

**Nevada Department of Conservation & Natural  
Resources,  
Division of Environmental Protection,  
Bureau of Air Pollution Control  
Title V Operating Permit Program Evaluation**

**Final Report**

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Conducted by the

U.S. Environmental Protection Agency  
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## **Acknowledgments**

EPA Region 9 would like to acknowledge the cooperation of the staff and management of the Nevada Department of Conservation and Natural Resources, Division of Environmental Protection, Bureau of Air Pollution Control (BAPC) during this title V program evaluation. We appreciate their willingness to respond to information requests and share their experiences regarding the development and implementation of BAPC's title V program.

## Executive Summary

In response to the recommendations of a 2002 Office of Inspector General (OIG) audit, the Environmental Protection Agency (EPA or we) re-examined the ways it can improve state and local title V operating permit programs and expedite permit issuance. Specifically, EPA developed an action plan for performing program reviews of title V operating permit programs for each air pollution control agency beginning in fiscal year 2003. The purpose of these program evaluations is to identify good practices, document areas needing improvement, and learn how EPA can help the permitting agencies improve their performance.

EPA Region 9 oversees 45 air permitting authorities with title V operating permit programs. Of these, 43 are state or local authorities with programs approved pursuant to part 70 (35 in California, three in Nevada, four in Arizona, and one in Hawaii). EPA Region 9 also oversees a delegated part 71 permitting program in the Navajo Nation and a part 69 permitting program in Guam. Because of the significant number of permitting authorities, Region 9 has committed to performing, on an annual basis, one comprehensive title V program evaluation of a permitting authority with 20 or more title V sources. This approach will cover about 85% of the title V sources in Region 9 once EPA completes evaluation of those programs.

Region 9 recently conducted a title V program evaluation of the Nevada Department of Conservation and Natural Resources, Division of Environmental Protection, Bureau of Air Pollution Control (BAPC or Bureau). The Bureau's permitting jurisdiction includes all sources in the State of Nevada outside of Clark and Washoe Counties, as well as fossil-fuel fired units that produce steam for electricity generation throughout the state. (See Appendix A, Air Pollution Control Agencies in Nevada.)

This is the tenth title V program evaluation Region 9 has conducted. The first nine were conducted at permitting authorities in Arizona, Nevada, California, and Hawaii. The EPA Region 9 program evaluation team for this evaluation consisted of the following EPA personnel: Amy Zimpfer, Associate Director, Air Division; Gerardo Rios, Chief of the Air Permits Office; Ken Israels, Program Evaluation Advisor; Geoffrey Glass, BAPC Program Evaluation Coordinator; and Eugene Chen, Air Permits Office Program Evaluation Team Member.

The evaluation was conducted in four stages. At the first stage, EPA sent BAPC a questionnaire focusing on title V program implementation in preparation for the site visit at BAPC's offices. (See Appendix B, Title V Questionnaire and BAPC Responses.) During the second stage of the program evaluation, Region 9 conducted a review of BAPC's title V permit files maintained by EPA, including copies of permits, statements of basis, permit applications, and correspondence. The third stage of the program evaluation was a site visit, which consisted of Region 9 representatives visiting BAPC offices in Carson City to interview Bureau staff and managers. The site visit took place August 11-14, 2014. The fourth stage of the program evaluation involved follow-up and clarification of issues for completion of the draft report.

The State of Nevada has a population of 2.76 million (2012 estimate); approximately 2 million persons live in Clark County and 420,000 persons reside in Washoe County. There are presently 35

facilities with current or pending title V operating permits within BAPC's jurisdiction. The majority of BAPC's permittees are engaged in mining, electricity generation and solid waste management.

Based on Region 9's program evaluation of BAPC, we conclude that, in general, NDEP implements a strong program, with adequate funding and good systems in place. We have identified a few areas for improvement including enhancing information included in Statements of Basis (SOB) documents. Some major findings are provided below:

1. BAPC has developed a Class I permit template and standardized emission calculation worksheets. In addition, BAPC is developing guidance documents for common policy issues to ensure greater permit consistency. (Finding 2.2)
2. Although BAPC SoBs contain most of the information necessary for permit issuance, the Bureau does not adequately document certain decisions of the permitting process. (Finding 2.5)
3. BAPC generally does not include sufficient detail on construction, permitting, or compliance history in SoBs. (Finding 2.6)
4. BAPC consistently implements the CAM rule. (Finding 3.1)
5. Nevada contains a number of linguistically isolated communities, particularly in the Las Vegas area in Clark County, where translation services would be necessary for the public to be aware of and understand BAPC permit actions. However, BAPC has not routinely translated public notice packages. (Finding 4.3)
6. BAPC coordinates with NDEP's tribal liaison and informs all tribes in Nevada of new permits, renewals, and revisions. (Finding 4.6)
7. BAPC has required at least one source to suspend operations as a result of losing its application shield. (Finding 5.4)
8. BAPC compliance staff use Class I permits and other title V documents during field inspections, and as a part of the broader full compliance evaluation (FCE). (Finding 6.2)
9. BAPC collects sufficient revenue to implement the title V permitting program. (Finding 7.3)
10. BAPC has recently hired new Permits Services staff. It is broadly investing in Permits Services staff through training and mentoring programs. (Finding 7.4)
11. BAPC has a constructive relationship with EPA. (Finding 8.2)
12. BAPC has used its Class I permit template as a basis for writing enforceable minor source permits. (Finding 8.7)
13. BAPC uses title V renewal as an opportunity to model NAAQS compliance and increment consumption in an area where there are few ambient air quality monitors. (Finding 8.8)

Our report provides a series of findings (in addition to those listed above) and recommendations that should be considered in addressing our findings. We have given BAPC an opportunity to review these findings and to consider our recommendations in the context of their organization, priorities, and resources. In response to our report, as noted in the project workplan that outlines the process we followed in performing this evaluation, we ask BAPC to prepare and submit to EPA a workplan that outlines how it intends to address our findings. (See Appendix C, Workplan for BAPC Title V Program Evaluation.)

## 1. Introduction

### Background

In 2000, the OIG initiated an evaluation on the progress of issuing title V permits by EPA and states due to concerns about the progress that state and local air pollution control agencies were making in issuing title V permits under the Clean Air Act (CAA or the Act). The purpose of OIG's evaluation was to identify factors delaying the issuance of title V permits by selected state and local agencies and to identify practices contributing to timely issuance of permits by those same agencies.

After reviewing several selected state and local air pollution control agencies, OIG issued a report on the progress of title V permit issuance by EPA and states.<sup>1</sup> In the report, OIG concluded that the key factors affecting the issuance of title V permits included (1) a lack of resources, complex EPA regulations, and conflicting priorities contributed to permit delays; (2) EPA oversight and technical assistance had little impact on issuing title V permits; and (3) state agency management support for the title V program, state agency and industry partnering, and permit writer site visits to facilities contributed to the progress that agencies made in issuing title V operating permits.

OIG's report provided several recommendations for EPA to improve title V programs and increase the issuance of title V permits. In response to OIG's recommendations, EPA made a commitment in July 2002 to carry out comprehensive title V program evaluations nationwide. The goals of these evaluations are to identify areas where EPA's oversight role can be improved, areas where air pollution control agencies are taking unique approaches that may benefit other agencies, and areas of local programs that need improvement. EPA's effort to perform title V program evaluations for each air pollution control agency began in fiscal year 2003.

EPA Region 9 oversees 45 air permitting authorities with title V operating permit programs. Of these, 43 are state or local authorities with programs approved pursuant to part 70 (35 in California, three in Nevada, four in Arizona, and one in Hawaii). EPA Region 9 also oversees a delegated part 71 permitting program in the Navajo Nation and a part 69 permitting program in Guam. Due to the significant number of permitting authorities, Region 9 has committed to performing one comprehensive title V program evaluation every year of a permitting authority with 20 or more title V sources. This would represent about 85% of the title V sources in Region 9 once EPA completes evaluation of those programs.

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<sup>1</sup> See Report No. 2002-P-00008, Office of Inspector General Evaluation Report, AIR, EPA and State Progress In Issuing title V Permits, dated March 29, 2002.

