as Areas of Improvement. They are as follows:

- Statement of Basis (SOB) identification of Prevention of Significant Deterioration (PSD) requirements/permits versus non PSD New Source Review (NSR) requirements/permits
- Source determination analysis
- Periodic monitoring rationales
- Environmental Justice (EJ)
- Compliance Assurance Monitoring (CAM) correlations for sources that show no correlation for the parameters analyzed
- Final copy of SOBs should be sent to the EPA with the final permit

WYAQD has addressed these areas as follows:

WYAQD has developed a standardized "Engineer's Notebook" for every title V facility. This notebook organizes all of the permit application and background needed to prepare each title V permit. It is hoped that as staff turnover occurs, this notebook will help to promote a thorough and accurate permit drafting process, eliminate redundant research from modifications and renewals and assure the preservation of essential information about each facility. The development of this notebook should assist WYAQD in specific source determinations for each facility, maintain a resource specific to each source to assist in verification of periodic monitoring rationales and catalog current and historic environmental justice issues related to the individual title V source.

Upon receipt of the Third Round Review report, WYAQD revised their standard practices to send a final copy of the SOB to EPA with each final permit.

Fourth Round Review's Findings and Comments

<u>Procedural changes in title V program</u>. The fourth round program review questionnaire asked whether any procedures in the title V program have changed (e.g., public participation, petitions, communication with the EPA) since the third round program review. WYAQD responded with the following remarks:

We have made several changes to our program over the last six years. These include:

- All permits are now peer reviewed prior to management review. This not only reduces bottlenecks at the management level as peer-reviewed draft permits are of a higher quality, but has enhanced the knowledge and capabilities of permit staff.
- Ongoing development and use of a standardized "Engineer's Notebook" SOP for every Title V facility. The Notebook organizes all of the permit application and background information used to prepare each Title V permit. It promotes thorough and accurate drafting of permits, eliminates

redundant research from modifications and renewals, optimizes the accessibility of information during peer and manager reviews of draft permit actions, and assures the preservation of essential information about Title V facilities. It helps promote continuity and makes information quickly accessible as it is organized consistently from facility to facility.

- While public notices continue to be placed in newspapers, they are also posted on the Wyoming DEQ website, along with the draft permit and statement of basis.
- Communications with EPA have transitioned to electronic, via email, for the most part.
- Permit application forms have been updated multiple times; first to include $PM_{2.5}$ and greenhouse gases and to improve clarity throughout the forms; then more recently to be consistent with the Division's electronic systems (IMPACT).
- Wyoming launched a new web-based system for regulated sources in the state to submit permit applications, compliance reports, and emission inventories (called IMPACT). Title V sources now have the option to use IMPACT (which is CROMERR compliant) to submit permit applications, or to use paper forms.
- We recently began use of a "Permit Basis Date" approach. Wyoming has a rigorous construction permit program that results in frequent changes to applicable requirements at some facilities. This meant that, in some cases, Title V facilities would have changes to applicable requirements while the Title V permit was in final internal review or on public/EPA notice, resulting in having to pull back the permit and revise it. Sometimes this turned into an endless re-do loop, making it very difficult to issue the Title V permit and creating a backlog. The Permit Basis Date is a "line in the sand" the date representing a delineation between what is evaluated and included in the permit and what will be addressed in a subsequent operating permit modification, reopening, or renewal. All emission sources installed as of the Permit Basis Date, as well as those sources authorized by a construction permit but not yet started up by the Permit Basis Date, will be included in the operating permit. The operating permit will include all requirements that apply on the Permit Basis Date, as well as those requirements that have been identified as of the Permit Basis Date that will become effective during the operating permit term. Using this approach will significantly help efforts to reduce our renewal backlog and get more current Title V permits to Wyoming facilities.

What the state believes it is doing especially well. The fourth round questionnaire asked what the state thinks it is doing especially well in the title V program. WYAQD responded with the following remarks:

"We place a strong emphasis on preparing permits that are effective tools to assist permittees in meeting all their compliance obligations by being clearly written and well-organized."

"Our Engineer's Notebooks are highly effective tools. They are a clearly organized compilation of everything the Agency needs to know to determine applicable requirements for a facility and to provide a thorough background for Title V permits. They include the permit application, all

construction permits issued, and notes from the permit writer. Because Wyoming has a rigorous construction permit program, many Title V facilities have multiple interrelated construction permit actions that may apply to a facility. Part of the Notebook uses a chain-of-custody technique to track individual construction permit conditions, determine which ones still apply, and cross-reference the resulting Title V permit conditions. The Notebooks are a resource not only for Title V permitting, but for construction permitting, compliance, and monitoring."

<u>Issues affecting the title V program</u>. The fourth round questionnaire also asked if there are any issues affecting the title V program that the WYAQD considers particularly important. WYAQD responded with the following remarks:

- Application backlog. We are taking measures to address the causes of the backlog that are within our control. We have professional development plans for each permit writer that describe their interests and skills, with ideas to build those in ways that also improve the effectiveness of the permit program. This will help our efforts to train and retain experienced staff. The Air Quality Division must also continually shift and balance our staff resources with demands for all elements of Title V facility regulation and oversight; at times, this might mean an increased focus on facility data management (for example) which temporarily takes some time away from permitting or other functions. We hope to be able to focus resources on our backlog for the next few years. We are also proceeding with the Permit Basis Date approach as a tool to manage frequent construction permit actions. Some elements that contribute to the backlog are outside of our control, however. This includes increasing regulatory complexity at a federal level, and regulatory uncertainty due to Regional Haze litigation or other similar unresolved issues.
- Trying to determine how newer federal standards apply to facilities is typically laborious and time-consuming as the standards are incredibly complicated. A testament to this is the multiple-page, very large spreadsheets that EPA has provided to assist sources to navigate the engine MACT (ZZZZ). While these spreadsheets are helpful (as long as they are up-to-date!), they give some indication of how difficult it is to clarify what applies to which units or activities. Any efforts EPA can make to simplify rule structure in upcoming rules and rule revisions would be greatly appreciated. Tables included in the rules themselves, such as Table 2 (Stack Emission Limits) in NSPS Part 60 Subpart OOO, can help clarify what applies to which units.
- Monitoring of insignificant sources. Due to a very rigorous new source review program in Wyoming as well as state rules which can apply to very small sources, many facilities have very small, uncontrolled sources with emission limits. Wyoming's Title V program has not typically required monitoring for such sources in the past due to the relatively high cost of monitoring something that has a very low risk of exceeding its limit or creating an impact on the environment. In response to petitions in other states, EPA has been pushing to include more and more monitoring for such sources. Such monitoring is, in our view, an inefficient use of resources as well as an unnecessary source of contention between the permit program and permit applicants. We could provide examples if it would be helpful.
- There has been a general trend of increasing complexity in Air programs over the years. This has not been accompanied by a commensurate increase in resources available to state agencies to manage those programs. Efforts to use electronic systems to make staff more efficient have

succeeded, but not nearly enough to compensate for the significant additional burdens. Simultaneously, Title V sources have decreased their emissions – resulting in reduced fee income to permit authorities. While we have been able to continue to meet our programmatic obligations with our fee structure, federal regulatory complexity is making that more difficult. The regulatory focus should be on the most critical issues to air quality, not just more of everything.

<u>Most important issues</u>. The fourth round questionnaire asked which issues the WYAQD would rate as the most important. WYAQD responded that the permit backlog is the most significant, though all the listed issues contribute to that backlog.

<u>EPA policies or regulatory issues causing concern</u>. The fourth round questionnaire asked if there are any EPA policies or regulatory issues that are causing concern. WYAQD expressed appreciation for the EPA's efforts to reduce the Wyoming State Implementation Plan (SIP) backlog. In addition, WYAQD cited the following three specific areas of concern:

"Something we have noticed in recent years is causing frustration. We have worked cooperatively with the Region 8 office for a long time; we have a relationship with Region 8 staff who have gained an appreciation and some understanding of on-the-ground realities in the states they work with. They have been increasingly reluctant to act without headquarters involvement in matters from large to small, and getting anything out of headquarters seems to take a very long time. While we understand the desire to be consistent and review everything for every possible link to any national initiatives or litigation, this has gotten to the point where we are unable to get issues addressed and questions answered in a timely manner. We need the flow of information and associated decision-making to be restored so that we can move ahead with the business of implementing our Clean Air Act obligations and addressing the needs of permittees."

"A more specific regulatory issue of concern is the SO₂ Data Requirements Rule (DRR). Wyoming Governor Matt Mead submitted a recommendation in May 2011 that all counties in Wyoming be designated as "unclassifiable." EPA has deferred action on this and instead required additional information, which has been submitted to EPA. This included modeling and monitoring data, all of which support designations of Attainment. This data was obtained at a significant cost to Wyoming sources when there was no evidence of any attainment problems. We are also very concerned about using models, which by their nature include numerous assumptions and simplification of real world processes, to make attainment determinations. While we have complied with the DRR, we do not believe this should be a model for the future. We do request that EPA accept Wyoming's recommendations promptly so that we can proceed with certainty on permitting the affected sources, all of which have active Title V permit applications in our backlog."

"In general, the onslaught of new and revised federal standards, as well as related stays and lawsuits, causes a great deal of burden and uncertainty for the program. Over a third of the Title V permits issued in Wyoming since the last program review were reopenings. MACT and NSPS standards as currently written are difficult to address in an operating permit, and are even more difficult for sources to understand. It is impossible to read a MACT standard without having a number of different documents available and open at the same time. The cross references within and outside the subpart, along with specific definitions and terminology that may change in

different subparts, seem unnecessarily confusing. Trying to determine what a facility must do to comply with the standards and give companies some kind of "road map" via the permit is increasingly difficult, if not impossible. If permit writers, who deal with applicable requirements such as MACT standards as a part of their daily job, cannot navigate the standards, how can we expect sources or compliance inspectors to do so?"

What EPA can do to help. The fourth round questionnaire asked how the EPA can help with these issues. WYAQD had the following specific suggestions:

"We would greatly appreciate more timely response and assistance when we come forward with questions, or are involved in cooperative efforts with EPA. As mentioned in our answer to the last question, prompt approval of Wyoming's SO₂ designation recommendation is requested. Timely EPA guidance and direction specifically for permit writing would be helpful whenever there is a stay or vacatur of standards. Preparing flowcharts and spreadsheets for MACT standards, similar to that prepared for Part 63 Subpart ZZZZ, is very useful."

"We suggest that EPA consider a different approach be used to address how the NESHAP General Provisions apply in each MACT standard. The General Provisions, while they have been revised, were promulgated in 1994. Much has changed since then. While the General Provisions applicability tables included in each MACT standard were adequate several years ago, each MACT standard now has so much information on monitoring, notification, recordkeeping, and reporting that it is nearly impossible to understand how those requirements in the subpart mesh with the associated requirements in the General Provisions. We recommend, in some cases at least, to not use some sections of the General Provisions at all – and put ALL such requirements in the individual subpart itself."

<u>Permit issuance timeliness questions</u>. The fourth round questionnaire asked the questions below about timeliness of permit issuance. These questions are followed by WYAQD's responses.

- 1. Since the third round program review, what percent of title V initial permits have you issued within the regulatory timeframe specified in 40 CFR 70.7(a)(2)? WYAQD responded with the following remarks:
 - "Between 4/1/2011 and 5/31/17, the Division issued 29 initial permits. 18 of these permits were issued within 18 months for a percentage of 62%."
- 2. Since the third round program review, what percent of title V significant permit modifications have you issued within the regulatory timeframe specified in 40 CFR 70.7(a)(2) and (e)(4)(ii)? WYAQD responded with the following remarks:
 - "Between 4/1/2011 and 5/31/17, the Division issued 25 significant permit modifications. 19 permits, or 76 percent, were issued within 18 months; and 14 permits, or 56 percent, were issued within 9 months."
 - "We also want to acknowledge the sizable workload associated with permit reopenings. Because reopened permits must also incorporate all other changes to the facility, in

addition to the new or revised applicable rule that triggered the reopening, they represent the same type of workload as a significant permit modification. Between 4/1/2011 and 5/31/17, the Division issued 75 permit reopenings – 3 times as many as significant modifications. 44 permits, or 59 percent, were issued within 18 months of rule promulgation."

3. What percent of title V permits expire before they can be renewed? WYAQD responded with the following remarks:

"Between 4/1/2011 and 5/31/17, the Division issued 84 renewed permits. 79 permits, or 94%, expired before they were renewed."

4. For those permits that could not be renewed before they expired, what are the reasons they could not be renewed prior to their expiration? WYAQD responded with the following remarks:

"Complete renewal applications are due no earlier than 18 months and no later than 6 months prior to permit expiration. Most applicants elect to submit their renewal applications 6 to 9 months prior to expiration. There is a required 30 day public comment period and a 45 day EPA review period associated with the renewal of the permit. Allowing a couple of weeks turnaround time to arrange for public notice and for preparation and distribution of draft and proposed permits, this means that the renewed permit must be written within 3 to 6 months of application submittal – including negotiation of periodic and compliance assurance monitoring, and a response to comments, if necessary. Each permit often also requires the addition of new NESHAP/NSPS requirements, inclusion of new permits or waivers issued recently, and must be updated to include the latest general permit language. We don't believe it's too surprising that most permits expire before they can be renewed. "

5. Have unresolved violations created any delay in issuing title V renewals? WYAQD responded with the following remarks:

"Yes. We have delayed the issuance of renewals if enforcement negotiations are likely to result in significant changes to emission control systems and associated Chapter 6, Section 2 (construction) permits or modifications, or if the applicant requests a delay pending resolution."

6. Have permittees requested a hold in renewal for any reason? WYAQD responded with the following remarks:

"Yes. When there are unresolved regulatory issues, such as Regional Haze or other rules in litigation, companies often request a hold. This can also be true of settlement negotiations. Additionally, when the issuance of a Chapter 6, Section 2 permit is imminent (on or nearing public notice) or that action will result in significant changes in applicable requirements for existing equipment, we have delayed work on the permit renewal."

Based on these questions and responses, the EPA finds no issues or concerns with timeliness of title V permit issuance in Wyoming.

Compliance Assurance Monitoring (CAM). The fourth round questionnaire asked whether CAM requirements (40 CFR part 64) have slowed the renewal process or have otherwise caused difficulties. WYAQD responded that in some cases, CAM still presents difficulty. WYAQD expressed that CAM training is inadequate in that it does not typically contain real-world examples and does not address situations that do not fit into the standard situations. Unique sources continue to present difficulties when attempting to develop appropriate monitoring plans and to establish meaningful parameters.

Improvements that could be described as best practices. The fourth round questionnaire asked what improvements the state believes it has made to the management of the title V permit program, since the third round review, that could be described as best practices and could be of interest to other states. The questionnaire also asked what improvements the state plans to make within the next five years. WYAQD responded that in addition to the procedural changes described in their questionnaire (peer review, the Engineer's Notebook, and electronic submittals and public noticing), they have done the following:

- Requesting a pre-application meeting with applicants with especially complex facilities and/or regulatory issues. This helps to identify and discuss concerns early in the process as companies prepare their application.
- Conducting more detailed completeness reviews. We have found this is the best time to promptly get needed information from applicants; once the completeness determination has been made, there is less urgency for applicants to respond to our requests.
- In renewal reminder letters (which we have always sent out) we are now clearly highlighting a date 9 months prior to permit expiration as the date we expect a renewal application to be submitted, to allow time for a thorough completeness review on our part, and preparation of additional information as needed on the applicant's part. The letter encourages submission even earlier, at 12 months prior to expiration. (Submission of a complete application remains due at 6 months prior to expiration in order to grant the application shield; the letter language is to strongly encourage earlier submission.)

<u>Public participation</u>. The fourth round questionnaire asked what forms of news media are used to maximize public participation, how public participation could be improved, whether a mailing list is used, and whether the state has a public participation policy.

WYAQD responded that newspaper notices in the largest paper in the town or county related to the source are used in addition to web page listings on WYAQD's website. WYAQD does not use a public-requested mailing list. One was used in the past, but a poll of the users determined that it was no longer a desired method. In addition, WYAQD does utilize a title V listserve for the public to receive emailed title V notices.

<u>Petitions</u>. The fourth round questionnaire asked what effect petitions have had on the program. WYAOD responded that the EPA has received one petition thus far and it was withdrawn.

<u>EPA relationship</u>. The fourth round questionnaire asked if there is any EPA title V policy that is causing problems or confusion. WYAQD responded as follows:

"Many MACT standards have been subject to frequent change. As a result, we had to eliminate our efforts to customize conditions related to MACT standards to individual facilities, because those customized conditions resulted in a need to reopen permits every time a MACT standard was revised. This pushed the work of determining how a MACT standard applied to a facility and what parts of the rule applied to which operations/equipment at the site down to the compliance inspector and the permittee. This was not a good outcome, but the only way we could avoid an unworkable backlog in permit reopenings."

"Our Title V permits now include only a minimal amount of information about MACT. We determine which MACT standards apply, and when the standard applies to clearly defined emission units, we do specify the units at the facility that are affected sources. As an example:

SUBPART YYYY REQUIREMENTS [40 CFR 63 Subparts A and YYYY; and WAQSR Ch 5, Sec 3]"

"The permittee shall meet all applicable requirements of 40 CFR 63 Subparts A and YYYY; and WAQSR Ch 5, Sec 3 as they apply to any existing, new, or reconstructed stationary combustion turbine located at a major source of HAP emissions as described in \$63.6090, including (here we would list the turbines at the site subject to YYYY)."

"The permittee shall assess compliance with 40 CFR 63 Subpart YYYY by conducting any applicable testing and monitoring required by $\S 63.6115$ through 63.6140, and by reviewing any records required by $\S 63.6155$ and 63.6160."

"Additionally, in staff meetings, we regularly share experiences with determining MACT applicability and how MACT requirements intersect with construction permits requirements, as well as how to prepare associated Title V permit conditions."

<u>Permit reviews</u>. The EPA attempts to review all WYAQD title V permit actions, not just a sampling of permit actions. This includes all types of title V permit actions: initial permits, renewals, significant permit modifications, minor permit modifications, administrative amendments and reopenings for cause. Many of these actions can involve substantial changes to the permits, which is allowed under WYAQD's EPA-approved operating permit program regulations.

Regarding permit renewals, since many of the permits are now undergoing the third or fourth renewal, the EPA is quite familiar with the permits, having seen them multiple times already. The permit changes upon renewal tend to be minimal, since in most instances the WYAQD's title V program has attempted to keep the permits up-to-date since the last renewal.

EPA occasionally submits comments on draft or proposed title V permits; however, the comments are usually about relatively minor concerns, such as typographical errors or explanations for permitting decisions, or questions to facilitate better EPA understanding of the permits or statements-of-basis. The comments have usually been quickly resolved. The EPA appreciates the WYAQD's excellent cooperation in these matters.

Training

WYAQD has recently enjoyed stability among the permit writers, allowing the state to ensure trained and seasoned personnel implement the program. Many of the permit writers have several years of experience in the title V program. The WYAQD did offer the following suggestions for ongoing training needs.

"At this point in the process, worthwhile training for permit writing could focus on preparing enforceable permit language (both for NSR and Title V) and wading through new MACT and NSPS standards. Any tools to assist with determining applicability of both NSPS and NESHAP standards are helpful. An opportunity or mechanism for state and tribal permit authorities to share and discuss challenging CAM situations would be very helpful."

"I also request that some kind of attention be paid to the definition of Responsible Official (RO) and some kind of refresher material be put out for permittees. We continually find ourselves explaining both the definition of an RO and some of the things that only a person meeting the criteria for an RO can do – even after 20 years. It also seems like there are types of entities that do not cleanly fit into the current Part 70 definition, and we struggle with how to handle those... there are various forms of partnerships that look more like the traditional corporation, for example. Municipalities in our state often have only one elected official (usually the mayor) that can sign for landfills – and it is unworkable for there to not be an alternate allowed to sign in the event the mayor is not available."

Fee Audit

A fee audit questionnaire titled "Fiscal Tracking Evaluation Document" (unchanged from the first and second round) was submitted to the WYAQD during the fourth round to fill out, but no on-site fee audit was performed. WYAQD's responses to the fee audit questions are included as Attachment 2 to this report. Supporting documents are included as Attachment 3.

WYAQD has not expressed any shortfalls or budgeting difficulties related to its title V program and fee structure. The budgeting is established on a two-year schedule with the next one to be established for fiscal years 19/20.

The EPA has examined WYAQD's responses to the fee audit questions and does not have any concerns.

Implementation Agreement

There is no Implementation Agreement between the WYAQD and the EPA for the title V permitting program.

Conclusion

In conclusion, WYAQD implements an effective title V program that continues to evolve as challenges arise. WYAQD continues to communicate with the EPA staff to address issues in proposed permits. The title V fee review demonstrates WYAQD's ability to continue to operate a program that meets the fee requirements of Part 70. WYAQD has provided all of the necessary information to the EPA during these reviews and has addressed issues raised by the EPA. WYAQD's title V program continues to meet the requirements of the Part 70 regulations. No deficiencies were noted during this review.