## **Title V Program Evaluation at Nevada's Bureau of Air Pollution Control**

Region 9 recently conducted a title V program evaluation of the Nevada, Department of Conservation and Natural Resources, Division of Environmental Protection (Division), Bureau of Air Pollution Control (BAPC or Bureau). This is the tenth title V program evaluation Region 9 has conducted. The EPA Region 9 program evaluation team for this evaluation consisted of the following EPA personnel: Amy Zimpfer, Associate Director; Gerardo Rios, Chief of the Air Permits Office; Ken Israels, Program Evaluation Advisor; Geoffrey Glass, BAPC Program Evaluation Coordinator; and Eugene Chen, Air Permits Office Program Evaluation Team Member.

The objectives of the evaluation were to assess how BAPC implements its title V permitting program, evaluate the overall effectiveness of BAPC's title V program, identify areas of BAPC's title V program that need improvement and areas where EPA's oversight role can be improved, and highlight unique and innovative aspects of BAPC's program that might be beneficial to other permitting authorities. The evaluation was conducted in several stages. At the first stage, EPA sent BAPC a questionnaire (see Appendix B, Title V Questionnaire and BAPC Responses) focusing on title V program implementation in preparation for the site visit to BAPC's offices. The title V questionnaire was developed by EPA nationally and covers the following program areas: (1) Title V Permit Preparation and Content; (2) General Permits; (3) Monitoring; (4) Public Participation and Affected State Review; (5) Permit Issuance/Revision/Renewal Processes; (6) Compliance; (7) Resources & Internal Management Support; and (8) Title V Benefits.

During the second stage of the program evaluation, Region 9 conducted an internal review of EPA's own set of BAPC title V permit files. BAPC submits Title V permits to Region 9 in accordance with its EPA-approved title V program and the Part 70 regulations. Region 9 maintains title V permit files containing these permits along with copies of associated documents, permit applications, and correspondence.

The third stage of the program evaluation was the site visit, which consisted of Region 9 representatives visiting the BAPC Carson City offices to conduct further file reviews, interview BAPC staff and managers, and review the Division's permit-related databases. The purpose of the interviews was to confirm the responses in the completed questionnaire and to ask clarifying questions. The site visit took place August 11 through August 14, 2014. Region 9 also conducted interviews by phone with BAPC managers prior to and after the site visit.

The fourth stage of the program evaluation was follow-up and clarification of issues for completion of the draft report. Region 9 compiled and summarized interview notes and made phone calls to clarify Region 9's understanding of various aspects of the title V program at BAPC. The program evaluation team met on a regular basis to work towards completion of the draft report.

## **BAPC Description**

The State of Nevada designated the Nevada Department of Conservation and Natural Resources as the air pollution control agency for the State for the purposes of the Federal Clean Air Act (the Act) in 1971.<sup>2</sup> State Law requires those counties in Nevada with a population of 100,000 or greater to establish local air programs. The State allows smaller counties to form air programs or to join with other counties to form air programs, with approval from the state. To date, only Clark and Washoe Counties, both with populations over 100,000 have established air programs. The Division of Environmental Protection (NDEP) is the division of the Department of Conservation and Natural Resources delegated to implement the Act in the remainder of Nevada.

Stationary source air permits, including title V permits, are issued through the Permitting Branch of the BAPC. Compliance and enforcement activities, such as facility inspections, source testing, and preparing enforcement cases are handled by the Compliance and Enforcement Branch of BAPC. The Bureau of Air Quality Planning (BAQP) is responsible for developing rules and preparing studies and plans to show how the State of Nevada will comply with the national ambient air quality standards (NAAQS). BAQP also compiles emission inventories, maintains ambient air pollution monitors, and manages the air database used by both BAPC and BAQP.

## **Nevada's Title V Program**

EPA granted Nevada's title V program interim approval effective January 11, 1996, and full approval effective November 30, 2001. See 40 C.F.R. part 70, appendix A. EPA also granted Clark and Washoe Counties' title V programs full approval effective November 30, 2001.

Nevada issues Class I permits to sources required to obtain title V permits. Nevada's Class I permitting program is a combined new source review (NSR) and title V operating permit program. The Nevada Administrative Code (NAC) requires permittees to demonstrate compliance with the NAAQS at permit renewal and whenever the permittee proposes a modification that may have a detrimental air impact.<sup>3</sup>

In this report, we use the term "title V permit" when discussing title V permits generally and "Class I permit" when discussing Nevada's title V permits in particular.

## **EPA's Findings and Recommendations**

The following sections include a brief introduction, and a series of findings, discussions, and recommendations.<sup>4</sup>

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<sup>2</sup> See Chapter 445B of the Nevada Administrative Code

<sup>3</sup> See Paragraphs 445B.3443.3, 445B.3395.11(d), and 445B.340.2 of the Nevada Administrative Code

<sup>4</sup> We note that while the title V questionnaire included questions about general permits, this report does not include a section on general permits because the Bureau does not issue general permits under the title V program.

The findings and recommendations in this report are based on EPA's internal reviews performed prior to the site visit to BAPC, the Bureau's responses to the Title V Questionnaire, phone interviews conducted prior to the site visit, interviews and file reviews conducted during the August 11 - 14, 2014, site visit, and interviews and phone calls following the site visit.

## 2. Permit Preparation and Content

The purpose of this section is to evaluate the permitting authority's procedure for preparing title V permits. The requirements of title V of the CAA are codified in 40 C.F.R. Part 70. The terms "title V" and "Part 70" are used interchangeably in this report. Part 70 outlines the necessary elements of a title V permit application under 40 C.F.R. 70.5, and it specifies the requirements that must be included in each title V permit under 40 C.F.R. 70.6. Title V permits must include all applicable requirements, as well as necessary testing, monitoring, recordkeeping, and reporting requirements sufficient to ensure compliance with the terms and conditions of the permit.

**2.1 Finding:** BAPC has a quality assurance process for reviewing pre-draft permits before they become available for public and EPA review.

**Discussion:** BAPC staff report that they begin the permit writing process with Class I permit templates that organize the emission-unit specific sections of the permit into equipment descriptions, operating limits, emission limits, and monitoring and recordkeeping requirements. For common source types found in Nevada, the template includes federal requirements such as requirements found in New Source Performance Standards (NSPS) from 40 C.F.R. part 60 and National Emission Standards for Hazardous Air Pollutants from 40 C.F.R. parts 61 and 63 (NESHAP). (See Finding 2.2). Pre-draft permits are then peer reviewed before going to the permitting manager for supervisor review. During interviews, permit writers reported that they regularly share pre-draft conditions with compliance and monitoring services staff to ensure that monitoring and testing requirements will assure compliance with applicable requirements, especially when writing conditions for new requirements. The Bureau also shares courtesy copies with permittees so that they may provide comments and corrections. The internal review process helps ensure consistency and quality in the Bureau's title V permits.

**Recommendation:** BAPC should continue its quality assurance practices.

**2.2 Finding:** BAPC has developed a Class I permit template and standardized emission calculation worksheets. In addition, BAPC is developing guidance documents for common policy issues to ensure greater permit consistency.

**Discussion:** BAPC has developed a template for Class I permits. This template includes standard conditions such as emission limits, operating limits, monitoring, record keeping, and reporting conditions based on SIP requirements and federal standards. The Bureau has developed a set of standard conditions for common source types found in Nevada, including nonmetallic mineral processing units subject to NSPS OOO, metallic mineral processing units subject to NSPS LL, emergency generators, etc. By developing the permit template, the Bureau reduces duplication of effort and improves consistency between permits.

The Bureau has also developed standardized emission calculation worksheets that permit writers use to calculate potential emissions during application review. These worksheets are

peer reviewed and approved by the permitting manager along with the pre-draft permit resulting in greater consistency between permits in the same industry.

During our interviews, staff reported that they had recently begun maintaining a library of guidance documents related to Bureau policy decisions to increase consistency in Bureau decision making.

**Recommendation:** BAPC should continue to develop, review, and update permit templates, calculation tools, and guidance documents.

**2.3 Finding:** The BAPC permit issuance process allows the Bureau to streamline the issuance of NSR and revised title V permits.

**Discussion:** BAPC allows sources to choose between a bifurcated process for preconstruction and operating permits or a combined process in which Class I permits meet the requirements of the new source review (NSR) and title V operating permit programs. According to NAC 445B.3361, to modify an existing Class I stationary source, the owner or operator must apply for and obtain either an operating permit to construct (OPTC) or a Class I permit revision.

If the owner or operator elects to apply for an OPTC, the Bureau treats the NSR and title V permitting processes separately, first granting conditional approval for the construction or modification and then modifying the operating permit. The conditional approval for the OPTC will contain a description of the construction project, including the physical changes that are occurring as well as a regulatory analysis of the construction. In addition, per NAC 445B.3364.4, the Director is required to allow a 30-day public review period for OPTCs. After the permittee makes the changes allowed under the OPTC, the Bureau revises the Class I operating permit as a minor or significant Class I permit revision, whichever is appropriate.

If the owner or operator elects to apply for a Class I permit revision, the Bureau applies the NSR and title V permitting processes simultaneously in one permit action. In this case, the Bureau makes clear what physical and regulatory changes are occurring and which conditions in the permit are being added or modified as part of the public notice for the modification. Depending on the type of modification, the Bureau may process the modification as either a major or minor modification, while assuring that both NSR and title V requirements are met, including requirements for public notice and EPA review.

**Recommendation:** EPA supports BAPC's use of both the OPTC process and the Class I revision process to allow increased flexibility for issuing revised title V permits.

**2.4 Finding:** BAPC has not updated its title V application forms to require PM<sub>2.5</sub> (particulate with a diameter of less than 2.5 micrometers) or GHG (greenhouse gas) emission data.

**Discussion:** According to 40 CFR 70.5(c)(3)(i), standard application forms for title V operating permits shall include information about “all emissions of regulated air pollutants.” In reviewing BAPC’s Class I permit application forms, we discovered that they did not require information about PM<sub>2.5</sub> or GHG emissions, which meet the definition of regulated air pollutants in part 70.

Although not included on the forms, we note that PM<sub>2.5</sub> and GHG emissions information is included in the Bureau’s statements of basis (SoBs), indicating that the Bureau is collecting this required information.

**Recommendation:** Although we appreciate that BAPC is collecting this required emissions information, the Bureau should update its title V application forms to provide for PM<sub>2.5</sub> and GHG emission data.

**2.5 Finding:** Although BAPC SoBs contain most of the information necessary for permit issuance, the Bureau does not adequately document certain decisions it makes in the permitting process.

**Discussion:** Part 70 requires title V permitting authorities to provide “a statement of the legal and factual basis for the draft permit conditions” (40 CFR 70.7(a)(5)). The purpose of this requirement is to support the proposed title V permit with a discussion of the decision-making that went into the development of the permit and provide the permitting authority, the public, and EPA a record of the applicability determinations and technical issues surrounding the issuance of the permit. The statement of basis should document the regulatory and policy issues applicable to the source, and is an essential tool for conducting meaningful permit review.<sup>5</sup>

BAPC develops well written SoBs (which the Bureau refers to as technical reviews) for initial and renewal permits that contain the relevant topics that are typically needed for explain what requirements apply to the facility. These topics include:

- Facility and process descriptions;
- Descriptions of emission units (We note that some data – e.g. stack heights, flow rates, Universal Transverse Mercator (UTM) coordinates – are often included in the permit rather than the SoB);
- Insignificant activities and emission units;
- Analyses of potential to emit and ambient impacts;

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<sup>5</sup> EPA has released certain guidance documents regarding the suggested content for Statement of Basis documents, including a December 20, 2001 letter to Ohio EPA (<http://www.epa.gov/region07/air/title5/t5memos/sbguide.pdf>) and April 30, 2014 implementation guidance on title V annual compliance certifications and statement of basis requirements (<http://www.epa.gov/region07/air/title5/t5memos/20140430.pdf>).

- Informative language about federal standards such as parts 60, 61, and 63;
- Applicability of the Prevention of Significant Deterioration (PSD) program to the facility;
- Applicability of the Compliance Assurance Monitoring (CAM) program to pollutant specific emission units;
- Applicability of the Acid Rain program.

However, for the permits we reviewed, we discovered that the Bureau does not always include enough detail to adequately document how it makes decisions regarding the following areas:

- Bureau SoBs generally do not discuss why CAM applies to particular units or how it made a determination to approve particular CAM plans, for example:
  - o In the SoB for Veris Gold (Permit AP1041-37422), the Bureau merely lists those units for which Veris submitted CAM plans.
  - o The SoB for Reid-Gardner Power Plant (Permit AP4911-0897) has a table that lists the units that are subject to CAM but contains no discussion to explain or justify the plans.
  - o In the SoB for Tracy Power (Permit 4911-0194), the Bureau states, without providing any analysis, that the only units subject to CAM are the cooling towers, for which it prescribes quarterly water sampling.<sup>6</sup>
- When there are several possible standards in parts 60 and 63 that could apply to a unit, the Bureau is inconsistent in its level of detail in explaining which ones apply. For example:
  - o In the SoB for Veris Gold, there is a conclusory statement that NESHAP ZZZZ applies to the internal combustion engines and no mention of NSPS III.
  - o The SoB for Reid Gardner Power Plant discusses applicability of standards in parts 60 and 63 (both applicable and nonapplicable) to the main power boilers), but does not address standards that could apply to the cooling towers and internal combustion engines.

Because the SoBs did not contain sufficient information regarding these decisions, EPA could not determine if the decisions were appropriate or not.

**Recommendation:** Although BAPC issues well written SoBs with the majority of the necessary topics needed to be evaluated for permit issuance, the Bureau can improve its

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<sup>6</sup> According to the CAM Rule, 40 CFR 64.3(b)(4), the minimum frequency of approvable monitoring is daily.

statements of basis by taking extra steps to ensure that every SoB adequately documents all permitting decisions, including the applicability or inapplicability of federal standards, the applicability of CAM, and the adequacy of approved CAM plans.

**2.6 Finding:** BAPC generally does not include sufficient detail on construction, permitting, or compliance history in SoBs.

**Discussion:** In our review of the Bureau's SoBs, we found that most did not include any discussion of the facility's construction, permitting, or compliance history. If there was any such discussion, it was cursory and did not go into any depth. Information regarding a facility's construction, permitting, and compliance history contributes to transparent documentation of regulatory decision making.

The applicability of federal requirements such as New Source Performance Standards in 40 CFR part 60, National Emission Standards for Hazardous Air Pollutants in 40 CFR part 63, and the Regional Haze Rule in 40 CFR part 51, subpart P, depend on the dates of construction, operation, and/or permitting of affected units. In addition, whether a facility can take credit for contemporaneous emission increases or reductions in NSR actions depends on the dates that equipment came on or off line.

Furthermore, whether an authority can approve alternative monitoring or alternative operating scenarios or needs to include compliance schedules in a permit depends on a facility's compliance status and compliance history.

This information is readily available to the Bureau and the permit applicant, but if it is not included in SoBs, this information is not readily available to the public.

**Recommendation:** BAPC should include information about construction, permitting, and compliance history in SoBs in sufficient detail to inform the public about permitting context and how permitting decisions are made. EPA can provide examples upon request.

**2.7 Finding:** BAPC cites the origin and authority of all conditions in its Class I permits.

**Discussion:** In reviewing BAPC's Class I permits, we found that the Bureau clearly documents the origin and authority of all conditions originating in federal standards (e.g. NSPS, NESHAP, and the Acid Rain Program), the Nevada SIP (including BART determinations), and PSD permits. The Bureau does not streamline conditions, but lists each requirement separately, even when they are identical or when compliance with one condition assures compliance with other conditions.

**Recommendation:** We commend the Bureau for citing the origin and authority of all permit conditions in its Class I permits.