ATTACHMENT 1: TITLE V FOURTH ROUND STATE PROGRAM REVIEW QUESTIONNAIRE AND WYAQD RESPONSES

Title V Fourth Round State Program Review Questionnaire Wyoming 2017

- I. General Program Review Questions and Responses
 - A. What has been done in response to EPA recommendations for improvements from the third round program review?
 - No issues of concern were identified during the third round review of Wyoming's Title V program.
 - B. What key EPA comments on individual Title V permits remain unresolved (EPA to determine this)? What is the State's position on these unresolved comments?

 We are not aware of any unresolved comments.
 - C. Have any procedures in Title V changed (e.g., public participation, petitions, communication with EPA) since the third round program review?
 - 1. If so, which ones?

We have made several changes to our program over the last six years. These include:

- All permits are now peer reviewed prior to management review. This not only reduces bottlenecks at the management level as peer-reviewed draft permits are of a higher quality, but has enhanced the knowledge and capabilities of permit staff.
- Ongoing development and use of a standardized "Engineer's Notebook" SOP for every
 Title V facility. The Notebook organizes all of the permit application and background
 information used to prepare each Title V permit. It promotes thorough and accurate
 drafting of permits, eliminates redundant research from modifications and renewals,
 optimizes the accessibility of information during peer and manager reviews of draft
 permit actions, and assures the preservation of essential information about Title V
 facilities. It helps promote continuity and makes information quickly accessible as it is
 organized consistently from facility to facility.
- While public notices continue to be placed in newspapers, they are also posted on the Wyoming DEQ website, along with the draft permit and statement of basis.
- Communications with EPA have transitioned to electronic, via email, for the most part.
- Permit application forms have been updated multiple times; first to include PM_{2.5} and greenhouse gases and to improve clarity throughout the forms; then more recently to be consistent with the Division's electronic systems (IMPACT).
- Wyoming launched a new web-based system for regulated sources in the state to submit permit applications, compliance reports, and emission inventories (called IMPACT).
 Title V sources now have the option to use IMPACT (which is CROMERR compliant) to submit permit applications, or to use paper forms.
- We recently began use of a "Permit Basis Date" approach. Wyoming has a rigorous construction permit program that results in frequent changes to applicable requirements

at some facilities. This meant that, in some cases, Title V facilities would have changes to applicable requirements while the Title V permit was in final internal review or on public/EPA notice, resulting in having to pull back the permit and revise it. Sometimes this turned into an endless re-do loop, making it very difficult to issue the Title V permit and creating a backlog. The Permit Basis Date is a "line in the sand" - the date representing a delineation between what is evaluated and included in the permit and what will be addressed in a subsequent operating permit modification, reopening, or renewal. All emission sources installed as of the Permit Basis Date, as well as those sources authorized by a construction permit but not yet started up by the Permit Basis Date, will be included in the operating permit. The operating permit will include all requirements that apply on the Permit Basis Date, as well as those requirements that have been identified as of the Permit Basis Date that will become effective during the operating permit term. Using this approach will significantly help efforts to reduce our renewal backlog and get more current Title V permits to Wyoming facilities.

D. What does the state think it's doing especially well in the Title V program?

We place a strong emphasis on preparing permits that are effective tools to assist permittees in meeting all their compliance obligations by being clearly written and wellorganized.

Our Engineer's Notebooks are highly effective tools. They are a clearly organized compilation of everything the Agency needs to know to determine applicable requirements for a facility and to provide a thorough background for Title V permits. They include the permit application, all construction permits issued, and notes from the permit writer. Because Wyoming has a rigorous construction permit program, many Title V facilities have multiple interrelated construction permit actions that may apply to a facility. Part of the Notebook uses a chain-of-custody technique to track individual construction permit conditions, determine which ones still apply, and cross-reference the resulting Title V permit conditions. The Notebooks are a resource not only for Title V permitting, but for construction permitting, compliance, and monitoring.

- E. Are there any issues affecting the Title V program in your state right now that you consider particularly important?
 - Application backlog. We are taking measures to address the causes of the backlog that are within our control. We have professional development plans for each permit writer that describe their interests and skills, with ideas to build those in ways that also improve the effectiveness of the permit program. This will help our efforts to train and retain experienced staff. The Air Quality Division must also continually shift and balance our staff resources with demands for all elements of Title V facility regulation and oversight; at times, this might mean an increased focus on facility data management (for example) which temporarily takes some time away from permitting or other functions. We hope to be able to focus resources on our backlog for the next few years. We are also proceeding with the Permit Basis Date approach as a tool to manage frequent construction permit actions. Some elements that contribute to the backlog are outside of our control, however. This includes increasing regulatory

complexity at a federal level, and regulatory uncertainty due to Regional Haze litigation or other similar unresolved issues.

- Irying to determine how newer federal standards apply to facilities is typically laborious and time-consuming as the standards are incredibly complicated. A testament to this is the multiple-page, very large spreadsheets that EPA has provided to assist sources to navigate the engine MACT (ZZZZ). While these spreadsheets are helpful (as long as they are up-to-date!), they give some indication of how difficult it is to clarify what applies to which units or activities. Any efforts EPA can make to simplify rule structure in upcoming rules and rule revisions would be greatly appreciated. Tables included in the rules themselves, such as Table 2 (Stack Emission Limits) in NSPS Part 60 Subpart OOO, can help clarify what applies to which units.
- Monitoring of insignificant sources. Due to a very rigorous new source review program in Wyoming as well as state rules which can apply to very small sources, many facilities have very small, uncontrolled sources with emission limits. Wyoming's Title V program has not typically required monitoring for such sources in the past due to the relatively high cost of monitoring something that has a very low risk of exceeding its limit or creating an impact on the environment. In response to petitions in other states, EPA has been pushing to include more and more monitoring for such sources. Such monitoring is, in our view, an inefficient use of resources as well as an unnecessary source of contention between the permit program and permit applicants. We could provide examples if it would be helpful.
- There has been a general trend of increasing complexity in Air programs over the years. This has not been accompanied by a commensurate increase in resources available to state agencies to manage those programs. Efforts to use electronic systems to make staff more efficient have succeeded, but not nearly enough to compensate for the significant additional burdens. Simultaneously, Title V sources have decreased their emissions resulting in reduced fee income to permit authorities. While we have been able to continue to meet our programmatic obligations with our fee structure, federal regulatory complexity is making that more difficult. The regulatory focus should be on the most critical issues to air quality, not just more of everything.
- Which one would you rate as the most important?
 The application backlog (however all of the above items contribute to making our backlog worse).
- 2. Are there any EPA policies or regulatory issues that are causing concern?

First, we would like to express appreciation for EPA's efforts to reduce our SIP backlog. Seeing progress on that has been great and promptly processed SIPs help us effectively regulate and permit Title V sources.

Something we have noticed in recent years is causing frustration. We have worked cooperatively with the Region 8 office for a long time; we have a relationship with Region 8 staff who have gained an appreciation and some understanding of on-the-ground realities in the states they work with. They have been increasingly reluctant to

act without headquarters involvement in matters from large to small, and getting anything out of headquarters seems to take a very long time. While we understand the desire to be consistent and review everything for every possible link to any national initiatives or litigation, this has gotten to the point where we are unable to get issues addressed and questions answered in a timely manner. We need the flow of information and associated decision-making to be restored so that we can move ahead with the business of implementing our Clean Air Act obligations and addressing the needs of permittees.

A more specific regulatory issue of concern is the SO₂ Data Requirements Rule (DRR). Wyoming Governor Matt Mead submitted a recommendation in May 2011 that all counties in Wyoming be designated as "unclassifiable." EPA has deferred action on this and instead required additional information, which has been submitted to EPA. This included modeling and monitoring data, all of which support designations of Attainment. This data was obtained at a significant cost to Wyoming sources when there was no evidence of any attainment problems. We are also very concerned about using models, which by their nature include numerous assumptions and simplification of real world processes, to make attainment determinations. While we have complied with the DRR, we do not believe this should be a model for the future. We do request that EPA accept Wyoming's recommendations promptly so that we can proceed with certainty on permitting the affected sources, all of which have active Title V permit applications in our backlog.

In general, the onslaught of new and revised federal standards, as well as related stays and lawsuits, causes a great deal of burden and uncertainty for the program. Over a third of the Title V permits issued in Wyoming since the last program review were reopenings. MACT and NSPS standards as currently written are difficult to address in an operating permit, and are even more difficult for sources to understand. It is impossible to read a MACT standard without having a number of different documents available and open at the same time. The cross references within and outside the subpart, along with specific definitions and terminology that may change in different subparts, seem unnecessarily confusing. Trying to determine what a facility must do to comply with the standards and give companies some kind of "road map" via the permit is increasingly difficult, if not impossible. If permit writers, who deal with applicable requirements such as MACT standards as a part of their daily job, cannot navigate the standards, how can we expect sources or compliance inspectors to do so?

3. How can EPA help?

We would greatly appreciate more timely response and assistance when we come forward with questions, or are involved in cooperative efforts with EPA. As mentioned in our answer to the last question, prompt approval of Wyoming's SO2 designation recommendation is requested. Timely EPA guidance and direction specifically for permit writing would be helpful whenever there is a stay or vacatur of standards. Preparing flowcharts and spreadsheets for MACT standards, similar to that prepared for Part 63 Subpart ZZZZ, is very useful.

We suggest that EPA consider a different approach be used to address how the NESHAP General Provisions apply in each MACT standard. The General Provisions, while they have been revised, were promulgated in 1994. Much has changed since then. While the General Provisions applicability tables included in each MACT standard were adequate several years ago, each MACT standard now has so much information on monitoring, notification, recordkeeping, and reporting that it is nearly impossible to understand how those requirements in the subpart mesh with the associated requirements in the General Provisions. We recommend, in some cases at least, to not use some sections of the General Provisions at all – and put ALL such requirements in the individual subpart itself.

II. Permit Issuance

- A. Since the third round program review, what percent of Title V initial permits have you issued within the regulatory timeframe specified in 40 CFR 70.7(a)(2)?
 - Between 4/1/2011 and 5/31/17, the Division issued 29 initial permits. 18 of these permits were issued within 18 months for a percentage of 62%.
- B. Since the third round program review, what percent of Title V significant permit modifications have you issued within the regulatory timeframe specified in 40 CFR 70.7(a)(2) and (e)(4)(ii)?

Between 4/1/2011 and 5/31/17, the Division issued 25 significant permit modifications. 19 permits, or 76 percent, were issued within 18 months; and 14 permits, or 56 percent, were issued within 9 months.

We also want to acknowledge the sizable workload associated with permit reopenings. Because reopened permits must also incorporate all other changes to the facility, in addition to the new or revised applicable rule that triggered the reopening, they represent the same type of workload as a significant permit modification. Between 4/1/2011 and 5/31/17, the Division issued 75 permit reopenings – 3 times as many as significant modifications. 44 permits, or 59 percent, were issued within 18 months of rule promulgation.

C. What percent of Title V permits expire before they can be renewed?

Between 4/1/2011 and 5/31/17, the Division issued 84 renewed permits. 79 permits, or 94%, expired before they were renewed.

1. For those permits that could not be renewed before they expired, what are the reasons they could not be renewed prior to their expiration?

Complete renewal applications are due no earlier than 18 months and no later than 6 months prior to permit expiration. Most applicants elect to submit their renewal applications 6 to 9 months prior to expiration. There is a required 30 day public comment period and a 45 day EPA review period associated with the renewal of the permit. Allowing a couple of weeks turnaround time to arrange for public notice and for preparation and distribution of draft and proposed permits, this means that the renewed permit must be written within 3 to 6 months of application submittal —

including negotiation of periodic and compliance assurance monitoring, and a response to comments, if necessary. Each permit often also requires the addition of new NESHAP/NSPS requirements, inclusion of new permits or waivers issued recently, and must be updated to include the latest general permit language. We don't believe it's too surprising that most permits expire before they can be renewed.

D. Have unresolved violations created any delay in issuing Title V renewals?

Yes. We have delayed the issuance of renewals if enforcement negotiations are likely to result in significant changes to emission control systems and associated Chapter 6, Section 2 (construction) permits or modifications, or if the applicant requests a delay pending resolution.

E. Have permittees requested a hold in renewal for any reason?

Yes. When there are unresolved regulatory issues, such as Regional Haze or other rules in litigation, companies often request a hold. This can also be true of settlement negotiations. Additionally, when the issuance of a Chapter 6, Section 2 permit is imminent (on or nearing public notice) or that action will result in significant changes in applicable requirements for existing equipment, we have delayed work on the permit renewal.

F. CAM

- Are CAM plan requirements slowing the renewal process?
 In some cases.
 - a. If so, what is it about CAM that's problematic?

There are some sources that do not "fit" well into CAM – typically, ESP-controlled particulate sources where the materials being handled vary in composition. Trying to find an operating parameter that correlates with actual measured particulate during stack tests has been very difficult in some cases.

We also continue to have sources who misunderstand how CAM works and have to continue to do some education with them. The going-back-and-forth to finally get them to come up with an acceptable CAM plan can be very time consuming.

- 2. Where CAM plans have been inadequate, what have been the main types of inadequacies that have caused difficulties or delays in permit issuance?
 - CAM plans sometimes contain inadequate data or information to assure proper parameter monitoring selection, and/or plans have data which does not support proposed parameter ranges.
- 3. What difficulties have you had in getting better plans to be submitted?

Often, it takes time (sometimes including additional stack testing) to develop a new CAM plan if the original submittal is found lacking. Sometimes it is simply that the company contact has other priorities and takes a long time to respond, and this often happens after administrative completeness has been determined so there is less urgency given to responding to us.

4. Have you had to supplement the CAM technical guidance document (TGD) with state-issued guidance?

Yes.

5. Is CAM training adequate?

No. What is lacking is good real-life examples and discussions of CAM situations that do not fit well into a cookie-cutter mold. Getting permit writers from different places together to share information would be most helpful.

- Are CAM applicability determinations resource-intensive or difficult?
 Usually no. For sources new to CAM, it can be difficult to determine pre-control emissions.
- G. What improvements does the State believe it has made to the management of the Title V permit program, since the third round program review, that could be described as best practices and could be of interest to other States?

Please see the answer to 1.C. Additionally:

- Requesting a pre-application meeting with applicants with especially complex facilities and/or regulatory issues. This helps to identify and discuss concerns early in the process as companies prepare their application.
- Conducting more detailed completeness reviews. We have found this is the best time to promptly get needed information from applicants; once the completeness determination has been made, there is less urgency for applicants to respond to our requests.
- In renewal reminder letters (which we have always sent out) we are now clearly highlighting a date 9 months prior to permit expiration as the date we expect a renewal application to be submitted, to allow time for a thorough completeness review on our part, and preparation of additional information as needed on the applicant's part. The letter encourages submission even earlier, at 12 months prior to expiration. (Submission of a complete application remains due at 6 months prior to expiration in order to grant the application shield; the letter language is to strongly encourage earlier submission.)
- H. What improvements does the state plan to make, if any, in the management of the Title V permit program within the next five years?

Implementation of the Permit Basis Date approach; also, exploring more use of minor permit modifications and 502(b)(10) changes rather than significant modifications (when allowed by our regulations, which mirror Part 70).

Making some elements of IMPACT viewable to the public via a website, including permit applications.

1. Does the state have a set period of time for planning cycles?

No, unless there is a budget impact – in which case, the state is on a biennium budget cycle from July to June (2 years).

III. Public Participation

A. What forms of news media do you use to maximize public participation, for implementation of 40 CFR 70.7(h)?

WYDEQ uses the county or local newspaper(s) as appropriate to reach the largest audience possible where the sources are located to notify the public of permit actions. WYDEQ generally does not use a State-wide publication for the public notification process because it is neither cost effective nor has the effect of reaching the local community in which the sources operate. Also, the Division maintains an operating permit website which includes information on draft permits on public notice as well as all final permits.

1. How is the form of media chosen?

The combination of local newspapers and WYDEQ website best meet the needs of our citizens based on our assessment of the types of media they typically have access to.

- How do you believe public participation should be improved?
 We believe the mechanisms we use to give the public opportunity for participation are appropriate.
- B. Do you have a mailing list for Title V public participation for implementation of 40 CFR 70.7(h)(1)? If so, please provide it.

We had one in the past, but a few years ago polled all the entities on the mailing list and asked if they continued to want to be on a mailing list or are satisfied with their ability to access notice information via our website. No one wanted to continue to receive mailings. We also have a listserve option for anyone to subscribe to email notifications for Title V public notices.

- C. Is there a policy which outlines the response to comments procedure or process, such as which comments are responded to, the time-frame for responding, how the permitting authority will respond, to whom, etc.?
 - If written, can you provide a copy? If not written, could you describe the policy?
 We do not have a written policy regarding the response to comments. We do respond to all written comments. The comments are addressed to the person or group making the comments. All comments are addressed as expeditiously as possible to provide for timely issuance of the permit.

IV. Petitions

- A. Since the third round program review, to what extent have Title V petitions:
 - 1. Changed how permits are written;
 - 2. Resulted in re-openings of other permits;
 - 3. Resulted in an amended permitting process, to address any issues settled through petitions granted in full or in part?

Except as described below, there have been no changes in the way permits are written, and no re-openings as the result of a petition process. The only Title V petition for Wyoming since the first round program review was withdrawn.

Due to a very rigorous new source review program in Wyoming as well as state rules which can apply to very small sources, many facilities have very small, uncontrolled sources with emission limits. Wyoming's Title V program had not typically required monitoring for such sources in the past due to the relatively high cost of monitoring something that has a very low risk of exceeding its limit or creating an impact on the environment. In response to petitions in other states, EPA has been pushing to include more and more monitoring for such sources. Such monitoring is, in our view, an inefficient use of resources as well as an unnecessary source of contention between the permit program and the permit applicants.

V. EPA Relationship

A. Is there any EPA policy, on Title V, that is causing problems or confusion?

NOTE: Answer may or may not be the same as I.E.2.

We are unaware of any problems or confusion.

B. Has the state developed any tools, strategies, or best practices that have assisted in the inclusion of MACT subparts in Title V permits?

Many MACT standards have been subject to frequent change. As a result, we had to eliminate our efforts to customize conditions related to MACT standards to individual facilities, because those customized conditions resulted in a need to reopen permits every time a MACT standard was revised. This pushed the work of determining how a MACT standard applied to a facility and what parts of the rule applied to which operations/equipment at the site down to the compliance inspector and the permittee. This was not a good outcome, but the only way we could avoid an unworkable backlog in permit reopenings.

Our Title V permits now include only a minimal amount of information about MACT. We determine which MACT standards apply, and when the standard applies to clearly defined emission units, we do specify the units at the facility that are affected sources. As an example:

SUBPART YYYY REQUIREMENTS [40 CFR 63 Subparts A and YYYY; and WAQSR Ch 5, Sec 3]

The permittee shall meet all applicable requirements of 40 CFR 63 Subparts A and YYYY; and WAQSR Ch 5, Sec 3 as they apply to any existing, new, or reconstructed stationary combustion turbine located at a major source of HAP emissions as described in §63.6090, including (here we would list the turbines at the site subject to YYYY).

The permittee shall assess compliance with 40 CFR 63 Subpart YYYY by conducting any applicable testing and monitoring required by §§63.6115 through 63.6140, and by reviewing any records required by §§63.6155 and 63.6160.

Additionally, in staff meetings, we regularly share experiences with determining MACT applicability and how MACT requirements intersect with construction permits requirements, as well as how to prepare associated Title V permit conditions.

C. Is the issue of startup-shutdown-malfunction (SSM) emissions causing problems or confusion in Title V permit writing?

Rarely.

1. Has the state developed any tools, strategies, or best practices that have alleviated problems or confusion if either exist?

N/A

D. Do you have any unaddressed training needs? What can EPA do to help?

At this point in the process, worthwhile training for permit writing could focus on preparing enforceable permit language (both for NSR and Title V) and wading through new MACT and NSPS standards. Any tools to assist with determining applicability of both NSPS and NESHAP standards are helpful. An opportunity or mechanism for state and tribal permit authorities to share and discuss challenging CAM situations would be very helpful.

I also request that some kind of attention be paid to the definition of Responsible Official (RO) and some kind of refresher material be put out for permittees. We continually find ourselves explaining both the definition of an RO and some of the things that only a person meeting the criteria for an RO can do – even after 20 years. It also seems like there are types of entities that do not cleanly fit into the current Part 70 definition, and we struggle with how to handle those... there are various forms of partnerships that look more like the traditional corporation, for example. Municipalities in our state often have only one elected official (usually the mayor) that can sign for landfills – and it is unworkable for there to not be an alternate allowed to sign in the event the mayor is not available.