### 3. Monitoring

The purpose of this section is to evaluate the permitting authority's procedure for meeting title V monitoring requirements. Part 70 requires title V permits to include monitoring and related recordkeeping and reporting requirements. (See 40 C.F.R. 70.6(a)(3).) Each permit must contain monitoring and analytical procedures or test methods as required by applicable monitoring and testing requirements. Where the applicable requirement itself does not require periodic testing or monitoring, the permit has to contain periodic monitoring sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit. As necessary, permitting authorities must also include in title V permits requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods.

Title V permits must also contain recordkeeping for required monitoring and require that each title V source record all required monitoring data and support information and retain such records for a period of at least five years from the date of the monitoring sample, measurement, report, or application was made. With respect to reporting, permits must include all applicable reporting requirements and require (1) submittal of reports of any required monitoring at least every six months and (2) prompt reporting of any deviations from permit requirements. All required reports must be certified by a responsible official consistent with the requirements of 40 C.F.R. 70.5(d).

Title V permits must also include CAM provisions where CAM is required.<sup>7</sup> In addition to periodic monitoring, permitting authorities are required to evaluate the applicability of CAM and include a CAM plan as appropriate. CAM applicability determinations are required either at permit renewal, or upon the submittal of an application for a significant title V permit revision. CAM requires a source to develop parametric monitoring for certain emission units with control devices, which may be in addition to any periodic monitoring, to assure compliance with applicable requirements.

**3.1 Finding:** BAPC rigorously and systematically implements the CAM rule.

**Discussion:** Current Class I operating permit application forms require applicants for new sources and modifications of stationary sources to determine if CAM applies, and, if so, to include a CAM plan with the permit application. BAPC then reviews permit applications with regard to CAM requirements. A review of Class I permit applications indicate that the majority of renewals and initial applications include a discussion of CAM and a CAM plan, as necessary. In instances where applicants have not included CAM analyses or plans, BAPC has either subsequently requested such information, or performed the analysis themselves.

In our review, we found that BAPC consistently includes CAM monitoring requirements in permit conditions. For the majority of its issued Class I operating permits, BAPC also includes other required elements of CAM monitoring in its permit conditions, such as

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<sup>7</sup> See 40 CFR Part 64.

indicator ranges or excursion definitions. We note that we did find a few isolated cases where CAM monitoring did not meet the minimum data collection requirements in 40 CFR 64.3(b)(4). When we brought this to their attention, BAPC staff were amenable to amend the issue.

**Recommendation:** BAPC should continue to implement the CAM rule in a rigorous and systematic manner.

- 3.2 Finding:** BAPC regularly includes periodic visibility monitoring requirements in Class I permits to assure compliance with the State’s general opacity standard.

**Discussion:** NAC 445B.3405(1)(c)(2) and 40 C.F.R. 70.6(a)(3)(i)(B) require the permitting authority to include in permits “periodic testing or monitoring that is sufficient to yield reliable data from the relevant period which is representative of the stationary source’s compliance with the conditions of the operating permit.” Adding such periodic monitoring, testing, or record keeping provisions in permits is called *gap filling*. Gap filling may be necessary when an applicable requirement does not require any monitoring, requires only an initial compliance demonstration, or requires insufficient monitoring. To be effective, monitoring requirements should specify a compliance method, a frequency for conducting monitoring, and criteria indicating non-compliance or triggering further investigation.

Nevada has a 20% opacity standard that applies to all emission units (NAC 445B.22017). For emission units that operate a continuous opacity monitoring system (COMS), compliance with this standard can be determined by examining COMS data. However, because the majority of emission units do not operate a COMS, such units would not have continuous opacity data available to demonstrate compliance. To assure compliance with the general opacity standard, BAPC typically requires opacity monitoring for emission units that do not operate COMS. For example, our file review indicated that Class I operating permits for the Veris Gold Jerritt Canyon mine, Barrick Goldstrike mine, Cyanco Company, and Valley Joist, Inc. include opacity monitoring conditions for emission units at these facilities. These conditions require monthly monitoring for the presence of visible emissions from several emission units. The presence of visible emissions triggers a requirement to perform a Method 9 observation, as well as related recordkeeping and reporting requirements.

**Recommendation:** BAPC should continue to require periodic monitoring to assure compliance with the State opacity standard and to continue to require sufficiency monitoring where needed.

- 3.3 Finding:** The District incorporates appropriate performance and quality assurance requirements into permits for sources with a Continuous Emissions Monitoring System (CEMS).

**Discussion:** Several Class I facilities regulated by BAPC are required to operate CEMS. Sources that operate CEMS must meet certain performance specifications and quality assurance procedures. For electricity generating units (EGUs) subject to the Acid Rain

Program, these requirements are set forth in 40 C.F.R. part 75. For sources in other industries regulated by BAPC, such as mining or general manufacturing, these requirements are set forth in Appendices B and F of 40 C.F.R. part 60. These requirements ensure that CEMS are designed and installed properly, and produce quality data for use in compliance determinations.

Based on our file review of EGUs such as North Valmy, Reid Gardner, and Tracy Generating Stations, BAPC incorporates the appropriate continuous emission monitoring and quality assurance requirements for these units from 40 CFR part 75. Based on our file review of other sources such as the Veris Gold Jerritt Canyon mine, Barrick Goldstrike mine, and Cyanco Company, BAPC incorporates the appropriate requirements from 40 CFR part 60, appendix B, regarding performance specifications regarding initial installation and operation of CEMS, and 40 CFR part 60, appendix F, regarding performance specifications regarding CEMS quality control and assurance.

**Recommendation:** BAPC should continue to ensure that Class I permits for sources that operate CEMS include the appropriate Part 60 and/or Part 75 requirements regarding CEMS installation and data quality control and assurance.

#### 4. Public Participation and Affected State Review

This section examines BAPC procedures used to meet public participation requirements for title V permit issuance. The federal title V public participation requirements are found in 40 C.F.R. 70.7(h). Title V public participation procedures apply to initial permit issuance, significant permit modifications, and permit renewals. Adequate public participation procedures must provide for public notice including an opportunity for public comment and public hearing on the draft permit, permit modification, or renewal. Draft permit actions must be noticed in a newspaper of general circulation or a State publication designed to give general public notice; to persons on a mailing list developed by the permitting authority; to those persons that have requested in writing to be on the mailing list; and by other means necessary to assure adequate notice to the affected public.

The public notice should, at a minimum: identify the affected facility; the name and address of the permitting authority processing the permit; the activity or activities involved in the permit action; the emissions change involved in any permit modification; the name, address, and telephone number of a person from whom interested persons may obtain additional information, including copies of the draft permit, the application, all relevant supporting materials, and all other materials available to the permitting authority that are relevant to the permit decision; a brief description of the required comment procedures; and the time and place of any hearing that may be held, including procedures to request a hearing. (See 40 C.F.R. 70.7(h)(2).)

The permitting authority must keep a record of the public comments and of the issues raised during the public participation process so that EPA may fulfill the Agency's obligation under section 505(b)(2) of the Act to determine whether a citizen petition may be granted. The public petition process, 40 C.F.R. 70.8(d), allows any person who has objected to permit issuance during the public comment period to petition the EPA to object to a title V permit if EPA does not object to the permit in writing as provided under 40 C.F.R. 70.8(c). Public petitions to object to a title V permit must be submitted to EPA within 60 days after the expiration of the EPA 45-day review period. Any petition submitted to EPA must be based only on comments regarding the permit that were raised during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.

**4.1 Finding:** BAPC posts public notices for all of its Class I permits on its website, and for projects where public interest is high, BAPC provides additional detailed information on its website, including copies of the draft permit, application, and SoB.

**Discussion:** Under BAPC's permitting program, Class I permits are Nevada's title V permits. Thus, Class I permits must include all of the administrative requirements of their approved operating permit program. One such administrative requirement is with regards to public noticing. As required under 70.7(h) and NAC 445B.3395, BAPC public notices all Class I permits. In our review of the state's permitting program we found that while the state is meeting the public noticing requirement for Class I permit, BAPC also posts public

notices for all of its Class I permits on its website. Furthermore, for some projects where public interest is high, BAPC provides additional detailed information on its website, including copies of the draft permit, application, and SoB. While BAPC makes copies of all permits and SoBs available at local libraries, this type of information is generally not posted on its website unless there is high public interest.

During EPA's evaluations of other permitting authorities we have found that it is common practice to provide additional information beyond the public notices on agency websites. Many agencies provide the equivalent of BAPC's Director's Review (which is substantively an executive summary of the permitting action). This approach helps to improve public understanding of permitting actions under title V.

**Recommendation:** We encourage BAPC to continue posting Class I documents on its website, and consider improvements to further enhance public access (regardless of high public interest) to these documents by providing access to each title V permit's Director's Review<sup>8</sup> (and other documents used to develop the permit and the TSD as appropriate) on the BAPC website during the public comment period and to archive these documents once the comment period is over.

**4.2 Finding:** BAPC's website postings of draft and final permit packages do not inform the public of the right to petition the EPA Administrator to object to title V permits.

**Discussion:** 40 C.F.R. § 70.8(d) and Section 15 of NAC 445B.3364 provide that any person may petition the EPA Administrator, within 60 days of the expiration of EPA's 45-day review period, to object to a title V/Class I permit. The petition must be based only on objections that were raised with reasonable specificity during the public comment period.<sup>9</sup>

While Section 15 of NAC 445B.3364 informs the public of the right to petition, BAPC's public notice web page does not provide this information or the timeframe for petitions to be filed when proposing or issuing a Class I permit. While doing so is not required by Part 70, we believe that it is good practice to provide this information in public notices when draft or final permits become available, rather than relying exclusively on regulatory language that is not easily accessible on the BAPC website and that is not specifically tied to a title V permitting action.

**Recommendation:** BAPC should add this information to its permitting packages and public notice web page.<sup>10</sup>

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<sup>8</sup> See Appendix D for an example of a BAPC Director's Review document.

<sup>9</sup> An exception applies when the petitioner demonstrates that it was impracticable to raise those objections during the public comment period or that the grounds for objection arose after that period.

<sup>10</sup> See <http://www.epa.gov/oar/oaqps/permits/partic/proof1.pdf#page=108>

**4.3 Finding:** Although Nevada contains a number of linguistically isolated communities where translation services may be necessary for the public to be aware of and understand BAPC permit actions, BAPC has not routinely translated public notice packages.

**Discussion:** BAPC's jurisdiction covers most of the State of Nevada except for Clark and Washoe counties, in which BAPC has jurisdiction over a limited number of facility types. EPA prepared a map of linguistically isolated communities within BAPC's jurisdiction in which title V permits have been or may be issued (see Appendix E). Unlike prior EPA title V program evaluations, Region 9 notes that, in general, very few people live within BAPC's jurisdiction (except for Clark and Washoe Counties) even though there are indications that linguistically isolated populations may be present. With respect to those areas where many people reside (such as Clark and Washoe Counties), linguistically isolated communities' population density is significant and it is unclear whether BAPC considers providing translation service in those communities during the title V permitting process. The Bureau has not reported providing translation services in the past.

**Recommendation:** During the title V permit issuance and renewal process, BAPC should perform an analysis of linguistically isolated communities near title V permitted facilities in more densely populated communities (like Clark and Washoe Counties) and provide translation services where needed. In less populous areas of BAPC's jurisdiction, BAPC should consider performing a similar analysis to determine if translation services may be needed.

**4.4 Finding:** BAPC always conducts public hearings when requested and often plans hearings in advance if they believe there is public interest.

**Discussion:** During our site visit, interviewees uniformly said that BAPC holds public hearings when requested by a member of the public or when BAPC is aware that there is high public interest in a specific permitting action. Hearings are conducted by BAPC staff and management in coordination with the Nevada Attorney General's office. Typically, BAPC does a presentation on the permitting action followed by public comments.

**Recommendation:** BAPC should continue this practice.

**4.5 Finding:** BAPC routinely notifies affected states and tribes of title V permitting actions-

**Discussion:** In our file review, we found that BAPC notifies affected states and tribes, including Oregon, Idaho, Utah, California and Clark and Washoe Counties, using a mailing list. The current mailing list includes the California Air Resources Board (CARB), but none of California's local air pollution control agencies along the California/Nevada border, all of which meet the legal definition of an affected state in part 70. However, there have been no recent Class I permitting actions located along the border of Nevada and California. We brought this to BAPC's attention and our understanding is that, if there are Class I permitting actions along the Nevada/California border, BAPC will notify affected California local agencies as well as CARB of these actions.

**Recommendation:** BAPC should continue its current practice and, in the event that Class I permitting actions occur along the border of Nevada and California, BAPC should add to the mailing list any affected California local agencies along the California/Nevada border to assure that they are notified when necessary.

**4.6 Finding:** BAPC has access to NDEP's tribal liaison and informs all tribes in Nevada of new permits, renewals, and revisions.

**Discussion:** The NDEP tribal liaison is a valuable resource in working on permitting issues with tribes located in Nevada. NDEP has had a tribal liaison position for 10 years. The tribal liaison has the following responsibilities:

1. Develops communication protocols with tribes within Nevada.
2. Attends meetings to communicate tribal questions or concerns.
3. Participates in conferences sponsored by tribes.

We further note that all of the Nevada tribes are included on the BAPC permitting mailing list identified in Finding 4.5.

**Recommendation:** BAPC's use of a tribal liaison is unique among Region 9 title V permitting programs. Given the effectiveness of the position, NDEP should continue this practice.

**4.7 Finding:** BAPC uses an as-needed approach to meet the small business assistance program requirements under title V.

**Discussion:** Under CAA Section 507, some of the functions of a small business assistance program are:

- Development, collection, and coordination of information on compliance methods and technologies for small business stationary sources.
- Establishment of a small business stationary source compliance assistance program for determining applicable requirements and permit issuance.
- Adequate mechanisms for notifying small business stationary sources on a timely basis of their rights under the Act.
- Adequate mechanisms for informing small business stationary sources of their obligations under the Act, including a program for referring sources to qualified auditors or for the State to provide for audits of the operations of such sources to determine compliance with this Act.

These functions address compliance and implementation challenges facing small businesses subject to the title V program.

In our review, we learned that, when the title V program was initiated, the BAPC had a formal small business assistance program as required under CAA Section 507. Over time, as a result of decreased demand for small business assistance regarding title V, BAPC has transitioned to a more as-needed approach to providing small business assistance in which

they provide such assistance consistent with the CAA Section 507 requirements. BAPC recently created a new position that, in addition to other responsibilities discussed later in Chapter 7 (see finding 7.4), is responsible for addressing outreach and training for small businesses.

**Recommendation:** EPA notes BAPC's ability to address CAA Section 507 requirements while adapting their program in the face of changing small business demands.

## 5. Permit Issuance / Revision / Renewal

This section focuses on the permitting authority's progress in issuing initial title V permits and the Bureau's ability to issue timely permit renewals and revisions consistent with the regulatory requirements for permit processing and issuance. Part 70 sets deadlines for permitting authorities to issue all initial title V permits. EPA, as an oversight agency, is charged with ensuring that these deadlines are met as well as ensuring that permits are issued consistent with title V requirements. Part 70 describes the required title V program procedures for permit issuance, revision, and renewal of title V permits. Specifically, 40 C.F.R. 70.7 requires that a permitting authority take final action on each permit application within 18 months after receipt of a complete permit application, except that action must be taken on an application for a minor modification within 90 days after receipt of a complete permit application.<sup>11</sup>

**5.1 Finding:** BAPC is working to eliminate its title V renewal backlog.

**Discussion:** During our site visit, Bureau staff reported that as a result of employee turnover there had previously been a significant backlog of Class I permit renewals in Nevada.

Currently, among its 35 title V sources, seven are operating under an application shield, i.e. beyond the expiration date of its current permit after submitting a timely application. Of these seven, three are beyond the 18-month deadline for processing applications, the permits having expired in 2008, 2012, and 2013. BAPC management expect to eliminate the title V backlog in 2015.

Recently, the Bureau has made increased staff training and permitting resources a priority (see Finding 7.4) and, as a result, has seen increased staff retention and a reduction in its permitting backlog.