ATTACHMENT 2: STATE/LOCAL TITLE V PROGRAM FISCAL TRACKING EVALUATION QUESTIONNAIRE AND WYAQD RESPONSES

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Wyoming Title V Program Fiscal Tracking

Basic Questions for All Permitting Authorities	More Detailed Questions Factors to Support a Permitting Authority's Answer to the Basic Questions (Note: these are not all-inclusive, and some ideas will not apply in all cases)	Possible Resources Available
1. Title V Fee Re	evenue	
Can the Permitting Authority show that sources are being billed in accordance with its fee requirement(s), and	Where are the fee collection authority and the fee rate(s) specified? Wyoming Environmental Quality Act 35-11-211 Fees; WAQSR Chapter 6, Section 3(f) Fees Is the Permitting Authority including reference to these fee requirements in its Title V permits? Yes; all Title V permits have a Condition G8:	Req's/Auth.: State/local Title V program legislation & regulations
that sources are paying fees as required? Yes.	Annual Fee Payment: [WAQSR Ch 6, Sec 3(f)(i), (ii), and (vi)] [W.S. 35-11-211] (G8) The permittee shall, as a condition of continued operations, submit an annual fee to the Division as established in Chapter 6, Section 3 (f) of the WAQSR. The Division shall give written notice of the amount of fee to be assessed and the basis for such fee assessment annually. The assessed fee is due on receipt of the notice unless the fee assessment is appealed pursuant to W.S. 35-11-211(d). If any part of the fee assessment is not appealed it shall be paid to the Division on receipt of the written notice. Any remaining fee which may be due after completion of the appeal is immediately due and payable upon issuance of the Council's decision. Failure to pay fees owed the Division is a violation of Chapter 6, Section 3 (f) and W.S. 35-11-203 and may be cause for the revocation of this permit. List the fee rate(s) formulae applicable for the time period being reviewed. (Include emission based fees, application fees, hourly processing fees, etc.) Fees are on a per ton emissions basis, with a minimum of \$500 per facility per year and a maximum of 4000 tons billable pollutant (by pollutant). Rates are based on a state fiscal year (July to June): FY2011, 12 - \$31/ton FY2013 to current - \$34.50/ton Does the Permitting Authority anticipate any significant changes to its fee structure? The fee structure is reviewed during each budget preparation cycle to determine any need for change. This process will begin later this summer for the FY19/20 biennium.	Permit ref's: Permits state has written/ submitted to EPA Fee Rate(s): State/local Title V program submittal, and then verify w/ Permitting Authority that info is up-to-date Billing/Payments: Permitting Authority records. Emission data may be in AIRS. If some fees are hourly, there should be some direct labor tracking mechanism (see accounting system,
	What is the current status in States/locals with requirements to balance income & expenditures of the Title V program annually (i.e., must rebate any overage of fees, etc.)? N/A	below).

Basic Questions for All Permitting Authorities	More Detailed Questions Factors to Support a Permitting Authority's Answer to the Basic Questions (Note: these are not all-inclusive, and some ideas will not apply in all cases)	Possible Resources Available
1. Title V Fee R	evenue - Continued	
	Examine documentation of how the annual fees for sources are determined. Audit several sources' bills for accuracy.	
	Are appropriate (actual or potential) emission records used for \$/ton based fees? How are the Permitting Authority and its sources determining actual emissions for fee purposes?	
	See attached example of billing documentation	
	Are records kept (and used) for any hourly based fees?	
	N/A (no hourly based fees are assessed for Title V)	
	Review similar documentation for other types of fee mechanisms.	
	N/A (no other Title V fee mechanisms)	
	Billing	
	How is the Permitting Authority notifying sources of the fees owed and due dates for payment?	
	Invoices are mailed to the permittee. Bill is due upon receipt. Example included in attached billing documentation	
	Discuss how incoming payments are recorded to the appropriate accounts (receivings tracking).	
	Recorded on receipt. Tracking system is queried until all payments are received.	
	Payments	
	Are the sources paying the total fees charged each year?	
	Yes.	
	Are they paying on time?	
	Generally.	

Wyoming Title V Program Fiscal Tracking

Basic Questions for All Permitting Authorities	More Detailed Questions Factors to Support a Permitting Authority's Answer to the Basic Questions (Note: these are not all-inclusive, and some ideas will not apply in all cases)	Possible Resources Available
1. Title V Fee R	evenue - Continued	
	 If there's a collection problem, how is the Permitting Authority addressing it? Division staff initiate a phone call follow-up if not paid within ~30 days. Are late fees being assessed? If so, are the late fees being credited to the Title V accounts? No 	
2. Title V Expen	ditures	-3.2
Is the Permitting Authority identifying division of expenses between Title V and non-Title V programs?	What matrix is the Permitting Authority using to differentiate Title V activities from non-Title V activities? All expenditures are evaluated to determine if they are major-source related or not. Employees are given directions to complete timesheets based on the nature of their work. Small business assistance efforts are also charged to OPP. Direct labor:	If used by State/local program, sample time sheets and instructions given to employees; equivalent records for alternate direct labor differentiation method.
Yes.	If used by State/local program, review time sheets and instructions given to employees as to how to code information into the time sheet. If time sheets are not used, investigate method that State/local program uses to differentiate Title V and non-Title V direct labor. Latest version of timesheet instructions addressing this are attached.	Accounting system records showing that administrative/ clerical personnel costs are accounted for in the Title V program.

Basic Questions for All Permitting Authorities	More Detailed Questions Factors to Support a Permitting Authority's Answer to the Basic Questions (Note: these are not all-inclusive, and some ideas will not apply in all cases)	Possible Resources Available
2. Title V Expen	ditures - Continued	
	 Ensure that accounting system is set up to utilize the various coding information. Air Quality Division budget summary attached (biennium). Analyze time sheets/instructions (and/or other direct labor differentiation method) for conformance with the matrix of acceptable Title V activities Direct non-labor: Does the Permitting Authority utilize an allocation system that separates travel and equipment costs for Title V and non-Title V functions? Yes. See attached travel request form. All equipment procurement also requires coding which indicates funding source. If so, are the allocations in accordance with the Permitting Authority's Title V/ non-Title V activity separation? Yes. If not, are these included as part of indirect costs? (Direct non-labor needs to be addressed somewhere.) Indirect labor & non-labor: How are indirect labor & non-labor costs apportioned between Title V vs. non-Title V accounts? (Indirect costs include parts of secretarial & managerial overhead, paper & supplies, space, utilities, generalized computers, etc., that is not addressed as direct labor/non-labor) The department negotiates an indirect cost rate agreement with the federal government. The Title V program is not charged indirect costs as the legislature has chosen not to appropriate Title V funds to pay indirect costs. 	Accounting system records showing that non-labor costs (travel, equipment, office space costs, etc.) are accounted for in some fashion and a portion is billed to Title V. EPA Guidance includes: "Matrix of Title V-Related and Air Grant-Elegible Activities, Information Document," Office of Air & Radiation, May 31, 1994

Basic Questions for All Permitting Authorities	More Detailed Questions Factors to Support a Permitting Authority's Answer to the Basic Questions (Note: these are not all-inclusive, and some ideas will not apply in all cases)	Possible Resources Available
3. Accounting Sy	stem (i.e., the system that provides for analysis of the Title V program revenue and expenditure infor	mation gathered above)
Has the Permitting Authority integrated features into its accounting/financial management system which will:	Describe the accounting structure that the Permitting Authority uses to differentiate Title V \$ from other funds. [i.e., govt. fund, enterprise fund, etc for more detail on options, see the U of MD report.] A special revenue fund is used to account for Title V financial activity. In accordance with GASB 54, the significant revenue stream is considered committed. Does the accounting system have separate categorization for Title V and non-Title V funding and	Review sample reports/specific reports for the time period being reviewed. For background:
 identify Title V fee revenues separate from other funding? identify Title V expenditures separate from other expenses? produce management reports, periodically and as requested, which the Permitting Authority will be able use to certify as to the disposition of Title V funds? Yes. 	expenses? Yes. If yes, are these features being used to track Title V monies separate from non-Title V monies? Yes. The fund established to account for all expenditures and revenues associated with Title V activities records only financial transactions associated with Title V activities. If no, does the Permitting Authority keep any separate records that identify Title V monies separate from non-Title V monies? Could such information potentially be integrated into an accounting/financial management system? N/A	Overview of CLEAN AIR Title V Financial Management and Reporting, A Handbook for Financial Officers and Program Managers, Environmental Finance Center, Maryland Sea Grant College, University of Maryland, 0112 Skinner Hall, College Park, MD 20742, January 1997, [Publication Number UM-SG-CEPP-97-02]

Wyoming Title V Program Fiscal Tracking

Basic Questions for All Permitting Authorities	More Detailed Questions Factors to Support a Permitting Authority's Answer to the Basic Questions (Note: these are not all-inclusive, and some ideas will not apply in all cases)	Possible Resources Available
4. Separation of	Title V from §105 grant and grant match funding	
Can the Permitting Authority confirm that the Title V fees collected from sources are used to pay for the entire Title V program, and that no Title V fees are used as match to the CAA section 105 Air Program grant? Yes.	Determine the federal §105 grant award received, and the amount of state/local funds used during the time period being reviewed. For the current biennium (July 2016 to June 2018), the 105 grant award is estimated to be \$1.6 million (please note this does not correspond to the federal fiscal year). The total amount of funding from the state general fund for the same period is \$5.8 million. The total amount of Title V permit fees authorized by the legislature for AQD to collect is \$9.8 million. Determine the Title V fees collected (and Title V funds available, if carryover of Title V fees is allowed by state/local regulations) during the time period being reviewed. Total biennium fees collected as of June 15, 2017 are \$3,230,575, representing part of the first year (2016) of the biennium. Bills for the 2016 calendar year are still being sent out. Determine Title V expenditures during the time period being reviewed. Actual expenditures to date (July 2016 to May 2017) are \$3.1 million. Ensure that adequate non-Title V state/local funds were available to provide required match to the federal grant. See answer to the first question above describing the general fund. Ensure that sufficient Title V funds were available to pay for the Title V program (i.e.—Title V program is self supporting) Again, the fee structure is reviewed during each budget preparation cycle to determine any need for change. This process will begin later this summer for the FY19/20 biennium. The department has not experienced any shortfalls of appropriations or fee collections during the history of the program.	Grant files FSR's for applicable years. (See appropriate EPA Region grant & project manager staff) Permitting Authority accounting system reports showing revenue and expenditure summaries for Title V, grant, and other activities

ATTACHMENT 3: SUPPORTING DOCUMENTS FROM WYAQD ON FISCAL TRACKING

	•	

Attachments to Wyoming Title V Program Fiscal Tracking Questionnaire (June 2017)

Billing Documentation Example
Timesheet Instructions
Air Quality Division Budget Summary
Travel Request Form





Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Todd Parfitt, Director

Date: MAY 2 6 2017

Stephanie Moroz Enterprise Jonah Gas Gathering Company LLC P.O. Box 4324 Houston, TX 77210-4324

CERTIFIED MAIL

Re: Operating Permit Program Emissions Fee, 2016 Invoice

Facility Name: Bridger Compressor Station

Title V Permit #: 3-0-226 Facility ID: F018585 Amount Due: \$4,402.39

Dear Ms. Moroz:

In accordance with Chapter 6 (f)(v)(G) of the Wyoming Air Quality Standards & Regulations and pursuant to Wyoming Statute 35-11-211, the Division has calculated 2016 emissions fees based on the emissions inventory submitted by the company and other information available to the Division for the referenced facility. This billing is intended to represent a final assessment of fees due for 2016 operations. However, the Division, at its option, reserves the right to modify the assessment to correct errors or omissions. Adjustments to assessed emission fees for 2016 due to newly developed emission factors and/or emissions unit stack tests occurring after this fee assessment will not be allowed. Such refinements and improvements in emissions data may be used, on approval of the Division, in subsequent emissions inventories.

The assessed fee for 2016 operations is due upon receipt of this notice. Please make check payable to the Wyoming Department of Environmental Quality; and, to ensure proper accounting of your payment, please include the above referenced Facility Name and Title V Permit number on your check. Submit payment to: Wyoming Department of Environmental Quality, Air Quality Division, Operating Permits Program, 200 West 17th Street - Suite 3, Cheyenne, WY 82002.

Failure to pay the assessed fee is a violation of the Wyoming Environmental Quality Act and the Wyoming Air Quality Standards and Regulations, subject to both monetary penalties of up to \$10,000 each day that each violation occurs and injunctive relief, pursuant to W.S. 35-11-901(a)(i). It may also be a violation of federal law.

If you have any questions regarding this matter, please feel free to contact this office.

Sincerely.

Nancy E. Vehr Administrator

Air Quality Division

NV/bsw



Title V Fee for 2016 Emissions – Invoice #: EI0000577-2016

Date: MAY 2 6 2017

To:

Stephanie Moroz Enterprise Jonah Gas Gathering Company LLC

P.O. Box 4324

Houston, TX 77210-4324

Facility: Bridger Compressor Station

Facility ID: F018585

Facility Location: S9-T28N-R108W

County: Sublette

Start Date: 1/1/2016

End Date: 12/31/2016

Pollutant Code	Pollutant Desc	First Half Total Tons	Second Half Total Tons	Total Fee For Pollutant
7439976	Mercury, as HG; Alkyl & Aryl compounds; Elemental & Inorganic Forms	0.00593	0.00593	\$0.41
7440020	Nickel	0.10257	0.10257	\$7.08
NOX	Nitrogen Oxides	34.37436	34.37436	\$2,371.83
PM-PRI	PM Primary (includes filterables > 10 microns + condensibles)	4.67800	4.67800	\$322.78
SO2	Sulfur Dioxide	0.45	0.45	\$31.05
VOC	Volatile Organic Compounds	24.19192	24.19192	\$1,669.24

From:

Air Quality Division

Cheyenne, WY 82002

Phone: 307-777-7391

200 West 17th Street - Suite 3

Total Fee Due:

Wyoming Department of Environmental Quality

\$4,402.39

Emissions occurring from January 1, 2016 through December 31, 2016 are billed at a rate of \$34.50 per ton. The minimum fee assessed, in accordance with Chapter 6, Section 3(f)(iv)(C) of the Wyoming Air Quality Standards and Regulations, is \$500.00 per year.

TV Emissions Inventory (El0000577) for 2016
Bridger Compressor Station
F018585
February 21, 2017

2016 Emissions Summary Report : El0000577

- Report Data

Report Category: TV

Submitted Date: 02/28/2017

Approved Date 03/01/2017

- Facility Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units
PM Primary (includes filterables > 10 microns + condensibles)	0.156	9.2	9.356	TONS
PM10 Primary (includes filterables + condensibles)	0.156	9.198	9.354	TONS
PM2.5 Primary (includes filterables + condensibles)	0.156	9.103	9.259	TONS
CO - Carbon Monoxide	0	15.2388	15.2388	TONS
NOx - Nitrogen Oxides	0	68.7487	68.7487	TONS
SO2 - Sulfur Dioxide	0	0.9	0.9	TONS
VOC - Volatile Organic Compounds	44.63	3.75385	48.3839	TONS
Ammonia	0	0	0	TONS

The following information was developed using Wyorring DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Follutant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	19.8956	19.8956	TONS
PM Condensible Portion Only (all less than 2.5 microns)	0	1.81283E-04	1.81283E-04	TONS
PM Filterable Portion Only (includes larger than 10 microns)	0	0.0023653	0.0023653	TONS
PM10 Filterable Portion Only	0	0.00117402	0.00117402	TONS
PM2.5 Filterable Portion Only	0	2.615	2.615	TONS
Carbon Dioxide	0	199,143.	199,143.	TONS
Methane	0	15.4245	15.4245	TONS
Nitrous Oxide	0	0.044946	0.044946	TONS
Acenaphthene	0	1.22227E-07	1.22227E-07	TONS
Acenaphthyl ene	0	2.23181E-07	2.23181E-07	TONS
Accetaldehyde	0	0.0720072	0.0720072	TONS

Acrolein	0	0.0118607	0.0118607	TONS
Anthracene	0	5.18071E-08	5.18071E-08	TONS
Arsenic	0	4.086E-06	4.086E-06	TONS
Benz [A] Anthracene	О	0.00536422	0.00536422	TONS
Benzene	236.98	43.0338	280.014	POUNDS
Benzo [A] Pyrene	0	1.51091E-08	1.51091E-08	TONS
Benzo [B] Fluoranthene	0	4.30157E-08	4.30157E-08	TONS
Benzo[G,H,I,]Perylene	0	0.042903	0.042903	TONS
Benzo[K] Fluoranthene	0	2.08055E-08	2.08055E-08	TONS
Beryllium	0	1.2258E-07	1.2258E-07	TONS
Butadiene, 1,3-	0	3.84434E-04	3 .84434E-04	TONS
Cadrnium	0	0.0124048	0.0124048	TONS
Chromium	0	0.023792	0.023792	TONS
Chrysene	0	5.23345E-08	5 .23345E-08	TONS
Cobalt	0	1.71612E-06	11.71612E-06	TONS
Dibenzo[A, H] Anthracene	0	1.60965E-08	1 .60965E-08	TONS
Dimethylbenz[A] Anthracene, 7,12-	0	1.6344E-07	1 .6344E-07	TONS
Ethyl Benzene	0	0.0572181	0.0572181	TONS
Fluoranthene	0	0.00214583	0.00214583	TONS
Fluorene	0	3.4121E-07	3.4121E-07	TONS
Formaldehyde	0	0.420176	0.420176	TONS
Hexane, N-	1,344	73.548	1,417.55	POUNDS
Indeno[1,2,3-C,D]Pyrene	0	2.29799E-08	2.29799E-08	TONS
MN - Manganese	0	0.143411	0.143411	Z,ONS
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	0	0.0118602	0.0118602	I ONS
Methylcholanthrene, 3-	0	1.8387E-08	1.8387E-08	T ONS
Methylnaphthalene, 2-	0	4.9032E-07	4.9032E-07	TONS
Naphthalene	0	0.00233983	0.00233983	TONS
Nickel	0	0.205134	0.205134	T ONS
PAH, 16-	0	0.00393844	0.00393844	T ONS
Pb - Lead	0	1.0215E-05	1.0215E-05	TONS

Phenanthrene	0	1.25258E-06	1.25258E-06	TONS
Phenol	0	0.0227085	0.0227085	TONS
Polycyclic Organic Matter	0	1.50332E-05	1.50332E-05	TONS
Propylene Oxide	0	0.0259269	0.0259269	TONS
Pyrene	0	1.84467E-07	1.84467E-07	TONS
Selenium	0	2.4516E-07	21.4516E-07	TONS
Styrene	0	2.06571E-07	2.06571E-07	TONS
Toluene	182.64	465.048	647.688	POUNDS
Xylenes (Isomers and Mixture)	. 0.005	0.11444	0.11944	TONS

- Attachments

Attachment ID	Description	Туре	Public Document
1.330	2016 As-Received EI	Annual Summary of Emissions	x

- Notes

I I a a Albana	Data	Note
User Name	Date	Note

Emission Units Without Detailed Emissions

Jun 14 2017, 13:14:31

Emission Unit	Why Excluded	Company Equipment ID
BVC005	Did Not Operate	TBD
TNK001	Less Than Reporting Requirement	C-Tanks VRU3
1FNK00:2	Less Than Reporting Requirement	C-Tanks
TNK00:3	Less Than Reporting Requirement	C-Tanks VRU3
TNK004	Less Than Reporting Requirement	C-Tanks VRU3
TNK005	Less Than Reporting Requirement	S-Tanks
TNK006	Less Than Reporting Requirement	S-Tanks
TNK007	Less Than Reporting Requirement	S-Tanks

Report Pollutant Summary: Total Emissions (Tons)

Unit	SCC Id	PM-PRI	PM10-PRI	PM25-PRI	СО	NOX	SO2	VOC	NH3
BVC002	3-10-002-25	O	0	0	0	0	О	1.8	0

BVC003	3-10-002-99								
BVC:004	3-10-002-11	0	0	0	0	0	0	2	0
BVC:006	3-10-002-99	0	0	0	0	0	0	11.23	0
ENG001	2-02-002-01	2.3	2.3	2.289	4.35681	19.3406	0	1.32403	0
ENG002	2-02-002-01	1.6	1.6	1.593	1.80409	20.585	0	1.24199	0
ENG003	2-02-002-01	3.4	3.4	3.358	1.06165	19.4057	0	0.148381	0
ENG004	2-02-002-01	0.6	0.6	0.57	5.83195	5.27711	0.3	0.825509	0
ENG005	2-02-002-01	1.13	1.13	1.13	0.325107	1.93421	0.6	0.0405132	0
ENG006	2-02-002-01	0.01	0.01	0.005	0.134802	0.131499	0	0.00884575	0
ENG008	2-02-004-01	0.004	0.002	0.002	0.00440025	0.0645997	0	5.0025E-04	0
FLR001	3-10-002-05	0	0	0	0.02	0.01	0	0.01	0
FUG001	3-10-002-20	0	0	0	0	0	0	29.6	0
HET001	3-10-004-04	0.294	0.294	0.294	1.6	1.9	0	0.1	0
HET002	3-10-004-04	0.018	0.018	0.018	0.1	0.1	0	0.054082	0
Total		9.356	9.354	9.259	15.2388	68.7487	0.9	48.3839	0

Emissions Unit ID: BVC002

ID: BVC002

Detailed Reporting

AQD Description: VRU-PKV Cylinder Rod Packing Vent

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total		Further Validati ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	0	0	0	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	0	0	TONS	
CO - Carbon Monoxide	0	0	0	TONS	
NOx - Nitrogen Oxides	0	0	0	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	1.8	0	1.8	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Benzene	10	0	10	POUNDS
Hexane, N-	70	0	70	POUNDS
Toluene	10	0	10	POUNDS

Processes

- Process & Emissions Detail

Name: PRC016

Source Classification Code (SCC): 3-10-002-25

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No

contain Trade Secrets:

Maximum Hours Per Day: 24 Winter (Dec - Feb)%: 25

Maximum Days Per Week: 7 Spring (March-May)%: 25

Maximum Weeks Per Year: 52 Summer (June-Aug)%: 25

Actual Hours Per Year: 8760.0 Fall (Sept-Nov)%: 25

Material	terial Material Action		X Units	
Gas	Produced	1	MILLION CUBIC FEET	

- Process Emissions

Pollutant	Method Used	UnCont	Factor	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	0	0	TONS	
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	0	0	TONS	
CO - Carbon Monoxide	Emissions				0	0	0	TONS	
NOx - Nitrogen Oxides	Emissions				0	0	0	TONS	
SO2 - Sulfur Dioxide	Emissions				0	0	0	TONS	
VOC - Volatile Organic	Emissions				1.8	0	1.8	TONS	

BVC002: 2016

Compounds							
Ammonia	Emissions		ΰ	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

- Process Emissions

Pollutant	Method Used	UnCont	UnCont. Factor (LBS/X)	 Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Benzene	Emissions			10	0	10	POUN	Operator calc using vent rate and material composition.
Hexane, N-	Emissions			70	0	70	POUN	Operator calc using vent rate and material composition.
Tolu.ene	Emissions			10	0	10	POUN	Operator calc using vent rate and material composition.