**Recommendation:** EPA supports BAPC's efforts to eliminate its permit backlog by maintaining staffing levels and making permitting and the reduction of its title V permits backlog a priority. We encourage BAPC to continue with these efforts.

**5.2 Finding:** With improvements, BAPC's Class II permits can provide a solid foundation for limiting potential to emit below major source thresholds.

**Discussion:** A source that would otherwise have the potential to emit (PTE) a pollutant that exceeds the major source threshold can accept a voluntary limit (a "synthetic minor" limit) to maintain its PTE below the applicable threshold and avoid the requirement to obtain a major NSR or title V permit. A common way for sources to establish such a limit is to obtain a synthetic minor permit from the local permitting authority.

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<sup>11</sup> See 40 C.F.R. 70.7(a)(2) and 70.7(e)(2)(iv).

Synthetic minor limits must be both legally enforceable and enforceable as a practical matter.<sup>12</sup> According to EPA guidance, for emission limits in a permit to be practically enforceable, the permit provisions must specify: 1) a technically-accurate limitation and the portions of the source subject to the limitation; 2) the time period for the limitation; and 3) the method to determine compliance, including appropriate monitoring, record keeping, and reporting.<sup>13</sup>

EPA has recently provided additional guidance on synthetic minor permits and practical enforceability in its response to a section 505(b) petition to object to a permit, *In the Matter of Hu Honua Bioenergy Facility*, Title V Petition Response No. IX-2011-1, February 7, 2014 (Hu Honua Order). The Hu Honua Order clarifies that synthetic minor permits must limit the potential to emit of all emissions units at all times, and all emissions including those occurring during startup, shutdown and malfunction, must be used to determine compliance. *See e.g.* Hu Honua Order at 9-12. The Hu Honua Order also clarifies that synthetic minor permits must specify specific compliance demonstration methods, such as calculations, and/or formulas, to ensure practical enforceability. *See e.g., id.* At our request, BAPC provided us with five recent Class II permits with limits just below major source thresholds. All five permits were for sources in the mineral processing industry, the largest industry in Nevada, and had been issued through the Class II permitting program.

BAPC has a template for Class II permits similar to its Class I permit template (see Finding 2.2) that clearly and effectively organizes the permit into general conditions followed by conditions specific to each emission unit or groups of related emissions units. For each unit (or related units), the permit contains equipment descriptions, followed by emission limits, work practice standards, operating practices, and monitoring and recordkeeping requirements. The last sections of the permit contain emission caps and compliance schedules. These last sections are included when necessary, and are not present in every permit.

Many of Nevada's Class II permits contain emission limits based on the application of a control device or work practice requirement that limit the facility's uncontrolled potential to emit to below major source thresholds. Such emission limits can be considered source-specific determinations and, as a result, function as synthetic minor limits because they limit the facility's potential to emit below major source thresholds.

**Recommendation:** We recommend that BAPC consider using its well-established Class II permitting program to develop and issue synthetic minor permits. BAPC should enhance Class II permits with more explicit monitoring conditions, when needed, for control equipment. In addition, the Bureau may consider using the existing "Emission Caps" section

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<sup>12</sup> *Guidance on Limiting Potential to Emit in New Source Review Permitting*, Memorandum from Terrell E. Hunt and John S. Seitz, June 13, 1989.

<sup>13</sup> *Options for Limiting the Potential to Emit of a Stationary Source under Section 112 and Title V of the Clean Air Act*, Memorandum from John S. Seitz and Robert I. Van Heuvelen, January 25, 1995; *see also*, Hu Honua Bioenergy Facility title v Petition Response No. IX-2011-1, Feb 7 2014.

of the permit template to include emissions caps that apply to all facility emissions (including those occurring during startup, shutdown and malfunction) and specific compliance demonstration methods, such as calculations, and/or formulas, to ensure practical enforceability.

- 5.3 Finding:** When posting minor source permit applications on its website or submitting minor source permits to EPA for review, BAPC does not indicate if the permit contains voluntary emission limits that limit PTE to below major source thresholds.

**Discussion:** BAPC posts all minor source applications it receives on its website, but it does not identify those that include requests for voluntary emission limits to avoid title V permitting requirements, either on its website or within the attached documents. Furthermore, BAPC does not submit synthetic minor permits to EPA for review or alert EPA that such applications have been posted on its website.

**Recommendation:** BAPC must identify which applications for Class II permits posted on its website include voluntary emission limits. In addition, BAPC must submit these Class II permits, or links to electronic copies of such permits, to EPA for review upon request.

- 5.4 Finding:** BAPC has required at least one source to suspend operations as a result of losing its application shield.

**Discussion:** According to both title V's implementing regulations (40 CFR 70.7(c)(1)(ii)) and Nevada's Class I permitting regulations (NAC 445B.3443.2), permit expiration terminates a source's right to operate unless a timely and complete renewal application has been submitted. Timely, according to the federal regulation, means at least six months prior to the date of permit expiration, unless another date has been approved. According to the Nevada Administrative Code, timely means at least 240 days prior to permit expiration.

**Recommendation:** We agree with BAPC's implementation of the title V application deadlines and consequences to sources that do not apply for renewals on time. We have no recommendation for this finding.

- 5.5 Finding:** BAPC's applications for minor permit revisions specify the criteria for minor revisions and require a statement of truth and accuracy by a responsible official.

**Discussion:** The NAC provides three tracks for modifying Class I Operating Permits: minor revision, significant revision, and administrative revision. These correspond generally to the minor modification, significant modification, and administrative amendment tracks in part 70, modified to account for the fact that Nevada's Class I permitting program is a combined NSR and title V program. For example, minor modifications in part 70 do not require public review, whereas minor revisions in the NAC do not require a 30-day public review period unless the Director determines that the revision will result in a significant change in air quality. (NAC 445B.3395.8(c)) In addition, a modification that would be considered minor according to part 70 can be significant according to the NAC based on an

increase in emissions above certain thresholds, which correspond to the PSD significance thresholds. (NAC 445B.3395.1(f))

According to 40 CFR 70.7(e)(2)(ii)(C), an application for a minor permit modification must be certified by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures. We found that BAPC's applications for minor permit revisions correctly specify the criteria for minor revisions and require a statement of truth and accuracy by a responsible official.

We consider this to be a significant finding because in past program reviews we found that several permitting authorities did not require applicants to verify that proposed minor modifications actually met the criteria for minor modifications and, as a result, those permitting agencies sometimes processed significant modifications erroneously as minor modifications.

**Recommendation:** We commend BAPC for this practice.

- 5.6 Finding:** BAPC may not be properly processing significant permit modifications. Because the Bureau does not discuss in its SoB documents whether permit modifications are minor or significant, it is difficult to verify if any significant permit modifications are being incorrectly processed as minor permit modifications.

**Discussion:** Between September 2013 and October 2014, BAPC submitted five Class I permit modifications to EPA for review, identifying four as minor modifications and one as a major modification. BAPC did not explain its decision for selecting the minor or major modification process for revising the permit in any of the associated SoBs. When there were increases in emissions associated with the project, however, these were included in a table in the SoB.

After reviewing the five modifications, we found several cases in which BAPC may have made an error. The minor modification for Veris Gold (Permit AP1041-3422) includes emission limits based on NAC 445B.305, which allows the Director to impose more stringent standards for emissions than those otherwise required. Based on NAC 445B.3425(1)(c)(1) and 40 CFR 70.7(e)(2)(i)(A)(3), this may preclude the use of the minor modification process, depending on whether the "more stringent standard" was determined on a "case-by-case basis." BAPC may have made similar errors processing the applications to revise permits for Newmont Gold Quarry (Permit AP1041-0793) and Barrick Goldstrike (Permit AP1041-0739).

**Recommendation:** When revising Class I permits, BAPC should specify whether modifications meet the criteria for a minor or significant modification.

## 6. Compliance

This section addresses BAPC practices and procedures for issuing title V permits that ensure permittee compliance with all applicable requirements. Title V permits must contain sufficient requirements to allow the permitting authority, EPA, and the general public to adequately determine whether the permittee complies with all applicable requirements.

Compliance is a central priority for the title V permit program. Compliance assures a level playing field and prevents a permittee from gaining an unfair economic advantage over its competitors who comply with the law. Adequate conditions in a title V permit that assure compliance with all applicable requirements also result in greater confidence in the permitting authority's title V program within both the general public and the regulated community.

**6.1 Finding:** BAPC performs a full compliance evaluation (FCE) for each Class I source on an annual basis.

**Discussion:** According to EPA's 2010 *Clean Air Act Stationary Source Compliance Monitoring Strategy*, EPA recommends that permitting authorities perform FCEs for most title V sources at least every other year.<sup>14</sup> For the vast majority of title V sources, EPA expects that the permitting authority will need to perform an on-site inspection to determine the facility's compliance status as part of the FCE. The Bureau exceeds EPA's recommendation by inspecting each Class I facility annually.

During interviews, District inspectors reported that it is Bureau practice to perform FCEs (which includes an on-site inspection) of all Class I sources on an annual basis. Compliance staff indicated that the size of the state and BAPC's location in Carson City, which is located on the western border of the state, can make this objective challenging for certain sources. For example, certain mining facilities can be located as far as 350 miles from Carson City.

Despite these challenges, compliance staff indicated that they felt annual inspections were important, as they develop greater awareness and understanding of facilities, and develop relationships with facility staff.

**Recommendation:** EPA commends BAPC for inspecting each Class I source annually and encourages the Bureau to continue doing so.

**6.2 Finding:** BAPC compliance staff use Class I permits and other title V documents to determine compliance during field inspections.

**Discussion:** Compliance staff indicated that the Class I permit is the primary document relied upon during inspections to determine compliance. Other documents relied upon or

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<sup>14</sup> As recommended in *Clean Air Act Stationary Source Compliance Monitoring Strategy*, 2010, U.S. EPA. Available at <http://www.epa.gov/compliance/resources/policies/monitoring/caa/cmospolicy.pdf>

reviewed in preparation for site inspections include previous inspection reports, performance test results, recent deviation reports, and recent permit history. In interviews, compliance staff indicated that they typically bring various documents with them to site inspections for reference purposes, and are working to make more information from its ARIS database available remotely.

Compliance staff indicated that, when addressing compliance issues, the Bureau typically does not use compliance plans, instead favoring consent decrees (CD) and state orders. If a CD involves terms or conditions that involve a permanent change in operations, such terms will be included into the Class I permit during the next renewal while the CD is still in effect. In instances when a violation discovery is made at a facility that also has a permit application pending, it is Bureau policy to not issue permits until negotiations have been resolved to the satisfaction of compliance staff.

Compliance staff indicated that they regularly review pre-draft Class I permits, primarily to gauge the practical enforceability of permit conditions. (See Finding 2.1) As noted, the enforcement supervisor has the opportunity to review and provide input on all draft title V permits as part of the Bureau chief review. Permit writers accompany compliance staff on inspections anywhere from 1-3 times per year.

**Recommendation:** BAPC should continue to use Class I permits and other title V documents to determine compliance during field inspections.

- 6.3 Finding:** BAPC reviews all title V permit deviation reports, semiannual monitoring reports, and annual compliance certifications.

**Discussion:** During interviews, Bureau compliance staff indicated that they review all deviation reports and annual compliance certifications. CEMS data and semiannual monitoring reports are received and reviewed by the emissions auditing branch, which performs QA/QC of CEMS data. Reports and results of the QA/QC are updated in the ARIS database, where they become accessible to BAPC staff. Compliance staff do not primarily review semiannual reports, and rely upon auditing branch staff to refer any issues noted during the QA/QC process.

Compliance staff indicated that they have based NOVs on deviation reports, and that they are particularly useful for identifying areas for additional scrutiny in subsequent inspections. The overall percentage of deviation reports that result in NOVs is relatively low, as the majority of deviation reports are CEMS-related, such as for calibration.

**Recommendation:** EPA encourages BAPC to continue its review of compliance reports and take enforcement actions when warranted.

- 6.4 Finding:** Permit writers have access to compliance information, and review this information during the permit issuance process.

**Discussion:** Part 70 regulations requires facilities to be in compliance, or on a schedule for compliance, at the time of permit issuance. (40 CFR 70.5(c)(8))

Permit staff indicated that, when working on a permit, they check with the compliance inspector who performed the most recent inspection, and examine recent stack tests and compliance reports for comparison against permit application emission calculations. Staff also indicated that they consult with their supervisor regarding any outstanding compliance issues with a facility and wait until receiving guidance from compliance prior to proceeding with permit issuance.

**Recommendation:** EPA encourages the continued practice of information sharing between permitting and compliance staff. In addition, EPA recommends that consultation between the two offices regarding compliance information become part of BAPCs standard operating procedure for permit processing.

**6.5 Finding:** BAPC conducts unannounced inspections of title V sources where practicable.

**Discussion:** Compliance staff indicated that the majority of their inspections of title V sources are unannounced. As noted previously (see Finding 6.1), due to the size of the state and BAPC's location in Carson City, certain sources may be located as far as 350 miles from BAPC in areas of the state not routinely accessible by air travel. In these instances, compliance staff will notify sources of an inspection in order to ensure that the facility is operating and that the proper environmental staff will be available for the inspection.

**Recommendation:** BAPC should continue its practice of conducting unannounced inspections where possible.

## 7. Resources and Internal Management

The purpose of this section is to evaluate how the permitting authority is administering its title V program. With respect to title V administration, EPA's program evaluation: (1) focused on the permitting authority's progress toward issuing all initial title V permits and the permitting authority's goals for issuing timely title V permit revisions and renewals; (2) identified organizational issues and problems; (3) examined the permitting authority's fee structure, how fees are tracked, and how fee revenue is used; and (4) looked at the permitting authority's capability of having sufficient staff and resources to implement its title V program.

An important part of each permitting authority's title V program is to ensure that the permit program has the resources necessary to develop and administer the program effectively. In particular, a key requirement of the permit program is that the permitting authority establish an adequate fee program. Part 70 requires that permit programs ensure that title V fees are adequate to cover title V permit program costs and are used solely to cover the permit program costs.<sup>15</sup> Regulations concerning the fee program and the appropriate criteria for determining the adequacy of such programs are set forth in 40 C.F.R. 70.9.

**7.1 Finding:** BAPC engineers and inspectors report that they receive effective legal support from the Attorney General's office.

**Discussion:** The Nevada Attorney General's office represents and advises BAPC on air quality permitting and enforcement matters and participates in any meeting at which BAPC meets with a permittee or others who have legal counsel. During our site visit, each interviewee reported that they receive effective legal support from the Attorney General's office.

**Recommendation:** EPA has no recommendation for this finding.

**7.2 Finding:** BAPC manages its permits processing using an electronic database effectively.

**Discussion:** BAPC's Air Resources Information System (ARIS) is a well-structured Oracle database developed in-house used to track application submittals, fees, application reviews, permit issuance and renewals, and compliance activities. The database is also used to generate customized reports. During our site visit, BAPC demonstrated the database's flexibility and utility in retrieving critical information related to specific title V permits.

**Recommendation:** EPA commends the District for devoting the resources to build and maintain a well-structured database that provides a variety of tools for effectively implementing the title V program.

**7.3 Finding:** BAPC collects sufficient revenue to implement the title V permitting program.

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<sup>15</sup> See 40 C.F.R. 70.9(a).

**Discussion:** As shown in Appendix F (a screenshot of a typical timecard for an employee working on title V permitting actions), BAPC accounts for time spent on the title V program by its employees. Other title V-related expenses include personnel services, travel, indirect costs, information services, and training. Using its ARIS database in conjunction with its time and attendance system (to account for labor costs) and a budgeting process, BAPC provided EPA (see appendix G) the necessary information to demonstrate that its fees are sufficient to implement the title V permitting program. BAPC's title V fee revenues are made up of application fees and annual fees for emissions and maintenance. The average annual fees collected for fiscal years 2012 through 2014 were \$1,090,467. The annual average expenses during the same period were \$1,053,826. These data show that the BAPC title V program was operating at a sufficient surplus over this three year period to allow for variation throughout the year to avoid budgetary shortfalls.