BVC002: 2016

Emissions Unit ID: BVC003

Detailed Reporting

AQD Description: VRU-BD VRU Compressor Blowdown

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Pollutant	Fugitive Amount	Stack Amount	Total	Further Validati
				ons Require d

Processes

- Process & Emissions Detail

Name: PRC017

Source Classification Code (SCC): 3-10-002-99

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No

contain Trade Secrets:

Maximum Hours Per Day: 0

Maximum Days Per Week: 0

Maximum Weeks Per Year: 0

Actual Hours Per Year: 0.0

Winter (Dec - Feb)%: 25

Spring (March-May)%: 25

Summer (June-Aug)%: 25

Fall (Sept-Nov)%: 25

Material	Material Action	Throughput	X Units
Gas	Produced	1	MILLION CUBIC FEET

Process Emissions

	Method					Stack	Total	Units	Explanation
	Used	UnCont		Based	Amount	Amount			
			(LBS/X)	Factor					
				(LBS/H					
				our)					

Emissions Unit ID: BVC004

Detailed Reporting

AQD Description: PG-Pn, PG-BD

Pig Receiver/Launcher Blowdowns

- Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	0	0	0	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	0	0	TONS	
CO - Carbon Monoxide	0	0	0	TONS	
NOx - Nitrogen Oxides	0	0	0	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	2	0	2	TONS	
Ammonia	0	0	0	TONS	

Processes

- Process & Emissions Detail

Name: PRC018

Source Classification Code (SCC): 3-10-002-11

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No

contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 8760.0

Winter (Dec - Feb)%: 25

Spring (March-May)%: 25

Summer (June-Aug)%: 25

Fall (Sept-Nov)%: 25

Material	Material Action	Throughput	X Units
Gas	Produced	1	MILLION CUBIC FEET

- Process Emissions

Pollutant	Method Used	UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	0	0	TONS	
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	0	0	TONS	
CO - Carbon Monoxide	Emissions				0	0	0	TONS	
NOx - Nitrogen Oxides	Emissions				0	0	0	TONS	
SO2 - Sulfur Dioxide	Emissions				0	0	0	TONS	
VOC - Volatile Organic Compounds	Emissions				2	0	2	TONS	
Ammonia	Emissions				0	0	0	TONS	

BVC004: 2016

Emissions Unt ID: BVC006

Detailed Reporting

AQD Description: aka BVC001 (T-BD) Turbine T1-T9 Compressor Blowdowns

- Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	0	0	О	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	0	0	TONS	
CO - Carbon Monoxide	0	0	0	TONS	
NOx - Nitrogen Oxides	0	0	0	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	11.23	0	11.23	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amoun	t Stack Amount	Total	Units
Benzene	16.98	0	16.98	POUNDS
Hexane, N-	94	0	94	POUNDS
Toluene	12.64	0	12.64	POUNDS
Xylenes (Isomers and Mixture)	0	0	0	TONS

Processes

- Process & Emissions Detail

Name: PRC015

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 8760.0

Winter (Dec - Feb)%: 25

71...to: (200 : 02)/0: 2:

Spring (March-May)%: 25

Summer (June-Aug)%: 25

Fall (Sept-Nov)%: 25

BVC006: 2016

Material	Material Action	Throughput	X Units
Gas	Produced	2.25	MILLION CUBIC FEET

- Process Emissions

Pollutant	Method Used	Hours (JnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	0	0	TONS	
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	0	0	TONS	
CO - Carbon Monoxide	Emissions				0	0	0	TONS	
NOx - Nitrogen Oxides	Emissions				0	0	0	TONS	
SO2 - Sulfur Dioxide	Emissions				0	0	0	TONS	

VOC - Volatile Organic Compounds	Throughput -based factor	0	9,982.22	11.23	0	11.23	1	Operator calc from blowdown volume & gas composition; factor back calculated.
Ammonia	Emissions			0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Process Emissions

Pollutant	Method Used	UnCont	UnCont. Factor (LBS/X)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Benzene	Emissions		31.1046	16.98	0	16.98		Operator calc from blowdown volumes and gas composition; factor back calculated.
Hexane, N-	Emissions		172.193	94	0	94	1	Operator calc from blowdown volumes and gas composition; factor back calculated.
Toluene	Emissions		23.1544	12.64	0	12.64	1	Operator calc from blowdown volumes and gas composition; factor back calculated.
Xylenes (Isomers and Mixture)	Emissions			0	0	0	TONS	

BVC006: 2016

Emissions Unit ID: ENG001

Detailed Reporting

ENG001: 2016

AQD Description: 01/(T1) Solar Titan 130S Turbine

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validat. ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	0	2.3	2.3	TONS	
PM10 Primary (includes filterables + condensibles)	0	2.3	2.3	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	2.289	2.289	TONS	
CO - Carbon Monoxide	0	4.35681	4.35681	TONS	
NOx - Nitrogen Oxides	0	19.3406	19.3406	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	0	1.32403	1.32403	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	5.92997	5.92997	TONS
PM2.5 Filterable Portion Only	0	0.659	0.659	TONS
Carbon Dioxide	0	59,299.7	59,299.7	TONS
Methane	0	4.63616	4.63616	TONS
Acetaldehyde	0	0.0215635	0.0215635	TONS
Acrolein	0	0.00345016	0.00345016	TONS
Benz[A]Anthracene	0	0.00161726	0.00161726	TONS
Benzene	0	0.00646905	0.00646905	TONS

0	1.15904E-04	1 150045 04	
	11.1330111 01	1.15904E-04	TONS
0	0.00373318	0.00373318	TONS
0	0.00716448	0.00716448	TONS
0	0.0172508	0.0172508	TONS
0	6.46905E-04	6.46905E-04	TONS
0	0.131913	0.131913	TONS
0	0.0432349	0.0432349	TONS
0	0.00357415	0.00357415	TONS
0	7.00814E-04	7.00814E-04	TONS
0	0.0618334	0.0618334	TONS
0	0.00118599	0.00118599	TONS
0	0.00684644	0.00684644	TONS
0	0.00781677	0.00781677	TONS
0	0.0700814	0.0700814	TONS
0	0.0345016	0.0345016	TONS
		0 0.00716448 0 0.0172508 0 6.46905E-04 0 0.131913 0 0.0432349 0 0.00357415 0 7.00814E-04 0 0.0018599 0 0.00684644 0 0.00781677 0 0.00700814	0 0.00716448 0.00716448 0 0.0172508 0.0172508 0 6.46905E-04 6.46905E-04 0 0.131913 0.131913 0 0.0432349 0.0432349 0 0.00357415 0.00357415 0 7.00814E-04 7.00814E-04 0 0.0618334 0.0618334 0 0.0018599 0.00118599 0 0.00684644 0.00684644 0 0.00781677 0.00781677 0 0.0700814 0.0700814

Processes

- Process & Emissions Detail

Name: PRC002

Source Classification Code (SCC): 2-02-002-01

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/£xpl;anations No contain Trate Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 8168.0

Winter (Dec - Feb)%: 26

Spring (March-May)%: 27

Summer (June-Aug)%: 26

Fall (Sept-Nov)%: 21

Material	Material Action	Throughput	X Units
Natural Gas	Burned	950.94	MILLION CUBIC FEET

Variable	Amount	Meaning			
HCg	1133.8	Gas Heat Content (Btu/Cubic Feet)			
s	0	% Sulfur content by weight			

Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	2.3	2.3	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	2.3	2.3	TONS	·
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	2.289	2.289	TONS	
CO - Carbon Monoxide	Time-based factor - Stack Test		92.9716	1.0668	0	4.35681	4.35681	TONS	Stack Test 4/28/2015 and 4/18/2016
NOx - Nitrogen Oxides	Time-based factor - Stack Test	0	362.816	4.7357	0	19.3406	19.3406	TONS	Stack Test 4/28/2015 and 4/18/2016
SO2 - Sulfur Dioxide	Emissions				0	0	0	TONS	
VOC - Volatile Organic Compounds	Time-based factor - Stack Test	0	2.38098	0.3242	0	1.32403	1.32403	TONS	Stack Test 4/28/2015 and 4/18/2016
Ammonia	Emissions				0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	0	12.4718		0	5.92997	5.92997	TONS	
PM2.5 Filterable Portion Only	Emissions		0		0	0.659	0.659	TONS	
Carbon Dioxide	Throughput -based factor	0	124,718.		0	59,299.7	59,299.7	TONS	
Methane	Throughput -based factor	0	9.75068		0	4.63616	4.63616	TONS	
Acetaldehyde	Throughput -based factor	0	0.045352		0	0.0215635	0.0215635	TONS	
Acrolein	Throughput -based factor	0	0.007256		0	0.00345016	0.00345016	TONS	
Benz [A] Anthrace ne	Throughput -based factor	0	0.003401		0	0.00161726	0.00161726	TONS	
Benzene	Throughput -based factor	0	0.013605		0	0.00646905	0.00646905	TONS	
Butadiene, 1,3-	Throughput -based factor	0	2.43767E -04		0	1.15904E-04	1.15904E-04	TONS	
Cadmium	Throughput -based factor	0	0.007851 56		0	0.00373318	0.00373318	TONS	
Chromium	Throughput -based factor	0	0.015068		0	0.00716448	0.00716448	TONS	
Ethyl Benzene	Throughput -based	0	0.036281		0	0.0172508	0.0172508	TONS	

		1	I	Γ			T	Τ	
	factor								
Fluoranthene	Throughput -based factor	0	0.001360 56		0	6.46905E-04	6.46905E-04	TONS	
Formaldehyde	Time-based factor - Stack Test	0	0.804998	0.0323	0	0.131913	0.131913	TONS	Stack Test 4/28/2015 and 4/18/2016
MN - Manganese	Throughput -based factor	0	0.090930		0	0.0432349	0.0432349	TONS	
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	-based factor	0	0.007517 09		0	0.00357415	0.00357415	TONS	
Naphthalene	Throughput -based factor	0	0.001473 94		0	7.00814E-04	7.00814E-04	TONS	
Nickel	Throughput -based factor	0	0.130047		0	0.0618334	0.0618334	TONS	
PAH, 16-	Throughput -based factor	0	0.002494 36		0	0.00118599	0.00118599	TONS	
Phenol	Throughput -based factor	C)	0.014399		0	0.00684644	0.00684644	TONS	
Propylene Oxide	Throughput -based factor	0	0.016440		0	0.00781677	0.00781677	TONS	
Toluene	Throughput -based factor	0	0.147394		0	0.0700814	0.0700814	TONS	
Xylenes (Isomers and Mixture)	Throughput -based factor	0	0.072563		0	0.0345016	0.0345016	TONS	

Emissions Unit ID: ENG002

Detailed Reporting

AQD Description: 02(T2) Solar Titan 130S Turbine

Bridger Compressor Station(F018585)

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons Require
PM Primary (includes filterables > 10 microns + condensibles)	0	1.6	1.6	TONS	
PM10 Primary (includes filterables + condensibles)	0	1.6	1.6	TONS	
FM2.5 Primary (includes filterables + condensibles)	0	1.593	1.593	Z'ONS	
CO - Carbon Monoxide	0	1.80409	1.80409	TONS	
NOx - Nitrogen Oxides	0	20.585	20.585	TONS	
SO2 - Sulfur Dioxide	0	0	0	Z'ONS	
VOC - Volatile Organic Compounds	0	1.24199	1.24199	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	6.28791	6.28791	TONS
PM2.5 Filterable Portion Only	0	.459	0.459	TONS
Carbon Dioxide	0	62,879.1	€12,879.1	TONS
Methane	0	4.916	4.916	TONS
Acetaldehyde	0	0.0228651	0.0228651	TONS
Acrolein	0	0.00365842	0.00365842	TONS
Benz[A] Anthracene	0	0.00171488	0.00171488	TONS
Benzene	0	0.00685954	C1.00685954	TONS
			Γ	

Butadiene, 1,3-	0	1.229E-04	1.229E-04	TONS
Cadmium	0	0.00395852	0.00395852	TONS
Chromium	0	0.00759693	0.00759693	TONS
Ethyl Benzene	0	0.0182921	0.0182921	TONS
Fluoranthene	0	6.85954E-04	6.85954E-04	TONS
Formaldehyde	0	0.107829	0.107829	TONS
MN - Manganese	0	0.0458446	0.0458446	TONS
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	0	0.00378989	0.00378989	TONS
Naphthalene	0	7.43116E-04	7.43116E-04	TONS
Nickel	0	0.0655658	0.0655658	TONS
PAH, 16-	0	0.00125758	0.00125758	TONS
Phenol	0	0.0072597	0.0072597	TONS
Propylene Oxide	0	0.00828861	0.00828861	TONS
Toluene	0	0.0743116	0.0743116	TONS
Xylenes (Isomers and Mixture)	0	0.0365842	0.0365842	TONS

Processes

- Process & Emissions Detail

Name: PRC003

Source Classification Code (SCC): 2-02-002-01

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 8661.0

Winter (Dec - Feb)%: 25

Spring (March-May)%: 25

Summer (June-Aug)%: 25

Fall (Sept-Nov)%: 25

Material	Material Action	Throughput	X Units
Natural Gas	Burned	1008.34	MILLION CUBIC FEET

Variable	Amount	Meaning
HCg	1133.8	Gas Heat Content (Btu/Cubic Feet)
S	0	% Sulfur content by weight

Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	1.6	1.6	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	1.6	1.6	TONS	
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	1.593	1.593	TONS	
CO - Carbon Monoxide	Time-based factor - Stack Test	0	92.9716	0.4166	0	1.80409	1.80409	TONS	Stack Test 4/27/2015 and 4/18/2016
NOx - Nitrogen Oxides	Time-based factor - Stack Test	0	362.816	4.7535	0	20.585	20.585	TONS	Stack Test 4/27/2015 and 4/18/2016
SO2 - Sulfur Dioxide	Emissions				0	0	0	TONS	
VOC - Volatile Organic Compounds	Time-based factor - Stack Test	0	2.38098	0.2868	0	1.24199	1.24199	TONS	Stack Test 4/27/2015 and 4/18/2016
Ammonia	Emissions				0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

- Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	0	12.4718		0	6.28791	6.28791	TONS	
PM2.5 Filterable Portion Only	Emissions				0	. 459	0.459	TONS	
Carbon Dioxide	Throughput -based factor	0	124,718.		0	62,879.1	62,879.1	TONS	
Methane	Throughput -based factor	0	9.75068		0	4.916	4.916	TONS	
Acetaldehyde	Throughput -based factor	0	0.045352		0	0.0228651	0.0228651	TONS	
Acrolein	Throughput -based factor	0	0.007256 32		0	0.00365842	0.00365842	TONS	
Benz[A]Anthrace ne	Throughput -based factor	0	0.003401 4		0	0.00171488	0.00171488	TONS	
Benzene	Throughput -based factor	0	0.013605 6		0	0.00685954	0.00685954	TONS	
Butadiene, 1,3-	Throughput -based factor	0	2.43767E -04		0	1.229E-04	1.229E-04	TONS	
Cadmium	Throughput -based factor	0	0.007851 56		0	0.00395852	0.00395852	TONS	
Chromium	Throughput -based factor	0	0.015068		0	0.00759693	0.00759693	TONS	
Ethyl Benzene	Throughput -based	0	0.036281 6		0	0.0182921	0.0182921	TONS	

	factor								
Fluoranthene	Throughput -based factor	0	0.001360		0	6.85954E-04	6.85954E-04	TONS	
Formaldehyde	Time-based factor - Stack Test	0	0.804998	0.0249	0	0.107829	0.107829	TONS	stack tests in 4/2015 and 4/2016
MN - Manganese	Throughput -based factor	0	0.090930		0	0.0458446	0.0458446	TONS	
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	-based factor	0	0.007517		o	0.00378989	0.00378989	TONS	
Naphthalene	Throughput -based factor	0	0.001473		0	7.43116E-04	7.43116E-04	TONS	
Nickel	Throughput -based factor	0	0.130047		0	0.0655658	0.0655658	TONS	
PAH, 16-	Throughput -based factor	0	0.002494		0	0.00125758	0.00125758	TONS	
Phenol	Throughput -based factor	0	0.014399		0	0.0072597	0.0072597	TONS	
Propylene Oxide	Throughput -based factor	0	0.016440		0	0.00828861	0.00828861	TONS	
Toluene	Throughput -based factor	0	0.147394		0	0.0743116	0.0743116	TONS	
Kylenes (Isomers and Mixture)	Throughput -based factor	0	0.072563		0	0.0365842	0.0365842	TONS	

Emissions Unit ID: ENG003

Detailed Reporting

ENG003: 2016

AQD Description: 14/(T3) Solar Titan 130S Turbine

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validat ons Required
PM Primary (includes filterables > 10 microns + condensibles)	0	3.4	3.4	TONS	
PM10 Primary (includes filterables + condensibles)	0	3.4	3.4	TONS	
PM2.5 Primary (includes filterables + condensibles).	0	3.358	3.358	TONS	
CO - Carbon Monoxide	0	1.06165	1.06165	TONS	
NOx - Nitrogen Oxides	0	19.4057	19.4057	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	0	0.148381	0.148381	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Fugitive Amount	Stack Amount	Total	Units
0	4.63334	4.63334	TONS
0	.967	0.967	TONS
0	46,333.4	46,333.4	TONS
0	3.62243	3.62243	TONS
0	0.0168485	0.0168485	TONS
0	0.00269576	0.00269576	TONS
0	0.00126364	0.00126364	TONS
0	0.00505455	0.00505455	TONS
	Fugitive Amount 0 0 0 0 0 0 0 0 0 0 0 0	0 4.63334 0 .967 0 46,333.4 0 3.62243 0 0.0168485 0 0.00269576 0 0.00126364	0 4.63334 4.63334 0 .967 0.967 0 46,333.4 46,333.4 0 3.62243 3.62243 0 0.0168485 0.0168485 0 0.00269576 0.00269576 0 0.00126364 0.00126364

Butadiene, 1,3-	0	9.05607E-05	9.05607E-05	TONS
Cadmium	0	0.00291689	C)-00291689	TONS
Chromium	0	0.00559791	0.00559791	TONS
Ethyl Benzene	0	0.0134788	0.0134788	TONS
Fluoranthene	0	5.05455E-04	5.05455E-04	TONS
Formaldehyde	0	0.14519	0.14519	TONS
MN - Manganese	0	0.0337812	0.0337812	TONS
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	0	0.00279264	0.00279264	TONS
Naphthalene	0	5.47576E-04	5.47576E-04	TONS
Nickel	0	0.0483131	0.0483131	TONS
PAH, 16-	0	9.26667E-04	9.26667E-04	TONS
Phenol	0	0.00534941	0.00534941	TONS
Propylene Oxide	0	0.00610758	0.00610758	TONS
Toluene	0	0.0547576	0.0547576	TONS
Xylenes (Isomers and Mixture)	0	0.0269576	0.0269576	TONS

Processes

- Process & Emissions Detail

Name: PRC004

Source Classification Code (SCC): 2-02-002-01

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No contain Trace 'Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 6382.0

Winter (Dec - Feb)%: 23

Spring (March-May)%: 34

Summer (June-Aug)%: 34

Fall (Sept-Nov)%: 9

ENG003: 2016

Naterial	Material Action	Throughput	X Units
Natural Gas	Burned	743.01	MILLION CUBIC FEET

Variable	Amount	Meaning						
нсд	1133.8	Gas Heat Content (Btu/Cubic Feet)						
S	0	% Sulfur content by weight						

Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	3.4	3.4	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	3.4	3.4	TONS	
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	3.358	3.358	TONS	
CO - Carbon Monoxide	Time-based factor - Stack Test	0	92.9716	0.3327	0	1.06165	1.06165	TONS	Stack Test 4/27/2015 and 4/18/2016
NOx - Nitrogen Oxides	Time-based factor - Stack Test	0	362.816	6.0814	0	19.4057	19.4057	TONS	Stack Test 4/27/2015 and 4/18/2016
SO2 - Sulfur Dioxide	Emissions				0	0	0	TONS	
VOC - Volatile Organic Compounds	Time-based factor - Stack Test	0	2.38098	0.0465	0	0.148381	0.148381	TONS	stack tests on 4/27/2015 and 4/18/2016
Ammonia	Emissions				0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

ENG003: 2016

Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	lo.	1.2.4718		0	4.63334	4.63334	TONS	
PM2.5 Filterable Portion Only	Elmissions				0	.967	0.967	TONS	
Carbon Dioxide	Throughput -based factor	0	124,718.		0	46,333.4	46,333.4	TONS	
Methane	Throughpu: -based factor	C)	9.75068		0	3.62243	3.62243	TONS	
Acetaldehyde	Throughput -based factor	0	0.045352		0	0.0168485	0.0168485	TONS	
Acrolein	Throughput -based factor	0	0.007256 32		0	0.00269576	0.00269576	TONS	
Benz[A]Anthrace	Throughput -based factor	0	0.003401		0	0.00126364	0.00126364	TONS	
Benzene	Throughput -based factor	0	C).013605		0	0.00505455	0.00505455	TONS	
Butadiene, 1,3-	Throughput -based factor	0	21.43767E 04		0	9.05607E-05	9.05607E-05	TONS	
Cadmium	Throughput -based factor		01.007851 5.6		0	0.00291689	0.00291689	TONS	
Chromium	Throughput -based factor	l _o	0.015068		0	0.00559791	0.00559791	TONS	
Ethyl Benzene	Throughput -based	0	0.036281		0	0.0134788	0.0134788	TONS	

	1				1				
	factor								
Fluoranthene	Throughput -based factor	0	0.001360 56		0	5.05455E-04	5.05455E-04	TONS	
Formaldehyde	Time-based factor - Stack Test	0	0.804998	0.0455	0	0.14519	0.14519	TONS	Stack Test 4/27/2015 and 4/18/2016
MN - Manganese	Throughput -based factor	0	0.090930		0	0.0337812	0.0337812	TONS	
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	-based factor	0	0.007517 09		0	0.00279264	0.00279264	TONS	
Naphthalene	Throughput -based factor	0	0.001473 94		0	5.47576E-04	5.47576E-04	TONS	
Nickel	Throughput -based factor	0	0.130047		0	0.0483131	0.0483131	TONS	
PAH, 16-	Throughput -based factor	0	0.002494 36		0	9.26667E-04	9.26667E-04	TONS	
Phenol	Throughput -based factor	0	0.014399		0	0.00534941	0.00534941	TONS	
Propylene Oxide	Throughput -based factor	0	0.016440		0	0.00610758	0.00610758	TONS	
Toluene	Throughput -based factor	0	0.147394		0	0.0547576	0.0547576	TONS	
Xylenes (Isomers and Mixture)	Throughput -based factor		0.072563 2		0	0.0269576	0.0269576	TONS	

ENG003: 2016

Emissions Unit ID: ENG004

Detailed Reporting

AQD Description: 04/(T4) Solar Titan 130S Turbine

- Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati or 1s Require d
PM Primary (includes filterables > 10 microns + condensibles)	0	.6	0.6	TONS	
PM10 Primary (includes filterables + condensibles)	0	.6	0.6	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	.570	0.57	TONS	
CO - Carbon Monoxide	0	5.83195	5.83195	TONS	
NOx - Nitrogen Oxides	0	5.27711	5.27711	TONS	
SO2 - Sulfur Dioxide	0	. 3	0.3	TONS	
VOC - Volatile Organic Compounds	0	0.825509	0.825509	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyorning DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Polluitant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	2.25353	2.25353	TONS
PM2.5 Filterable Portion Only	0	.164	0.164	TONS
Carbon Dioxide	0	22,535.3	22,535.3	TONS
Methane	0	1.76185	1.76185	I.ONS
Acetaldehyde	0	0.00819465	0.00819465	T.ONS
Acrolein	0	0.00131114	0.00131114	Z'ONS
Benz[A]Anthracene	0	6.14599E-04	6.14599E-04	TONS
Benzene	0	0.0024584	0.0024584	TONS

Butadiene, 1,3-	0	4.40463E-05	4.40463E-05	TONS
Cadmium	0	0.0014187	0.0014187	TONS
Chromium	0	0.00272267	0.00272267	TONS
Ethyl Benzene	0	0.00655572	0.00655572	TONS
Fluoranthene	0	2.4584E-04	2.4584E-04	TONS
Formaldehyde	0	0.0152096	0.0152096	TONS
MN - Manganese	0	0.0164303	0.0164303	TONS
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	0	0.00135826	0.00135826	TONS
Naphthalene	0	2.66326E-04	2.66326E-04	TONS
Nickel	0	0.0234982	0.0234982	TONS
PAH, 16-	0	4.50706E-04	4.50706E-04	TONS
Phenol	0	0.00260181	0.00260181	TONS
Propylene Oxide	0	0.00297056	0.00297056	TONS
Toluene	0	0.0266326	0.0266326	TONS
Xylenes (Isomers and Mixture)	0	0.0131114	0.0131114	TONS

Processes

Process & Emissions Detail

Name: PRC005

Source Classification Code (SCC): 2-02-002-01

Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Vailablesi/Factors/Explanations No contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7 Ma ximum Weeks Per Year: 52

Actual Hours Per Year: 3104.0

Winter (Dec - Feb)%: 24

Spring (March-May)%: 1

Summer (June-Aug)%: 6

Fall (Sept-Nov)%: 69

Material	Material Action	Throughput	X Units
Natural Gas	Burned	361.38	MILLION CUBIC FEET

Variable	Arnount	Meaning
НСg	1133.8	Gas Heat Content (Btu/Cubic Feet)
S	0	% Sulfur content by weight

- Process Emissions

F ² ollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	. 6	0.6	TONS	
FM10 Primary (includes filterables + condensibles)	Emissions				0	. 6	0.6	TONS	
FM2.5 Primary (includes filterables + condensibles)	Emissions				0	.570	0.57	TONS	
C'O - Carbon Monoxide	Time-based factor - Stack Test	0	92.9716	3.7577	0	5.83195	5.83195	TONS	Stack Test 4/28/2015 and 4/19/2016
NOx - Nitrogen Cxides	Time-based factor - Stack Test	0	362.816	3.4002	0	5.27711	5.27711	TONS	Stack Test 4/28/2015 and 4/19/2016
SO2 - Sulfur Lioxide	Emissions				0	. 3	0.3	TONS	
VOC - Volatile (rganic (ompounds	Time-based factor - Stack Test	0	2.38098	0.5319	0	0.825509	0.825509	TONS	Stack Test 4/28/2015 and 4/19/2016
Ammonia	Emissions				0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming bEQ - generated emission calculations if you have more accurate information.

Bridger Compressor Station(F018585)

Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	0	12.4718		0	2.25353	2.25353	TONS	
PM2.5 Filterable Portion Only	Emissions				0	.164	0.164	TONS	
Carbon Dioxide	Throughput -based factor	0	124,718.		0	22,535.3	22,535.3	TONS	
Methane	Throughput -based factor	0	9.75068		0	1.76185	1.76185	TONS	
Acetaldehyde	Throughput -based factor	0	0.045352		0	0.00819465	0.00819465	TONS	
Acrolein	Throughput -based factor	0	0.007256		0	0.00131114	0.00131114	TONS	
Benz[A]Anthrace ne	Throughput -based factor	0	0.003401		0	6.14599E-04	6.14599E-04	TONS	
Benzene	Throughput -based factor	0	0.013605		0	0.0024584	0.0024584	TONS	
Butadiene, 1,3-	Throughput -based factor	0	2.43767E -04		0	4.40463E-05	4.40463E-05	TONS	
Cadmium	Throughput -based factor	C)	0.00 7 851 56		0	0.0014187	0.0014187	TONS	
Chromium	Throughput -based factor	0	0.015068		0	0.00272267	0.00272267	TONS	
Ethyl Benzene	Throughput -based	C+	0.036281		0	0.00655572	0.00655572	TONS	

	factor								
Fluoranthene	Throughput -based factor	0	0.001360 56		0	2.4584E-04	2.4584E-04	TONS	
Formaldehyde	Time-based factor - Stack Test	0	0.804998	0.0098	0	0.0152096	0.0152096	TONS	Stack Test 4/28/2015 and 4/19/2016
MN - Manganese	Throughput -based factor	0	0.090930		0	0.0164303	0.0164303	TONS	
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	-based factor	0	0.007517 09		0	0.00135826	0.00135826	TONS	
Naphthalene	Throughput -based factor	0	0.001473 94		0	2.66326E-04	2.66326E-04	TONS	
Nickel	Throughput -based factor	0	0.130047		0	0.0234982	0.0234982	TONS	
PAH, 16-	Throughput -based factor	0	0.002494		0	4.50706E-04	4.50706E-04	TONS	
Phenol	Throughput -based factor	0	0.014399		0	0.00260181	0.00260181	TONS	,
Propylene Oxide	Throughput -based factor	0	0.016440		0	0.00297056	0.00297056	TONS	
Toluene	Throughput -based factor	0	0.147394		0	0.0266326	0.0266326	TONS	
Xylenes (Isomers and Mixture)	Throughput -based factor	0	0.072563		0	0.0131114	0.0131114	TONS	

Emissions Unit ID: ENG005

Detailed Reporting

ENG005: 2016

AQD Description: 05/(T5/6) Solar Titan 130S Turbine

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	0	1.13	1.13	TONS	
PM10 Primary (includes filterables + condensibles)	0	1.13	1.13	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	1.13	1.13	TONS	
CO - Carbon Monoxide	0	0.325107	0.325107	TONS	
NOx - Nitrogen Oxides	0	1.93421	1.93421	TONS	
SO2 - Sulfur Dioxide	0	. 6	0.6	TONS	
VOC - Volatile Organic Compounds	0	0.0405132	0.0405132	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	0.538719	0.538719	TONS
PM2.5 Filterable Portion Only	0	.325	0.325	TONS
Carbon Dioxide	0	5,387.19	5,387.19	TONS
Methane	0	0.421181	0.421181	TONS
Acetaldehyde	0	0.00195898	0.00195898	TONS
Acrolein	0	3.13437E-04	3.13437E-04	TONS
Benz[A]Anthracene	0	1.46923E-04	1.46923E-04	TONS
Elenzene	0	5.87694E-04	5.87694E-04	TIONS
				1

0	1.05295E-05	1.05295E-05	TONS
0	3.39148E-04	3.39148E-04	TONS
0	6.50871E-04	6.50871E-04	TONS
0	0.00156718	0.00156718	TONS
0	5.87694E-05	5.87694E-05	TONS
0	0.0178822	0.0178822	TONS
0	0.00392776	0.00392776	TONS
0	3.24701E-04	3.24701E-04	TONS
0	6.36668E-05	6.36668E-05	TONS
0	0.00561738	0.00561738	TONS
0	1.07744E-04	1.07744E-04	TONS
0	6.21978E-04	6.21978E-04	TONS
0	7.1013E-04	7.1013E-04	TONS
0	0.00636668	0.00636668	TONS
0	0.00313437	0.00313437	TONS
	0 0 0 0	0 3.39148E-04 0 6.50871E-04 0 0.00156718 0 5.87694E-05 0 0.0178822 0 0.00392776 0 3.24701E-04 0 6.36668E-05 0 0.00561738 0 1.07744E-04	0 3.39148E-04 3.39148E-04 0 6.50871E-04 6.50871E-04 0 0.00156718 0.00156718 0 5.87694E-05 5.87694E-05 0 0.0178822 0.0178822 0 0.00392776 0.00392776 0 3.24701E-04 3.24701E-04 0 6.36668E-05 6.36668E-05 0 0.00561738 0.00561738 0 1.07744E-04 1.07744E-04 0 6.21978E-04 6.21978E-04 0 7.1013E-04 7.1013E-04 0 0.00636668 0.00636668

Processes

- Process & Emissions Detail

Name: PRC006

Source Classification Code (SCC): 2-02-002-01

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No

contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 742.0

Winter (Dec - Feb)%: 23

Spring (March-May)%: 56

Summer (June-Aug)%: 13

Fall (Sept-Nov)%: 8

Material	Material Action	Throughput	X Units
Natural Gas	Burned	86.39	MILLION CUBIC FEET

Variable	Amount	Meaning			
нСд	1133.8	Gas Heat Content (Btu/Cubic Feet)			
s	0	% Sulfur content by weight			

Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	1.13	1.13	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	1.13	1.13	TONS	
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	1.13	1.13	TONS	
CO - Carbon Monoxide	Time-based factor - Stack Test		92.9716	0.8763	0	0.325107	0.325107	TONS	Stack Test 4/28/2015 and 4/18/2016
NOx - Nitrogen Oxides	Time-based factor - Stack Test	0	362.816	5.2135	0	1.93421	1.93421	TONS	Stack Test 4/28/2015 and 4/18/2016
SO2 - Sulfur Dioxide	Emissions				0	. 6	0.6	TONS	
VOC - Volatile Organic Compounds	Time-based factor - Stack Test	0	2.38098	0.1092	0	0.0405132	0.0405132	TONS	Stack Test 4/28/2015 and 4/18/2016
Ammonia	Emissions				0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	0	12.4718		0	0.538719	0.538719	TONS	
PM2.5 Filterable Portion Only	Emissions				0	.325	0.325	TONS	
Carbon Dioxide	Throughput -based factor	0	124,718.		0	5,387.19	5,387.19	TONS	
Methane	Throughput -based factor	0	9.75068		0	0.421181	0.421181	TONS	
Acetaldehyde	Throughput -based factor	0	0.045352		0	0.00195898	0.00195898	TONS	
Acrolein	Throughput -based factor	0	0.007256 32		0	3.13437E-04	3.13437E-04	TONS	
Benz [A] Anthrace ne	Throughput -based factor	0	0.003401		0 '	1.46923E-04	1.46923E-04	TONS	
Benzene	Throughput -based factor	0	0.013605 6		0	5.87694E-04	5.87694E-04	TONS	
Butadiene, 1,3-	Throughput -based factor	0	2.43767E -04		0	1.05295E-05	1.05295E-05	TONS	
Cadmium	Throughput -based factor	0	0.007851 56		0	3.39148E-04	3.39148E-04	TONS	
Chromium	Throughput -based factor	0	0.015068		0	6.50871E-04	6.50871E-04	TONS	
Ethyl Benzene	Throughput -based	0	0.036281		0	0.00156718	0.00156718	TONS	

	factor								
Fluoranthene	Throughput -based factor	0	0.001360 56		0	5.87694E-05	5.87694E-05	TONS	
Formaldehyde	Time-based factor - Stack Test	0	0.804998	0.0482	0	0.0178822	0.0178822	TONS	Stack Test 4/28/2015 and 4/18/2016
MN - Manganese	Throughput -based factor	0	0.090930 8		0	0.00392776	0.00392776	TONS	
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	Throughput -based factor	0	0.007517 09		0	3.24701E-04	3.24701E-04	TONS	
Naphthalene	Throughput -based factor	0	0.001473 94		0	6.36668E-05	6.36668E-05	TONS	
Nickel	Throughput -based factor	О	0.130047		0	0.00561738	0.00561738	TONS	
PAH, 16-	Throughput -based factor	0	0.002494 36		0	1.07744E-04	1.07744E-04	TONS	
Phenol	Throughput -based factor	0	0.014399		0	6.21978E-04	6.21978E-04	TONS	
Propylene Oxide	Throughput -based factor	0	0.016440		0	7.1013E-04	7.1013E-04	TONS	
Toluene	Throughput -based factor	0	0.147394		0	0.00636668	0.00636668	TONS	
Xylenes (Isomers and Mixture)	Throughput -based factor	0	0.072563		0	0.00313437	0.00313437	TONS	

Emissions Unit ID: ENGO06

Detailed Reporting

AQD Description: 15/(G1) Solar Taurus 60-7300S Turbine

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	0	.01	0.01	TONS	
PM10 Primary (includes filterables + condensibles)	0	.01	0.01	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	.005	0.005	TONS	
CO - Carbon Monoxide	0	0.134802	0.134802	TONS	
NOx - Nitrogen Oxides	0	0.131499	0.131499	TONS	
SiO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	0	0.00884575	0.00884575	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	0.0252554	0.0252554	TONS
PM2.5 Filterable Portion Only	0	.001	0.001	TONS
Carbon Dioxide	0	252.554	252.554	TONS
Methane	0	0.0197451	0.0197451	TONS
Acetaldehyde	0	9.18378E-05	9.18378E-05	TONS
Acrolein	0	1.4694E-05	1.4694E-05	TONS
Benz [A] Anthracene	0	6.88784E-06	6.88784E-06	T'ONS
Benzene	0	2.75513E-05	2.75513E-05	TONS

Butadiene, 1,3-	0	4.93628E-07	4.93628E-07	TONS
Cadmium	0	1.58994E-05	1.58994E-05	TONS
Chromium	0	3.05131E-05	3.05131E-05	TONS
Ethyl Benzene	0	7.34702E-05	7.34702E-05	TONS
Fluoranthene	0	2.75513E-06	2.75513E-06	TONS
Formaldehyde	0	0.00149705	0.00149705	TONS
MN - Manganese	0	1.84135E-04	1.84135E-04	TONS
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	0	1.52221E-05	1.5222E-05	TONS
Naphthalene	0	2.98473E-06	2.98473E-06	TONS
Nickel	0	2.63345E-04	2.63345E-04	TONS
PAH, 16-	0	5.05108E-06	5.05108E-06	TONS
Phenol	0	2.91586E-05	2.91586E-05	TONS
Propylene Oxide	0	3.32912E-05	3.32912E-05	TONS
Toluene	0	2.98473E-04	2.98473E-04	TONS
Xylenes (Isomers and Mixture)	0	1.4694E-04	1.4694E-04	TONS

Processes

- Process & Emissions Detail

Name: PRC020

Source Classification Code (SCC): 2-02-002-01

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 79.0

Winter (Dec - Feb)%: 6

Spring (March-May)%: 11

Summer (June-Aug)%: 80

Fall (Sept-Nov)%: 3

Material	Material Action	Throughput	X Units
Natural Gas	Burned	4.05	MILLION CUBIC FEET

Variable	Amount	Meaning				
нСд	1133.8	Gas Heat Content (Btu/Cubic Feet)				
s	0	% Sulfur content by weight				

- Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	.01	0.01	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	.01	0.01	TONS	
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	.005	0.005	TONS	
CO - Carbon Monoxide	Time-based factor - Stack Test	0	92.9716	3.4127	0	0.134802	0.134802	TONS	Stack Test 5/6/2015 and 4/19/2016
NOx - Nitrogen Oxides	Time-based factor - Stack Test	0	362.816	3.3291	0	0.131499	0.131499	TONS	Stack Test 5/6/2015 and 4/19/2016
SO2 - Sulfur Dioxide	Emissions				0	0	0	TONS	
VOC - Volatile Organic Compounds	Time-based factor - Stack Test	24	2.38098	0.2684	0	0.00884575	0.00884575	TONS	Stack Test 5/6/2015 and 4/19/2016
Ammonia	Emissions				О	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

- Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	0	12.4718		0	0.0252554	0.0252554	TONS	
PM2.5 Filterable Portion Only	Emissions				0	.001	0.001	TONS	
Carbon Dioxide	Throughput -based factor	0	124,718.		0	252.554	252.554	TONS	
Methane	Throughput -based factor	0	9.75068		0	0.0197451	0.0197451	TONS	
Acetaldehyde	Throughput -based factor	0	0.045352		0	9.18378E-05	9.18378E-05	TONS	
Acrolein	Throughput -based factor	0	0.007256		0	1.4694E-05	1.4694E-05	TONS	
Benz [A] Anthrace ne	Throughput -based factor	0	0.003401		0	6.88784E-06	6.88784E-06	TONS	
Benzene	Throughput -based factor	0	0.013605		0	2.75513E-05	2.75513E-05	TONS	
Butadiene, 1,3-	Throughput -based factor	0	2.43767E -04		0	4.93628E-07	4.93628E-07	TONS	
Cadmium	Throughput -based factor	0	0.007851 56		0	1.58994E-05	1.58994E-05	TONS	
Chromium	Throughput -based factor	0	0.015068		0	3.05131E-05	3.05131E-05	TONS	
Ethyl Benzene	Throughput -based	0	0.036281		0	7.34702E-05	7.34702E-05	TONS	

	factor								
Fluoranthene	Throughput -based factor	0	0.001360 56		0	2.75513E-06	2.75513E-06	TONS	
Formaldehyde	Time-based factor - Stack Test	0	0.804998	0.0379	0	0.00149705	0.00149705	TONS	Stack Test 5/6/2015 and 4/19/2016
MN - Manganese	Throughput -based factor	0	0.090930		0	1.84135E-04	1.84135E-04	TONS	
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	-based factor	0	0.007517 09		0	1.52221E-05	1.52221E-05	TONS	
Naphthalene	Throughput -based factor	0	0.001473 94		0	2.98473E-06	2.98473E-06	TONS	
Nickel	Throughput -based factor	0	0.130047		0	2.63345E-04	2.63345E-04	TONS	
PAH, 16-	Throughput -based factor	0	0.002494		0	5.05108E-06	5.05108E-06	TONS	
Phenol	Throughput -based factor	0	0.014399		0	2.91586E-05	2.91586E-05	TONS	
Propylene Oxide	Throughput -based factor	0	0.016440		0	3.32912E-05	3.32912E-05	TONS	
Toluene	Throughput -based factor	0	0.147394		0	2.98473E-04	2.98473E-04	TONS	
Xylenes (Isomers and Mixture)	Throughput -based factor	0	0.072563		0	1.4694E-04	1.4694E-04	TONS	

Emissions Unit ID: ENGOOB

Detailed Reporting

ENG008: 2016

AQD Description: 08/(G3) John Deere Backup Generator

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons Require
PM Primary (includes filterables > 10 microns + condensibles)	0	.004	0.004	TONS	
PM10 Primary (includes filterables + condensibles)	0	.002	0.002	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	.002	0.002	TONS	
CO - Carbon Monoxide	0	0.00440025	0.00440025	TONS	
NOx - Nitrogen Oxides	0	0.0645997	0.0645997	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	0	5.0025E-04	5.0025E-04	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	0.00212359	0.00212359	TONS
PM Condensible Portion Only (all less than 2.5 microns)	0	1.81283E-04	1.81283E-04	TONS
PM Filterable Portion Only (includes larger than 10 microns)	0	0.0023653	0.0023653	TONS
PM: S. Filterable Portion Only	0	0.00117402	0.00117402	TONS
PM2.5 Filterable Portion Only	0	.001	0.001	TONS
Carbon Dioxide	0	3.90189	3.90189	TONS
Methane	0	1.91642E-04	1.91642E-04	TONS
Acenaphthene	0	1.0384E-07	1.0384E-07	TONS

Acenaphthylene	0	2.04794E-07	2.04794E-07	TONS
Acetaldehyde	0	5.59136E-07	5.59136E-07	TONS
Acrolein	0	1.74841E-07	1.74841E-07	TONS
Anthracene	0	2.72911E-08	2.72911E-08	TONS
Benz [A] Anthracene	0	1.38009E-08	1.38009E-08	TONS
Benzene	0	1.72178E-05	1.72178E-05	TONS
Benzo[A] Pyrene	0	2.85114E-09	2.85114E-09	TONS
Benzo[B]Fluoranthene	0	2.46287E-08	2.46287E-08	TONS
Benzo[G,H,I,]Perylene	0	6.16825E-09	6.16825E-09	TONS
Benzo[K]Fluoranthene	0	2.41848E-09	2.41848E-09	TONS
Chrysene	0	3.39475E-08	3.39475E-08	TONS
Dibenzo[A,H]Anthracene	0	3.83851E-09	3.83851E-09	TONS
Fluoranthene	0	8.94173E-08	8.94173E-08	TONS
Fluorene	0	2.84006E-07	2.84006E-07	TONS
Formaldehyde	0	1.75064E-06	1.75064E-06	TONS
Indeno[1,2,3-C,D]Pyrene	0	4.5929E-09	4.5929E-09	TONS
Maphthalene	0	2.88443E-06	2.88443E-06	TONS
РАН, 16-	0	4.70385E-06	4.70385E-06	TONS
Phenanthrene	0	9.05268E-07	9.05268E-07	TONS
Pyrene	0	8.23173E-08	8.23173E-08	TONS
Styrene	0	2.06571E-07	2.06571E-07	TONS
Toluene	0	6.23481E-06	6.23481E-06	TONS
Xylenes: (Isomers and Mixture)	0	4.28227E-06	4.28227E-06	TONS

Processes

- Process & Emissions Detail

Name: PRC009

Source Classification Code (SCC): 2-02-004-01

Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No contain Tade Secrets:

Maximum Hours Per Day: 15

Maximum Days Per Week: 1

Maximum Weeks Per Year: 15

Actual Hours Per Year: 15.0

Winter (Dec - Feb)%: 40

Spring (March-May)%: 20

Summer (June-Aug)%: 20

Fall (Sept-Nov)%: 20

ENG008: 2016

Material	Material Action	Throughput	X Units	
Distillate Oil (Diesel)	Burned	0.3453	1000 GALLONS	

Variable	Amount	Meaning					
HCl	128514	Liquid Heat Content (Btu/gallons)					
S	0.05	% Sulfur content by weight					

- Process Emissions

F'ollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	.004	0.004	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	.002	0.002	TONS	
PM2.5 Primary (includes filterables + c:ondensibles)	Emissions		0.3636		0	.002	0.002	TONS	
CO - Carbon Monoxide	Time-based factor - Estimated	0	130	0.5867	0	0.00440025	0.00440025	TONS	2/11/2016 by Portable Analyzer Test.
NOx - Nitrogen Oxides	Time-based factor - Estimated	0	604	8.6133	0	0.0645997	0.0645997	TONS	2/11/2016 by Portable Analyzer Test.
SO2 - Sulfur Dioxide	Emissions		39.7		O	0	0	TONS	

VOC - Volatile Organic Compounds	Time-based factor - Estimated	0	49.3	0.0667	0	5.0025E-04	5.0025E-04	TONS	2/11/2016 by Portable Analyzer Test.
Ammonia	Emissions				0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

- Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	0	12.3		0	0.00212359	0.00212359	TONS	
PM Condensible Portion Only (all less than 2.5 microns)	Throughput -based factor	0	1.05		0	1.81283E-04	1.81283E-04	TONS	
PM Filterable Portion Only (includes larger than 10 microns)	Throughput -based factor	0	13.7		0	0.0023653	0.0023653	TONS	
PM10 Filterable Portion Only	Throughput -based factor	0	6.8		0	0.00117402	0.00117402	TONS	
PM2.5 Filterable Portion Only	Emissions		6.5		0	.001	0.001	TONS	
Carbon Dioxide	Throughput -based factor	0	22,600		0	3.90189	3.90189	TONS	
Methane	Throughput -based factor	0	1.11		0	1.91642E-04	1.91642E-04	TONS	
Acenaphthene	Throughput -based factor	0	6.01446E -04		0	1.0384E-07	1.0384E-07	TONS	

Acenaphthylene	Throughput -based factor	0	0.001186	0	2.04794E-07	2.04794E-07	TONS	
Acetaldehyde	Throughput -based factor	0	0.003238 55	0	5.59136E-07	5.59136E-07	TONS	
Acrolein	Throughput -based factor	0	0.001012 69	0	1.74841E-07	1.74841E-07	TONS	
Anthracene	Throughput -based factor	0	1.58072E -04	0	2.72911E-08	2.72911E-08	TONS	
Benz[A]Anthrace ne	Throughput -based factor	0	7.99357E -05	0	1.38009E-08	1.38009E-08	TONS	
Benzene	Throughput -based factor	0	0.099726	0	1.72178E-05	1.72178E-05	TONS	
Benzo [A] Pyrene	Throughput -based factor	0	1.6514E- 05	0	2.85114E-09	2.85114E-09	TONS	
Benzo[B]Fluoran thene	Throughput based flactor	0	1.42651E -04	0	2.46287E-08	2.46287E-08	TONS	
Benzo[G,H,I,]Pe rylene	I'hroughput -based factor	0	3.57269E -05	0	6.16825E-09	6.16825E-09	TONS	
Benzo[K]Fluoran thene	Throughput -based factor	0	1.4008E- 05	0	2.41848E-09	2.41848E-09	TONS	
Chrysene	Throughput -based factor	0	1.96626E -04	0	3.39475E-08	3.39475E-08	TONS	
Dibenzo[A,H]Ant hracene	Throughput -based factor	0	2.22329E -05	0	3.83851E-09	3.83851E-09	TONS	
Fluoranthene	Throughput -based factor	0	5.17911E -04	0	8.94173E-08	8.94173E-08	TONS	
Fluorene	Throughput -based factor	0	0.001644 98	0	2.84006E-07	2.84006E-07	TONS	
		1	1	 	1			

ENG008: 2016

Formaldehyde	Throughput -based factor	О	0.010139	0	1.75064E-06	1.75064E-06	TONS	
Indeno[1,2,3- C,D]Pyrene	Throughput -based factor	0	2.66024E -05	0	4.5929E-09	4.5929E-09	TONS	
Naphthalene	Throughput -based factor	0	0.016706	0	2.88443E-06	2.88443E-06	TONS	
PAH, 16-	Throughput -based factor	0	0.027245	0	4.70385E-06	4.70385E-06	TONS	
Phenanthrene	Throughput -based factor	o	0.005243	0	9.05268E-07	9.05268E-07	TONS	
Pyrene	Throughput -based factor	О	4.76787E -04	0	8.23173E-08	8.23173E-08	TONS	
Styrene	Throughput -based factor	О	0.001196 47	0	2.06571E-07	2.06571E-07	TONS	
Toluene	Throughput -based factor	0	0.036112	0	6.23481E-06	6.23481E-06	TONS	
Xylenes (Isomers and Mixture)	Throughput -based factor	0	0.024803	0	4.28227E-06	4.28227E-06	TONS	

ENG008: 2016

Emissions Unit ID: FLR001 Detailed Reporting

AQD Description: 12/(CU-1) Smokeless Combustion Chamber (Combustion Unit) (Pilot) Flare

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons FRequire
PM Primary (includes filterables > 10 microns + condensibles)	0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	0	0	0	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	0	0	TONS	
CO - Carbon Monoxide	0	0.02	0.02	TONS	Τ
NOx - Nitrogen Oxides	0	0.01	0.01	TONS	ļ
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	0	0.01	0.01	TONS	
Ammonia	0	0	0	TONS	

- Processes

Process & Emissions Detail

Name: PRC013

Source Classification Code (SCC): 3-10-002-05

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No contain Trade Secrets:

Maximum Hours Per Day: 24

Winter (Dec - Feb)%: 25

Maximum Days Per Week: 7

Spring (March-May)%: 25

Maximum Weeks Per Year: 52

Summer (June-Aug)%: 25

Actual Hours Per Year: 8760.0

Fall (Sept-Nov)%: 25

Material	Material Action	Throughput	X Units		
Process Gas	Produced	0.105	MILLION CUBIC FEET		

- Process Emissions

Pollutant	Method Used	UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Fugitive Amount	Stack Amount	Total	Units	Explanation .
PM Primary (includes filterables > 10 microns + condensibles)	Emissions				0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	Emissions				0	0	0	TONS	
PM2.5 Primary (includes filterables + condensibles)	Emissions				0	0	0	TONS	
CO - Carbon Monoxide	Emissions				0	0.02	0.02	TONS	
NOx - Nitrogen Oxides	Emissions				0	0.01	0.01	TONS	
SO2 - Sulfur Dioxide	Emissions				0	0	0	TONS	
VOC - Volatile Organic Compounds	Emissions		5.6		0	0.01	0.01	TONS	
Ammonia	Emissions				0	0	0	TONS	

FLR001: 2016

Emissions Unit ID: FUG001

Detailed Reporting

AQD Description: (FUG) Facility Fugitive Emissions

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	0	0	0	TONS	
PM10 Primary (includes filterables + condensibles)	0	0	0	TONS	
PM2.5 Primary (includes filterables + condensibles)	0	0	0	TONS	
CO - Carbon Monoxide	0	0	0	TONS	
NOx - Nitrogen Oxides	0	0	0	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	29.6	0	29.6	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Benzene	210	0	210	POUNDS
Hexane, N-	1180	0	1,180	POUNDS
Toluene	160	0	160	POUNDS
Xylenes (Isomers and Mixture)	10	0	10	POUNDS

Processes

- Process & Emissions Detail

Name: PRC001

Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 8760.0

Winter (Dec - Feb)%: 25

Spring (March-May)%: 25

Summer (June-Aug)%: 25

Fall (Sept-Nov)%: 25

FUG001: 2016

Matterial	Material Action	Throughput	X Units
Gas	Produced	1	MILLION CUBIC FEET

Process Emissions

Pollutant	Method Used	UnCont	UnCont. Factor (LBS/X)	Fugitive Amount	Stack Amount	Total	Units	Explanation
FM Primary (includes filterables > 10 microns + c:ondensibles)	Emissions			0	0	0	TONS	
FM10 Primary (includes filterables + condensibles)	Emissions			0	0	0	TONS	
FM2.5 Primary (includes filterables + condensibles)	Emissions			O	0	0	TONS	
C'O - Carbon Monoxide	Emissions			0	0	0	TONS	
NOx - Nitrogen Oxides	Emissions			0	0	0	TONS	
SiO2 - Sulfur Dioxide	Emissions			0	0	0	ZONS	

VOC - Volatile Organic Compounds	Emissions		29.6	0	29.6	TONS	
Ammonia	Emissions		0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

- Process Emissions

Pollutant	Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)	Amount	Stack Amount	Total	Unit s	Explanation
Benzene	Emissions				210	0	210	POUN DS	
Hexane, N-	Emissions				1180	0	1,180	POUN DS	
T'oluene	Emissions				160	0	160	POUN	
Xylenes (Isomers and Mixture)	Emissions				10	0	10	POUN	

FUG001: 2016

Emissions Unit ID: HET001

Detailed Reporting

HET001: 2016

AQD Description: 09/(H1) 6.0 MMBtu/hr Fuel Gas Heater

- Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total	Units	Further Validati ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	0.147	0.147	0.294	TONS	
FM10 Primary (includes filterables + condensibles)	0.147	0.147	0.294	TONS	
FM2.5 Primary (includes filterables + condensibles)	0.147	0.147	0.294	TONS	
CO - Carbon Monoxide	0	1.6	1.6	TONS	
NOx - Nitrogen Oxides	0	1.9	19	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	0	.1	0.1	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	0.212465	0.212465	TONS
PM2.5 Filterable Portion Only	0	.037	0.037	TONS
Carbon Dioxide	0	2,317.8	2,317.8	TONS
Methane	0	0.0444245	0.0444245	TONS
Nitrous Oxide	0	0.042493	0.042493	TONS
Acenaphthene	О	1.73835E-08	1.73835E-08	TONS
Acenaphthylene	0	1.73835E-08	1.73835E-08	TONS
Acetaldehyde	0	4.57696E-04	4.57696E-04	TONS

Arthracene 0 3.1788-08 7.31788-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08 7.0188-08					
Armerie Armeri	Acrolein	0	3.94188E-04	3.94188E-04	TONS
Benna (A) Anthracene 0 1,738/SF-08 1,738/SF-08 708/SF-08 Bennane 0 4,056/SF-05 4,056/SF-05 708/SF-08 Bennac (A) Pyrene 0 1,738/SF-08 1,738/SF-08 708/SF-08 Bennac (A) Pyrene 0 1,738/SF-08 1,738/SF-08 708/SF-08 Bennac (A) Fluoranthene 0 0.405/SF-08 0.405/SF-08 708/SF-08 Bennac (A) Fluoranthene 0 1,738/SF-08 1,738/SF-08 708/SF-08 Bennac (A) Fluoranthene 0 1,738/SF-08 1,738/SF-08 708/SF-08 Bennac (A) Fluoranthene 0 1,538/SF-08 1,538/SF-08 708/SF-08 Cadatum 0 1,538/SF-08 1,538/SF-08 708/SF-08 Chrystene 0 1,748/SF-07 708/SF-08 Chrystene 0 1,622/SF-08 1,548/SF-08 708/SF-08 Diberbylober (A) Micharcene, 7,12- 0 1,548/SF-07 1,548/SF-08 708/SF-08 Fouranthene 0 1,548/SF-08 1,748/SF-08 708/SF-08	Anthracene	0	2.3178E-08	2.3178E-08	TONS
Benzene 0 4.05615E-05 4.05615E-05 7088 Benzen (B) Plucranthene 0 1.1589E-08 1.5898E-08 7088 Benzen (B) Plucranthene 0 0.0405615 1.0383E-08 7088 Benzen (B) Plucranthene 0 0.0405615 0.0405615 7088 Benzen (B) Plucranthene 0 0.0405615 0.0405615 7088 Benzen (B) Plucranthene 0 0.0405615 0.0405615 7088 Benzel (B) Plucranthene 0 1.1589E-07 1.1589E-07 1.1589E-07 7088 Benzyl Llum 0 2.12468E-05 2.12468E-05 1.0586E-07 7088 Chrysene 0 2.7041E-05 2.7041E-05 1088 Chrysene 0 1.62246E-06 1.0246E-06 708 DibenzolA, Bi Anthracene 0 1.5492E-07 1.5492E-07 708 DibenzolA, Bi Anthracene 0 1.5492E-07 1.5492E-07 708 Plucrathene 0 1.5492E-07 1.5492E-07 708	Arsenic	0	3.863E-06	3.863E-06	TONS
Banze (A) Pyrene 0 1,1589-08 1,1589-08 708 Benze (B) Plucranthene 0 1,78835-08 1,78835-08 708 Benze (B, I, I, Perylene 0 0,405615 0,405615 708 Benze (B, I, I) Perylene 0 0,405615 0,405615 708 Benze (B, I) Liveranthene 0 1,78835-08 1,78835-08 17885-08 108 Berylliue 0 1,15898-07 1,1588-01 708 Cadnium 0 2,14455-05 2,14458-05 108 Chromium 0 1,5385-04 2,7418-05 708 Cobalt 1,5385-04 1,7885-04 1,7885-04 708 Cobalt 0 1,5382-04 1,5882-04 708 Dibenco A, III Anthracene 7,12- 1,5482-04 708 Fluoranthene 0 5,7445-06 1,5482-04 708 Fluoranthene 0 6,7562-04 6,7562-04 708 Dibenzo (A, II) Anthracene 7,12- 6,7482-04 708	Benz[A]Anthracene	0	1.73835E-08	1.73835E-08	TONS
Beno [8] Fluoranthene 0 1.73835E-08 1.73835E-08 70835E-08 Benzo [G, H, 1) Perylene 0 0.406515 0.405515 7085 Benzo [G, H, 1) Perylene 0 1.73835E-08 1.73835E-08 1.73835E-08 7085 Benzo [R, 1) Perylene 0 1.589E-07 1.589E-07 7085 Cadatium 0 2.12465E-05 2.12465E-05 7085 Chromium 0 2.7041E-05 2.7041E-05 7085 Chrysene 0 1.73835E-08 1.73835E-08 7085 Cobalt 0 1.62246E-06 1.62246E-06 7085 Dishento/Albarthracene 0 1.6224E-06 1.589E-08 7085 Dishento/Albarthracene 0 1.5452E-07 1.5452E-01 7085 Piuoranthene 0 1.5452E-08 5.7945E-08 7085 Fiuoranthene 0 0.34767 0.3476T 7085 Formaldebyde 0 0.34767 0.3476T 7085 Beach, H 0 0.3476T <td>Benzene</td> <td>0</td> <td>4.05615E-05</td> <td>4.05615E-05</td> <td>TONS</td>	Benzene	0	4.05615E-05	4.0561 5 E-05	TONS
Benzol (G. H. I.) Perylene 0 0.0405615 70.8 Benzol (R. F.) Lenzol (R. F.) Le	Benzo [A] Pyrene	0	1.1589E-08	1.1589E-08	TONS
Beno (K) Fluorantheme 0 1,73835E-08 708 Reryllium 0 1,589E-07 1,1589E-07 708 Cadmium 0 1,549E-07 1,589E-07 708 Chronium 0 2,7441E-05 2,12465E-05 708 Chrygene 0 1,73835E-08 1,73835E-08 708 Cobalt 1,6246E-06 1,6246E-06 1,639E-08 708 Dimethylbenz (A)Hithracene 0 1,549E-08 1,589E-08 708 Pluoranthene 0 1,549E-08 1,589E-08 708 Pluoranthene 0 1,549E-08 1,589E-08 708 Pluoranthene 0 3,745E-08 1,545E-04 708 Pluoranthene 0 3,408E-08 5,749E-08 708 Pluoranthene 0 3,408E-08 5,749E-08 708 Pluoranthene 0 3,408E-08 5,749E-08 708 Return Managhame 0 3,408E-08 1,73835E-08 708 Maccaman Managhame <td>Benzo[B] Fluoranthene</td> <td>0</td> <td>1.73835E-08</td> <td>1.73835E-08</td> <td>TONS</td>	Benzo[B] Fluoranthene	0	1.73835E-08	1.73835E-08	TONS
Beryllium 0 1.589E-07 1.589E-07 70N Cadnium 0 2.12465E-05 2.12465E-05 70N Chronium 0 2.7041E-05 2.7041E-05 70N Chrysene 1.62246E-06 1.73835E-08 70N Chrysene 0 1.6246E-06 1.62246E-06 70N Cobalt 0 1.589E-08 1.589E-08 70N Dimentol/Linathracene 1.6246E-06 1.6246E-06 1.6246E-06 70N Dimentol/Linathracene 0 1.589E-08 1.589E-08 70N Pluorene 0 5.7945E-08 1.598E-09 70N Pluorene 0 5.408E-08 5.7945E-08 70N Pluorene 0 6.1756E-04 6.1756E-04 70N Revand, N- 0 0.34767 0.34767 70N Inden(1,2,3-C,D)Pyrene 0 7.338E-08 1.7385E-08 70N Mcroury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms 0 0.03476 1.7385E-08 1.7385E-08	Benzo[G,H,I,]Perylene	0	0.0405615	0.0405615	TONS
Cadmium 0 2.1245E-05 2.1245E-05 TON Chromium 0 2.7041E-05 2.7041E-05 70 Mo Chrysene 0 1.73835E-08 1.73835E-08 70 Mo Cobalt 0 1.6246E-06 1.62246E-06 1.02246E-06 70 Mo DibenzofA,HJAnthracene 0 1.5892E-08 1.5892E-08 1.5892E-08 70 Mo Pluoranthene 0 1.5452E-07 1.5452E-07 70 Mo Fluoranthene 0 5.7945E-08 5.7945E-08 70 Mo Fluoranthene 0 6.17562E-07 5.7945E-08 70 Mo Fluoranthene 0 0.34767 5.7945E-08 70 Mo Fluoranthene 0 0.34767 0.34767 70 Mo Fluoranthene 0 0.34767 0.34767 70 Mo Rexame, N- 0 0.34767 0.34767 70 Mo Mary - Manganese 0 7.33978E-06 7.33978E-06 70 Mo Metcury, as BG; Alkyl & Aryl CMRDS; Elemental & Inorganic Forms <t< td=""><td>Benzo[K]Fluoranthene</td><td>0</td><td>1.73835E-08</td><td>1.73835E-08</td><td>TONS</td></t<>	Benzo[K]Fluoranthene	0	1.73835E-08	1.73835E-08	TONS
Chromium 0 2.7041E-05 70N Chrysene 1.73835E-08 1.73835E-08 70N Cobalt 0 1.62246E-06 1.62246E-06 70N Disenzo (A, H) Anthracene 0 1.589E-08 1.589E-08 70N Disenzo (A, H) Anthracene, 7,12- 0 1.5452E-07 1.5452E-07 70N Fluoranthene 0 5.7945E-08 5.7945E-08 70N Fluoranthene 0 6.17562E-04 5.7945E-08 70N Formaldehyde 0 6.17562E-04 6.17562E-04 70N Hexane, N- 0 0.34767 6.17562E-04 70N Indeno(1,2,3-C,D) Pyrene 0 0.34767 0.34767 70N Mercury, as HG; Alkyl & Aryl CMNDS; Elemental & Inorganic Forme 0 0.3376-0 7.3397E-06 70N Methylcholanthrene, 3- 0 1.73835E-08 7.7383E-09 7.0385E-06 70N Naphthalene 0 1.7382E-05 1.7082E-05 70N Nickel 0 4.0565E-07 1	Beryllium	0	1.1589E-07	1.1589E-07	TONS
Chrysene 0 1,73835E-08 70835E-08 7085 Cobalt 1,62246E-06 1,62246E-06 708 Dibenzo (A, H) Anthracene 0 1,589E-08 1,589E-08 708 Dimethylbenz (A) Anthracene, 7,12- 0 1,545ZE-07 1,545ZE-07 708 Fluoranthene 0 5,745ZE-08 5,745ZE-08 708 Fluoranthene 0 6,175GZE-04 5,745ZE-08 708 Fluorandelyde 0 6,175GZE-04 5,745ZE-08 708 Floraldelyde 0 0,34767 0,34767 708 Indeno[1,2,3-C,D]Pyrene 0 0,34767 0,34767 708 Mercury, 3e HG; Alkyl & Aryl CMPNDS, Elemental & Inorganic Forms 0 0 3,397E-06 7,3397E-06 708 Methylcholanthrene, 3- 0 1,7835E-08 1,7835E-08 708 Methylaphthalene 2 1,7832E-05 1,7832E-05 708 Nickel 0 1,7832E-05 1,7832E-06 708 Nickel 0 1,7832E-	Cadmium	0	2.12465E-05	2.12465E-05	TONS
Cobalt 1.62246E-06 1.62246E-06 TON Dibenzo [A, H] Anthracene 1.1589E-08 1.1589E-08 1.589E-08 70 S Dimethylbenz [A) Anthracene, 7,12- 0 1.5452E-07 1.5452E-07 70 S Fluoranthene 0 5.7945E-08 5.7945E-08 70 S Fluorene 0 5.4082E-08 5.4082E-08 70 S Fornaldehyde 0 6.17562E-04 6.17562E-04 70 S Hexane, N- 0 0.34767 0.34767 70 S Inden(1,2,3-C,D]Pyrene 0 1.73835E-08 1.73835E-08 70 S NN - Manganese 0 5.0219E-06 7.3397E-06 70 S Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms 0 1.73835E-08 1.73835E-08 70 S Methylnaphthalene, 2- 0 4.6356E-07 1.73835E-08 70 S Nickel 0 4.05615E-05 4.05615E-05 70 S Pb - Lead 0 4.05615E-05 4.05615E-05 70 S Pb - Lead 0 <	Chromium	0	2.7041E-05	2.7041E-05	TONS
Diamoto (A, H) Anthracene 1.1589E-08 1.1589E-08 TOM Dimethylbenz (A) Anthracene, 7,12- 0 1.5452E-07 1.5452E-07 70x Fluoranthene 0 5.7945E-08 5.7945E-08 70x 70x Fluorene 0 5.4082E-08 5.4082E-08 70x 70x Formaldehyde 0 6.17562E-04 6.17562E-04 70x 70x Hexane, N- 0 0.034767 0.034767 70x 70x Indeno (1,2,3-C,D) Pyrene 0 1.73835E-08 1.73835E-08 70x Mercury, as Hg; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms 0 2.2392E-06 5.2019E-06 70x Methylnolanthrene, 3- 0 1.73835E-08 1.73835E-08 70x Methylnolanthrene, 3- 0 1.6156E-07 4.6156E-07 70x Naphthalene 2- 1.7822E-05 1.7822E-05 70x Nickel 0 1.6156E-07 4.6156E-07 4.6156E-07 70x Pb - Lead 0 1.656E-07 4.656E-04	Chrysene	0	1.73835E-08	1.73835E-08	TONS
Dimethylbenz (A) Anthracene, 7,12- 0 1,5452E-07 1,5452E-07 70 Section Fluoranthene 0 5,7945E-08 5,7945E-08 70 Section Fluorene 0 5,4082E-08 5,4082E-08 70 Section Formaldehyde 0 6,17562E-04 6,17562E-04 70 Section Hexane, N- 0 0,34767 70 Section 70 Section 70 Section MN - Manganese 0 7,3397E-06 7,3397E-06 70 Section 70 Section Methylcholanthrene, 3- 0 1,73835E-08 1,73835E-08 70 Section Methylnaphthalene, 2- 0 1,73835E-08 1,73835E-08 70 Section Naphthalene 0 1,73835E-08 1,73835E-08 70 Section Nickel 0 1,73835E-08 1,73835E-08 70 Section <td>Cobalt</td> <td>0</td> <td>1.62246E-06</td> <td>1.62246E-06</td> <td>TONS</td>	Cobalt	0	1.62246E-06	1.62246E-06	TONS
Fluoranthene 0 0 5.7945E-08 5.7945E-08 70.85 Fluorene 0 0 5.4082E-08 5.4082E-08 70.85 Fluorene 0 0 5.4082E-08 5.4082E-08 70.85 Formaldehyde 0 0.034767 70.85 Formaldehyde 0 0.034767 70.85 Fluorene 0 0 0.034767 70.85 Fluorene 0 0 0 0.034767 70.85 F	Dibenzo[A,H]Anthracene	0	1.1589E-08	1.1589E-08	TONS
Fluorene 0 0 5.4082E-08 5.4082E-08 70NS Formaldehyde 0 0 6.17562E-04 6.17562E-04 70NS Hexane, N- Indeno(1,2,3-C,D)Pyrene 0 1.73835E-08 1.73835E-08 70NS Indeno(1,2,3-C,D)Pyrene 0 0 1.73835E-08 1.73835E-08 70NS MN- Manganese 0 0 7.3397E-06 7.3397E-06 70NS Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms 0 0 5.0219E-06 5.0219E-06 70NS Methylnaphthalene, 3- Methylnaphthalene, 2- Naphthalene 0 1.1782E-05 1.782E-05 70NS Naphthalene 0 1.1782E-05 1.782E-05 70NS Nickel 0 9.6575E-06 9.6575E-06 70NS Pb - Lead 0 9.6575E-06 9.6575E-06 70NS Phenanthrene 0 1.227E-05 1.227E-05 70NS Phenanthrene 0 1.227E-05 1.227E-05 70NS Phenanthrene 0 1.227E-05 1.227E-05 70NS	Dimethylbenz[A]Anthracene, 7,12-	0	1.5452E-07	1.5452E-07	TONS
Formaldehyde 6.17562E-04 6.17562E-04 70NS Hexane, N- Indeno[1,2,3-C,D]Pyrene 0.034767 0.034767 70NS Indeno[1,2,3-C,D]Pyrene 0.034767 0.034767 70NS Mn- Manganese 0.0 1.3383E-08 1.3383E-08 70NS Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms 0.0 5.0219E-06 5.0219E-06 70NS Methylcholanthrene, 3- Methylcholanthrene, 3- Methylnaphthalene, 2- Maphthalene 0.0 1.7383E-08 1.7383E-08 70NS Naphthalene 0.0 1.7383E-08 1.7383E-08 70NS Naphthalene 0.0 1.7383E-08 1.7383E-08 70NS Nickel 0.0 1.782E-05 70NS Pb - Lead 0.0 5.0515E-06 0.6575E-06 70NS Phenanthrene 0.0 3.2835E-07 70NS	Fluoranthene	0	5.7945E-08	5.7945E-08	TONS
Hexane, N- Indeno[1,2,3-C,D]Pyrene Indeno[1,2,3-C,D]Pyrene 0 1.73835E-08 1.73835E-08 70NS MN - Manganese 0 7.3397E-06 7.3397E-06 70NS Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms 0 5.0219E-06 5.0219E-06 70NS Methylcholanthrene, 3- Methylnaphthalene, 2- Naphthalene 0 1.73835E-08 1.73835E-08 70NS Naphthalene 0 1.73835E-07 1.73835E-08 70NS Nickel Pb - Lead 0 4.05615E-05 1.17822E-05 70NS Phenanthrene 0 9.6575E-06 9.6575E-06 70NS Polycyclic Organic Matter	Fluorene	0	5.4082E-08	5.4082E-08	TONS
Indeno[1,2,3-C,D]Pyrene 0 1.73835E-08 1.73835E-08 TONS MN - Manganese 0 7.3397E-06 7.3397E-06 TONS Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms 0 5.0219E-06 5.0219E-06 TONS Methylcholanthrene, 3- 0 1.73835E-08 1.73835E-08 TONS Naphthalene, 2- 0 4.6356E-07 4.6356E-07 TONS Nickel 0 1.1782E-05 1.7182E-05 TONS Pb - Lead 0 9.6575E-06 9.6575E-06 TONS Phenanthrene 0 3.28355E-07 3.28355E-07 TONS Polycyclic Organic Matter 1.42127E-05 TONS	Formaldehyde	0	6.17562E-04	6.17562E-04	TONS
MN - Manganese 0 7.3397E-06 7.3397E-06 70NS Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms 0 5.0219E-06 5.0219E-06 70NS Methylcholanthrene, 3- 0 1.73835E-08 1.73835E-08 1.73835E-08 70NS Methylnaphthalene, 2- 0 4.6356E-07 4.6356E-07 70NS Naphthalene 0 1.17822E-05 1.17822E-05 70NS Nickel 0 4.05615E-05 4.05615E-05 70NS Pb - Lead 0 9.6575E-06 9.6575E-06 70NS Phenanthrene 0 3.2835E-07 70NS Phenanthrene 0 1.42127E-05 70NS Polycyclic Organic Matter 0 1.42127E-05 70NS	Hexane, N-	0	0.034767	0.034767	TONS
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms Methylcholanthrene, 3- Methylnaphthalene, 2- Naphthalene Naphthale	Indeno[1,2,3-C,D]Pyrene	0	1.73835E-08	1.73835E-08	TONS
Methylcholanthrene, 3- 0 1.73835E-08 1.73835E-08 TONS Methylnaphthalene, 2- 0 4.6356E-07 4.6356E-07 TONS Naphthalene 0 1.17822E-05 1.17822E-05 TONS Nickel 0 4.05615E-05 4.05615E-05 TONS Pb - Lead 0 9.6575E-06 9.6575E-06 TONS Phenanthrene 0 3.28355E-07 3.28355E-07 TONS Polycyclic Organic Matter 0 1.42127E-05 1.42127E-05 TONS	MN - Manganese	0	7.3397E-06	7.3397E-06	TONS
Methylnaphthalene, 2- 0 4.6356E-07 4.6356E-07 TONS Naphthalene 0 1.17822E-05 1.17822E-05 TONS Nickel 0 4.05615E-05 4.05615E-05 TONS Pb - Lead 0 9.6575E-06 9.6575E-06 TONS Phenanthrene 0 3.28355E-07 3.28355E-07 TONS Polycyclic Organic Matter 0 1.42127E-05 1.42127E-05 TONS	Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	0	5.0219E-06	5.0219E-06	TONS
Naphthalene 0 1.17822E-05 1.17822E-05 TONS Nickel 0 4.05615E-05 4.05615E-05 TONS Pb - Lead 0 9.6575E-06 9.6575E-06 TONS Phenanthrene 0 3.28355E-07 3.28355E-07 TONS Polycyclic Organic Matter 0 1.42127E-05 1.42127E-05 TONS	Methylcholanthrene, 3-	0	1.73835E-08	1.73835E-08	TONS
Nickel 0 4.05615E-05 4.05615E-05 TONS Pb - Lead 0 9.6575E-06 9.6575E-06 TONS Phenanthrene 0 3.28355E-07 3.28355E-07 TONS Polycyclic Organic Matter 0 1.42127E-05 1.42127E-05 TONS	Methylnaphthalene, 2-	0	4.6356E-07	4.6356E-07	TONS
Pb - Lead 0 9.6575E-06 9.6575E-06 TONS Phenanthrene 0 3.2835E-07 3.2835E-07 TONS Polycyclic Organic Matter 0 1.42127E-05 1.42127E-05 TONS	Naphthalene	0	1.17822E-05	1.17822E-05	TONS
Phenanthrene 0 3.28355E-07 3.28355E-07 TONS Polycyclic Organic Matter 0 1.42127E-05 1.42127E-05 TONS	Nickel	0	4.05615E-05	4.05615E-05	TONS
Polycyclic Organic Matter 0 1.42127E-05 1.42127E-05 TONS	Pb - Lead	0	9.6575E-06	9.6575E-06	TONS
	Phenanthrene	0	3.28355E-07	3.28355E-07	TONS
Pyrene 0 9.6575E-08 9.6575E-08 TONS	Polycyclic Organic Matter	0	1.42127E-05	1.42127E-05	TONS
	Pyrene	0	9.6575E-08	9.6575E-08	TONS

Selenium	0	2.3178E-07	2.3178E-07	TONS
Toluene	0	6.5671E-05	6.5671E-05	TONS

Processes

- Process & Emissions Detail

Name: PRC010

Source Classification Code (SCC): 3-10-004-04

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No

contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 8760.0

Winter (Dec - Feb)%: 25

Spring (March-May)%: 25

Summer (June-Aug)%: 25

Fall (Sept-Nov)%: 25

HET001: 2016

Material	Material Action	Throughput	X Units
Natural Gas	Burned	38.63	MILLION CUBIC FEET

Variable	Amount	Meaning
нсэ	1133.8	Gas Heat Content (Btu/Cubic Feet)

- Process Emissions

Pollutant	Method Used	UnCont	(LBS/X)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions			0.147	0.147	0.294	TONS	
PM10 Primary (includes filterables +	Emissions			0.147	0.147	0.294	TONS	

	1	 T	 1				
condensibles)		 					
PM2.5 Primary (includes filterables + condensibles)	Emissions		0.147	0.147	0.294	TONS	
CO - Carbon Monoxide	Emissions	35	0	1.6	1.6	TONS	
NOx - Nitrogen Oxides	Emissions	140	0	1.9	1.9	TONS	
SO2 - Sulfur Dioxide	Emissions	0.6	0	0	0	TONS	
VOC - Volatile Organic Compounds	Emissions	2.8	0	. 1	0.1	TONS	
Ammonia	Emissions	3.2	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Process Emissions

Pollutant	Method Used	UnCont	(LBS/X)	Amount	Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	0	11	0	0.212465	0.212465	TONS	
PM2.5 Filterable Portion Only	Emissions			0	.037	0.037	TONS	
Carbon Dioxide	Throughput -based factor	0	120,000.	0	2,317.8	2,317.8	TONS	
Methane	Throughput -based factor	0	2.3	0	0.0444245	0.0444245	TONS	
Nitrous Oxide	Throughput -based factor	0	2.2	0	0.042493	0.042493	TONS	·

Acenaphthene	Throughput -based factor	0	9°E-07	0	1.73835E-08	1.73835E-08	TONS	
Acenaphthylene	Throughput -based factor	0	9E-07	0	1.73835E-08	1.73835E-08	TONS	
Acetaldehyde	Throughput -based factor	0	(1.023696 4:	0	4.57696E-04	4.57696E-04	TONS	
Acrolein	Throughput -based factor	0	(1.020408 4	0	3.94188E-04	3.94188E-04	TONS	
Anthracene	Throughput -based factor	0	1.2E-06	0	2.3178E-08	2.3178E-08	TONS	
Arsenic	Throughput -based factor	0	2E-04	0	3.863E-06	3.863E-06	TONS	
Benz[A]Anthrace ne	Throughput -based factor	0	9E-07	0	1.73835E-08	1.73835E-08	TONS	
Benzene	Throughput -based factor	C)	01.0021	0	4.05615E-05	4.05615E-05	TONS	
Benzo[A] Pyrene	Throughput -based factor	О	6 E-07	0	1.1589E-08	1.1589E-08	TONS	
Benzo[B]Fluoran thene	Throughput -based factor	0	9E-07	0	1.73835E-08	1.73835E-08	TONS	
Benzo[G,H,I,]Pe r:ylene	Throughput -based factor	0	2.1	0	0.0405615	0.0405615	TONS	
Benzo[K]Fluoran thene	Throughput -based factor	0	9E-07	0	1.73835E-08	1.73835E-08	TONS	
Beryllium	Throughput -based factor	0	6E-06	0	1.1589E-07	1.1589E-07	TONS	
Cadmium	Throughput -based factor	0	0.0011	0	2.12465E-05	2.12465E-05	TONS	

Chromium	Throughput -based factor	0	0.0014	0	2.7041E-05	2.7041E-05	TONS	
Chrysene	Throughput -based factor	0	9E-07	0	1.73835E-08	1.73835E-08	TONS	
Cobalt	Throughput -based factor	0	8.4E-05	0	1.62246E-06	1.62246E-06	TONS	
Dibenzo[A,H]Ant hracene	Throughput -based factor	0	6E-07	0	1.1589E-08	1.1589E-08	TONS	
Dimethylbenz[A] Anthracene, 7,12-	Throughput -based factor	0	8E-06	0	1.5452E-07	1.5452E-07	TONS	
Fluoranthene	Throughput -based factor	0	3E-06	0	5.7945E-08	5.7945E-08	TONS	
Fluorene	Throughput -based factor	0	2.8E-06	0	5.4082E-08	5.4082E-08	TONS	
Formaldehyde	Throughput -based factor	0	0.031973	0	6.17562E-04	6.17562E-04	TONS	
Hexane, N-	Throughput -based factor	0	1.8	0	0.034767	0.034767	TONS	
Indeno[1,2,3- C,D]Pyrene	Throughput -based factor	0	9E-07	0	1.73835E-08	1.73835E-08	TONS	
MN - Manganese	Throughput -based factor	0	3.8E-04	0	7.3397E-06	7.3397E-06	TONS	
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	Throughput -based factor	0	2.6E-04	0	5.0219E-06	5.0219E-06	TONS	
Methylcholanthr ene, 3-	Throughput -based factor	0	9E-07	0	1.73835E-08	1.73835E-08	TONS	
Methylnaphthale	Throughput	0	2.4E-05	0	4.6356E-07	4.6356E-07	TONS	

ne, 2-	-based factor							
Naphthalene	Throughput -based factor	0	6.1E-04	0	1.17822E-05	1.17822E-05	TONS	
Nickel	Throughput -based factor	О	(I.0021	0	4.05615E-05	4.05615E-05	TONS	
Pb - Lead	Throughput -based factor	0	5 E - 04	0	9.6575E-06	9.6575E-06	TONS	
Phenanthrene	Throughput -based factor	o	1.7E-05	0	3.28355E-07	3.28355E-07	TONS	
Polycyclic Organic Matter	Throughput -based factor	0	7.35836E -04	0	1.42127E-05	1.42127E-05	TONS	
Pyrene	Throughput -based factor	0	5E-06	0	9.6575E-08	9.6575E-08	TONS	
Selenium	Throughput -based factor	0	12E-05	0	2.3178E-07	2.3178E-07	TONS	
Toluene	Throughput -based factor	0	(1.0034	0	6.5671E-05	6.5671E-05	TONS	

Detailed Reporting

HET002: 2016

Emission Unit Summary: HET002

AQD Description: 13/ (H2) 5.5 MMBtu/hr Black Start Heater

Emissions Unit ID: HET002

Unit Emissions

Pollutant	Fugitive Amount	Stack Amount	Total		Further Validati ons Require d
PM Primary (includes filterables > 10 microns + condensibles)	.009	.009	0.018	TONS	
PM10 Primary (includes filterables + condensibles)	0.009	0.009	0.018	TONS	
PM2.5 Primary (includes filterables + condensibles)	0.009	0.009	0.018	TONS	
CO - Carbon Monoxide	0	.1	0.1	TONS	
NOx - Nitrogen Oxides	0	.1	0.1	TONS	
SO2 - Sulfur Dioxide	0	0	0	TONS	
VOC - Volatile Organic Compounds	0	.054082	0.054082	TONS	
Ammonia	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

Pollutant	Fugitive Amount	Stack Amount	Total	Units
Organic Compounds	0	0.012265	0.012265	TONS
PM2.5 Filterable Portion Only	0	.002	0.002	TONS
Carbon Dioxide	0	133.8	133.8	TONS
Methane	0	0.0025645	0.0025645	TONS
Nitrous Oxide	0	0.002453	0.002453	TONS
Acenaphthene	0	1.0035E-09	1.0035E-09	TONS
Acenaphthylene	0	1.0035E-09	1.0035E-09	TONS
Acetaldehyde	0	2.64215E-05	2.64215E-05	TONS

Acrolein	0	2.27554E-05	2.27554E-05	TONS
Anthracene	0	1.338E-09	1.338E-09	TONS
Arsenic	0	2.23E-07	2.23E-07	TONS
Benz [A] Anthracene	0	1.0035E-09	1.0035E-09	TONS
Benzene	0	2.3415E-06	2.3415E-06	TONS
Benzo[A] Pyrene	0	€ .69E-10	6.69E-10	TONS
Benzo[B] Fluoranthene	0	1.0035E-09	1.0035E-09	TONS
Benzo[G,H,I,]Perylene	0	0.0023415	0.0023415	TONS
Benzo[K]Fluoranthene	0	1.0035E-09	1.0035E-09	TONS
Beryllium	0	6.69E-09	6.69E~09	TONS
Cadmium	0	1.2265E-06	1.2265E-06	TONS
Chromium	0	1.561E-06	1.561E-06	TONS
Chrysene	0	1.0035E-09	1.0035E-09	TONS
Cobalt	0	9.366E-08	9.366E-08	TONS
Dibenzo[A,H]Anthracene	0	6.69E-10	6.69E-10	TONS
Dimethylbenz[A]Anthracene, 7,12-	0	8.92E-09	8.92E-09	TONS
Fluoranthene	0	3.345E-09	3.345E-09	TONS
Fluorene	0	3.122E-09	3.122E-09	TONS
Formaldehyde	0	3.56501E-05	3.56501E-05	TONS
Hexane, N-	0	0.002007	0.002007	TONS
Indeno[1,2,3-C,D]Pyrene	0	1.0035E-09	1.0035E-09	TONS
MN - Manganese	0	4.237E-07	4.237E-07	TONS
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	0	2:.899E-07	2.899E-07	TONS
Methylcholanthrene, 3-	0	1.0035E-09	1.0035E-09	TONS
Methylnaphthalene, 2-	0	2.676E-08	2.676E-08	TONS
Naphthalene	0	6.8015E-07	6.8015E-07	TONS
Nickel	0	2.3415E-06	2.3415E-06	TONS
Pb - Lead	0	5.575E-07	5.575E-07	TONS
Phenanthrene	0	1.8955E-08	1.8955E-08	TONS
Polycyclic Organic Matter	0	8.20457E-07	8.20457E-07	TONS
Pyrene	0	5.575E-09	5.575E-09	TONS

Bridger Compressor Station(F018585)

Selenium	0	1.338E-08	1.338E-08	TONS
Toluene	0	3.791E-06	3.791E-06	TONS

Processes

- Process & Emissions Detail

Name: PRC014

Source Classification Code (SCC): 3-10-004-04

- Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule/Material/Variables/Factors/Explanations No

contain Trade Secrets:

Maximum Hours Per Day: 24

Maximum Days Per Week: 7

Maximum Weeks Per Year: 52

Actual Hours Per Year: 8760.0

Winter (Dec - Feb)%: 25

Spring (March-May)%: 25

Summer (June-Aug)%: 25

Fall (Sept-Nov)%: 25

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Material	Material Action	Throughput	X Units
Natural Gas	Burned	2.23	MILLION CUBIC FEET

Variable	Amount	Meaning
нсэ	1133.8	Gas Heat Content (Btu/Cubic Feet)

Process Emissions

Pollutant	Method Used	UnCont		Fugitive Amount	Stack Amount	Total	Units	Explanation
PM Primary (includes filterables > 10 microns + condensibles)	Emissions			.009	.009	0.018	TONS	
PM10 Primary (includes filterables +	Emissions			0.009	0.009	0.018	TONS	

		T					
condensibles)							
PM2.5 Primary (includes filterables + condensibles)	Emissions		0.009	0.009	0.018	TONS	
CO - Carbon Monoxide	Emissions	35	0	.1	0.1	TONS	
NOx - Nitrogen Oxides	Emissions	140	0	.1	0.1	TONS	
SO2 - Sulfur Dioxide	Emissions	0.6	0	0	0	TONS	
VOC - Volatile Organic Compounds	Emissions	2.8	0	.054082	0.054082	TONS	
Ammonia	Emissions	3.2	0	0	0	TONS	

The following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emission calculations if you have more accurate information.

- Process Emissions

Pollutant	Method Used	UnCont	UnCont. Factor (LBS/X)	Time- Based Factor (LBS/H our)		Stack Amount	Total	Unit s	Explanation
Organic Compounds	Throughput -based factor	0	1.1		0	0.012265	0.012265	TONS	
PM2.5 Filterable Portion Only	Emissions				0	.002	0.002	TONS	
Carbon Dioxide	Throughput -based factor	0	120,000.		0	133.8	133.8	TONS	
Methane	Throughput -based factor	0	2.3		0	0.0025645	0.0025645	TONS	
Nitrous Oxide	Throughput -based factor	0	2.2		0	0.002453	0.002453	TONS	

Acenaphthene	Throughput -based factor	D	9E-07	0	1.0035E-09	1.0035E-09	TONS
Acenaphthylene	Throughput -based factor	0	9E-07	0	1.0035E-09	1.0035E-09	TONS
Acetaldehyde	Throughput -based factor	0	0.023696	0	2.64215E-05	2.64215E-05	TONS
Acrolein	Throughput -based factor	0	0.020408	0	2.27554E-05	2.27554E-05	TONS
Anthracene	Throughput -based factor	0	1.2E-06	0	1.338E-09	1.338E-09	TONS
Arsenic	Throughput -based factor	0	2E-04	0	2.23E-07	2.23E-07	TONS
Benz[A]Anthrace ne	Throughput -based factor	0	9E-07	0	1.0035E-09	1.0035E-09	TONS
Benzene	Throughput -based factor	0	0.0021	0	2.3415E-06	2.3415E-06	TONS
Benzo[A] Pyrene	Throughput -based factor	0	6E-07	0	6.69E-10	6.69E-10	TONS
Benzo[B]Fluoran thene	Throughput -based factor	0	9E-07	0	1.0035E-09	1.0035E-09	TONS
Benzo[G,H,I,]Perylene	Throughput -based factor	0	2.1	0	0.0023415	0.0023415	TONS
Benzo[K]Fluoran thene	Throughput -based factor	0	9E-07	0	1.0035E-09	1.0035E-09	TONS
Beryllium	Throughput -based factor	0	6E-06	0	6.69E-09	6.69E-09	TONS
Cadmium	Throughput -based factor	0	0.0011	0	1.2265E-06	1.2265E-06	TONS

HET002: 2016

Chromium	Throughput -based factor	0	0.0014	0	1.56	1E-06	1.561E-06	TONS	
Chrysene	Throughput -based factor	0	9E-07	0	1.00	35E-09	1.0035E-09	TONS	
Cobalt	Throughput -based factor	0	8.4E-05	0	9.36	6E-08	9.366E-08	TONS	
Dibenzo [A, H] Ant hracene	Throughput -based factor	0	6E-07	0	6.69	E-10	6.69E-10	TONS	
Dimethylbenz[A] Anthracene, 7,12-	Throughput -based factor	0	8E-06	0	8.92	E-09	8.92E-09	TONS	
Fluoranthene	Throughput -based factor	0	3E-06	0	3.34	5E-09	3.345E-09	TONS	
Fluorene	Throughput -based factor	0	2.8E-06	0	3.12	2E-09	3.122E-09	TONS	
Formaldehyde	Throughput -based factor	0	0.031973	0	3.56	501E-05	3.56501E-05	TONS	
Hexane, N-	Throughput -based factor	0	1.8	0	0.00	2007	0.002007	TONS	
Indeno[1,2,3- C,D] Pyrene	Throughput -based factor	0	9E-07	0	1.00	35E-09	1.0035E-09	TONS	
MN - Manganese	Throughput -based factor	0	3.8E-04	0	4.23	7E-07	4.237E-07	TONS	
Mercury, as HG; Alkyl & Aryl CMPNDS; Elemental & Inorganic Forms	Throughput -based factor	0	2.68-04	0	2.89	9E-07	2.899E-07	TONS	
Methylcholanthr ene, 3-	Throughput -based factor	0 .	9E-07	0	1.00	35E-09	1.0035E-09	TONS	
Methylnaphthale	Throughput	0	2.4E-05	0	2.67	6E-08	2.676E-08	TONS	

ne, 2-	-based factor							
Naphthalene	Throughput -based factor	0	6.1E-04	0	6.8015E-07	6.8015E-07	TONS	
Nickel	Throughput -based factor	0	0.0021	0	2.3415E-06	2.3415E-06	TONS	
Pb - Lead	Throughput -based factor	0	5E-04	0	5.575E-07	5.575E-07	TONS	
Phenanthrene	Throughput -based factor	0	1.7E-05	0	1.8955E-08	1.8955E-08	TONS	
Polycyclic Organic Matter	Throughput -based factor	0	7.35836E -04	0	B.20457E-07	8.20457E-07	TONS	
Pyrene	Throughput -based factor	0	5E-06	0	5.575E-09	5.575E-09	TONS	
Selenium	Throughput -based factor	0	1.2E-05	0	1.338E-08	1.338E-08	TONS	
Toluene	Throughput -based factor	0	0.0034	 0	3.791E-06	3.791E-06	TONS	

HET002: 2016

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Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Todd Parfitt, Director



TO:

Air Quality Division Staff

FROM:

Nancy Vehr, AQD Administrator

DATE:

November 23, 2016 (Revision 2)

SUBJECT:

IMPACT Timesheet Module

The cut over for timesheets from AQDS to IMPACT (impact.wyo.gov) will occur on Monday, May 2, 2016. Please utilize the following guidance to code your time effective May 1, 2016.

Revision 1 includes the addition of a Section Code associated with time spent obtaining permission to access private property. Revision 2 includes the addition of a Section Code associated with time spent by employees that serve as a member in Wyoming's State Legislature.

Data Entry

Due to the direct connection within IMPACT of the timesheets with New Source Review billing, an employee is only able to input timesheet entries 14 days into the past and 30 days into the future. As a result, all AQD staff are encouraged to input their time on a daily basis. AQD staff with IMPACT Admin rights have the ability to input timesheet data outside the specified date range.

Please use time increments of no less than $\frac{1}{2}$ (0.5) of an hour to maximize time spent working and minimize time spent tracking.

The OT (overtime) check box is only to be used by non-exempt employees. Overtime is specified by DEQ Policies and State of Wyoming Personnel Rules.

Timecodes

Timecodes within IMPACT allow the AQD to track how AQD staff spend their work time and can be utilized for workload tracking, planning, and budgeting. Valid timecodes may consist of only a function code or a combination of function code and section code. Descriptions are provided for each function and section code to assist in determining when to use each code. IMPACT only displays valid timecodes. Timecodes have been reviewed and updated for incorporation within IMPACT and may differ from those previously available in AQDS.

If you have questions on how to code your time, please discuss them with your supervisor or Program Manager.

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Function Codes

There are six function codes that apply to work done in the Division, that link directly to our budget. It is important that the appropriate function codes are used for charging your time, as it affects the AQD budget. If appropriate, time may be split between function codes to reflect the most recent actual inventory of emissions from major and non-major (minor) sources in the State. Please speak to your supervisor or Program Manager regarding function time splits. The following function codes are now in use.

- 103 Ambient monitoring of PM_{2.5} and monitoring at the Cheyenne NCore station. EPA grant funding.
- Air quality work related to non-major (minor) sources or not covered by other function codes. EPA grant funding and Wyoming general funds combination.
- Jonah Interagency Office Compliance position work in the Jonah Infill project area. Special fund through the Jonah Infill Record of Decision.
- New Source Review New Source Review work. Fees charged to NSR permit and waiver applicants.
- Operating Permit Program Air quality work related to major sources. Emissions fees charged to OPP permittees.
- Pinedale Anticline Interagency Office Compliance position work in the Pinedale Anticline project area. Special fund through the Pinedale Anticline Record of Decision.

There are also function codes that are associated with leave and appropriate use of these codes is specified within DEQ Policies and State of Wyoming Personnel Rules. A description is only provided for a couple codes as most are self-explanatory.

Accrued Leave Vacation Leave and Compensatory Time.

Administrative Leave Used in combination with section codes "Local Office Leave" for Cheyenne Day or equivalent in District offices and "Governor's Personal Leave" for Governor granted leave, such as the day after Thanksgiving.

Bereavement Leave

Holiday Leave

Jury Duty

Leave Without Pay

Military Leave

Sick Leave

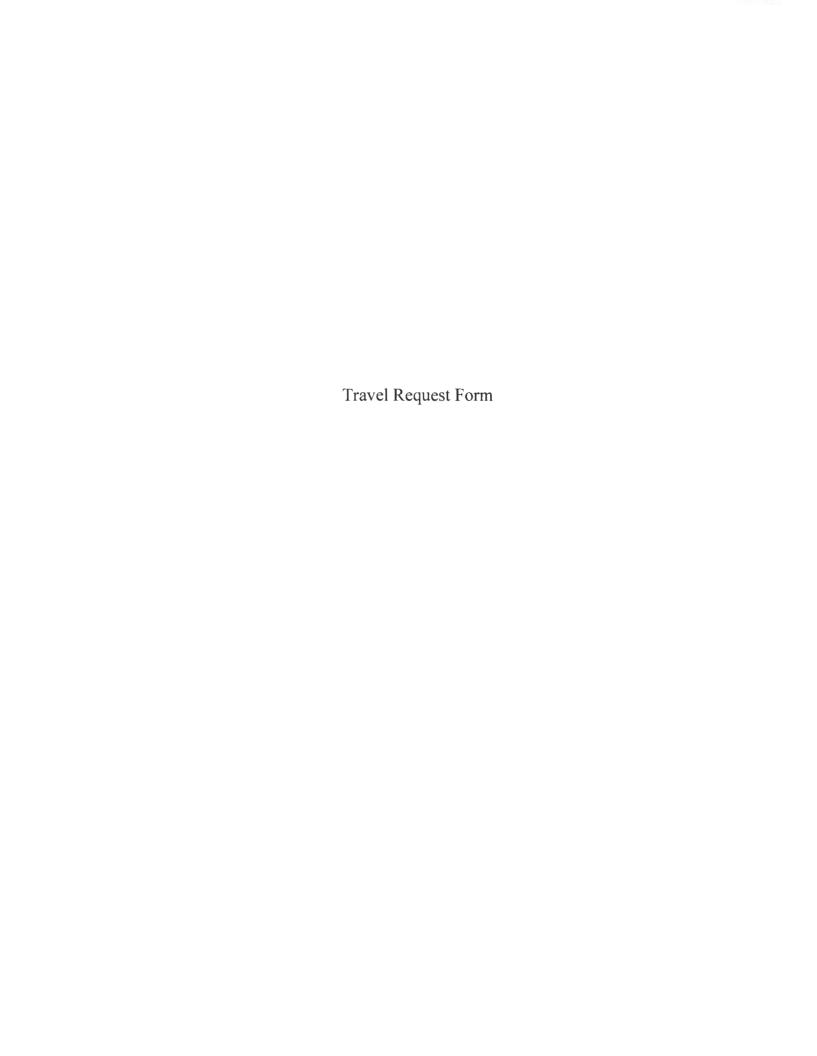
Snow Day

Voting Leave



B102 Level 2 As Of May 31, 2017

							Unobligated	
	_					Current Expense	Expense	
BFY	Fund	Dept	Div	Appr	Unit	Budget (90,2)	Budget(90,2)	
2017	001	020	0200	201	0201	486,516.00	486,516.00	Unawarded Appropriation
2017	001	020	0200	201	0211	760,294.19	680,524.52	JIO
2017	001	020	0200	201	0220	3,221,188.27	2,955,733.61	AQ General Fund
2017	001	020	0200	201	0224	912,500.31	826,435.34	PAPO
2017	001	020	0200	201	0242	253,892.99	14,609.70	PM2.5
2017	001	020	0200	201	0247	159,139.00	86,961.07	PM2.5
2017	001	020	0200	201	0257	190,150.00	190,150.00	DERA
2017	001	020	0200	201	0276	330,486.00	2,089.52	105
2017	001	020	0200	201	0277	1,850,304.71	963,317.17	105
2017	001	020	0200	201	0278	170,924.00	170,924.00	105 MPG
2017	001	020	0200	201	0279	1,438,112.00	113.94	105
2017	037	020	0200	037	0231	3,117,509.00	2,024,942.82	NSR
2017	037	020	0200	037	0232	85,000.00	19,162.33	NSR Multicounty Permits
2017	110	020	0200	110	0230	9,755,292.00	6,369,337.67	Title V



STATE OF WYOMING

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							coded
Agency / Division	BE	Y Fund	Agy	Org	Appr	Proj	- her
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	traveler			title			
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point of origin	destinati				depa	rture date	•
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return date		purpose of	шір				
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Actual lodging plus actual meals	State Airplane	Comme	ercial Airp	lane	Othe		
	State All plane	Conunc	Acidi Alip	iane _	Oule		
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List interrupted travel dates & times:							
Estimated Travel Expenditures		Previous	Out-of-	State Ti	ravel (optional a	gency use)
Airfare Other transportation Lodging * M&IE Actual meals		Previous	Out-of-	State Ti	ravel (optional a	gency use)
Airfare Other transportation Lodging * M&IE Actual meals Registration fees		Previous	Out-of-	State Ti	ravel (optional a	gency use)
Airfare Other transportation Lodging * M&IE Actual meals Registration fees		Previous	Out-of-	State Ti	ravel (optional a	gency use)
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Airfare Other transportation Lodging * M&IE Actual meals Registration fees Other (explain below) Total	0.00		Out-of-	State Ti	ravel (optional a	gency use)
Airfare Other transportation Lodging * M&IE Actual meals Registration fees Other (explain below) Cotal Check here if lodging rate exceeds	0.00 s "maximum lodging	rate"			ravel (optional a	gency use)
Airfare Other transportation Lodging * M&IE Actual meals Registration fees Other (explain below) Total Check here if lodging rate exceeds	0.00 s "maximum lodging	rate"			ravel (optional a	gency use)
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Airfare Other transportation Lodging * M&IE Actual meals Registration fees Other (explain below) Total Check here if lodging rate exceeds	0.00 s "maximum lodging	rate"			ravel (optional a	gency use)
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Airfare Other transportation Lodging * M&IE Actual meals Registration fees Other (explain below) Total Check here if lodging rate exceeds Additional comments: Approved Di	o.00 s "maximum lodging isapproved al) Date	rate"	Approve	ed gnature (r	Dis		ed Date