**Recommendation:** EPA encourages BAPC to maintain its existing accounting practices that provide sufficient information regarding expenses and revenue associated with title V permits.

- 7.4 Finding:** BAPC has experienced personnel turnover in the permitting program in recent years. They are addressing this issue by investing in its Permits Services staff through training and mentoring programs.

**Discussion:** Interviewees identified recent turnover in the permitting program as an issue that led to a loss of expertise and diminished institutional knowledge resulting in a permitting backlog. In response, BAPC created a new position responsible for addressing the potential effects of senior employees leaving the permitting program. The new position is a manager who is responsible for preparing a comprehensive permitting training program and for establishing a mentoring program.

**Recommendation:** EPA commends BAPC on preparing a strategy that may reduce permitting program turnover in the future.

## 8. Title V Benefits

The purpose of this section is to evaluate how the permitting authority's existing air permitting and compliance programs have benefited from the administration of the permitting authority's title V program. The title V permit program is intended to generally clarify which requirements apply to a source and enhance compliance with any CAA requirements, such as NSPS or SIP requirements. The program evaluation for this section is focused on reviewing how the permitting authority's air permitting program changed as a result of title V, resulted in transparency of the permitting process, improved records management and compliance, and encouraged sources to pursue pollution prevention efforts.

### 8.1 **Finding:** BAPC works constructively with industry.

**Discussion:** The Bureau has a constructive working relationship with regulated entities in Nevada. Bureau management and staff regularly interact with the regulated community to communicate permitting information, including information related to title V.

Mining and mineral processing is the largest industry regulated by BAPC. The Bureau meets quarterly with the Nevada Mining Association (NMA) and holds teleconferences with the NMA at least monthly. At its meetings with the NMA, the Bureau discusses regulatory issues such as emission factors, emission reductions from common control technologies such as wet suppression, and upcoming regulations that apply to the mining industry.

In 2011, for example, EPA promulgated National Emission Standards for Hazardous Air Pollutants: Gold Mine Ore Processing and Production Area Source Category (40 CFR part 63, subpart EEEEEEE), which requires gold mine ore processing facilities that are minor sources to obtain title V permits. Because of the close working relationship between BAPC and the NMA, the Bureau was able to easily notify all the existing affected sources in Nevada before the initial compliance date, February 17, 2014, and all the gold mine ore processing facilities in Nevada submitted timely title V applications.

More generally, the Bureau holds workshops with industry and the public whenever there are statewide regulatory changes. Recently, when the Bureau adopted the one-hour SO<sub>2</sub> and NO<sub>2</sub> standards and the 24-hour PM<sub>2.5</sub> standard, the Bureau held a workshop for industry to explain how the new standards would affect Class I and minor source permitting actions.

**Recommendation:** BAPC should continue its constructive working relationship with the regulated community.

### 8.2 **Finding:** BAPC has a constructive relationship with EPA.

**Discussion:** Part 70 requires states to submit proposed title V permits to the Administrator and allow the Administrator the right to object to proposed permits. (40 CFR 70.8) To avoid the likelihood of objections, management from BAPC and staff from EPA Region 9 with

Nevada oversight duties hold monthly calls to discuss permitting issues. On these calls, management from the Bureau tell EPA staff about upcoming permits, discuss possibly difficult issues, and work to resolve issues before permits go out to public comment. EPA staff alert BAPC management about new Agency policies and pending regulations. As a result of open lines of communications, adverse comments and objections to Nevada's Class I permits from EPA have become rare. In addition, because of increased familiarity, Bureau managers are comfortable contacting EPA to discuss permitting and regulatory issues between scheduled calls.

**Recommendation:** BAPC and EPA should continue to maintain their constructive working relationship.

**8.3 Finding:** Title V has increased BAPC's knowledge of federal regulations.

**Discussion:** Since Class I permits must include all applicable requirements, BAPC permitting staff reviews federal regulations (e.g., NSPS, NESHAP) more frequently than before Nevada adopted the title V program to determine which requirements apply to facilities. The permit application review process requires that permitting staff evaluate whether applicable requirements, including federal regulations, apply to emission units. Staff have greater exposure to federal regulations and apply them on a more frequent basis. In addition, during the interviews, it was evident that staff knowledge of federal air pollution regulations has increased as a result of implementing title V.

**Recommendation:** None.

**8.4 Finding:** BAPC has observed that Class I permit holders are more aware of their obligations under the CAA than other permittees.

**Discussion:** Section 70.6 of part 70 and NAC 445B.3405 require title V/Class I permits to include all applicable requirements, including monitoring, recordkeeping, and reporting requirements, such as semiannual monitoring reports and annual compliance certifications.

During our site visit, interviewees noted that Class I permit holders generally had a higher level of understanding of their CAA obligations than other permittees, that regular reporting increased awareness of CAA requirements, and that sources base their compliance programs on Class I permits.

**Recommendation:** None.

**8.5 Finding:** The information in BAPC's SoBs help to promote transparency in the title V permitting process by documenting permitting decisions and helping the public to understand stationary sources' CAA obligations.

**Discussion:** BAPC SoBs contain detailed information about the regulated facility including its physical processes, the applicability of state and federal regulations, emissions from individual pieces of equipment and the facility as a whole, and ambient air impacts from the facility's emissions. This documentation helps the regulated community, EPA, the public, and future permit writers understand the impacts of the facility and the decisions the Bureau has made.

**Recommendation:** The Bureau should continue to produce informative SoBs that document the CAA obligations of title V facilities. (See Finding 2.5 for more information on our recommendations for improving BAPC SoBs.)

- 8.6 Finding:** Some sources have accepted enforceable limits to reduce their potential emissions and thus avoid title V applicability.

**Discussion:** Some major sources avoid title V permitting by voluntarily accepting PTE limits that are less than the major source thresholds, resulting in reductions in potential emissions and, in some cases, in actual emissions. Reduced emissions result in improvements to human health and the environment.

**Recommendation:** We recommend that the Bureau continue its practice of creating synthetic minor sources with practically and legally enforceable permit terms and conditions.

- 8.7 Finding:** BAPC has used its Class I permit template as a basis for writing enforceable minor source permits.

**Discussion:** The Bureau organizes its Class I permits into sections with general conditions at the beginning of the permit followed by conditions specific to each emission unit or groups of related emissions units. For each unit (or related group), there are equipment descriptions, followed by emission limits, work practice standards, operating practices, and monitoring and recordkeeping requirements.

When writing permits for Class II sources, which are industrial minor sources of air pollution, the Bureau follows the same basic permit structure it uses for Class I permits. The result is a well-organized and enforceable minor source permit.

The Bureau has been able to take advantage of this structure to write enforceable synthetic minor permits for sources that want to avoid the requirement to obtain a major source permit and/or comply with a major source regulation. (See Finding 5.2)

**Recommendation:** BAPC should continue to write well organized and enforceable minor source permits.

- 8.8 Finding:** BAPC uses title V renewal as an opportunity to model NAAQS compliance and increment consumption in an area where there are few ambient air quality monitors.

**Discussion:** Nevada's Class I permitting program requires permit applicants to demonstrate compliance with the NAAQS at the time of permit issuance and renewal. Applicants demonstrate compliance through dispersion modeling using EPA approved models.

Regular dispersion modeling is particularly valuable in a state with a low population density and widely distributed industry (mostly mining and power generation), as it ensures that attainment with the NAAQS is maintained where there are few ambient air quality monitors. The Director has the authority to require an applicant to modify a source's renewal application if dispersion modeling shows an exceedance of any of the NAAQS.

**Recommendation:** We commend BAPC for this practice as it assures compliance with both new and existing NAAQS, allows operational flexibility for permittees, and maintains integrity of the combined NSR/title V permitting program.

## GLOSSARY OF ACRONYMS & ABBREVIATIONS

Act	Clean Air Act [42 U.S.C. Section 7401 et seq.]
Agency	U.S. Environmental Protection Agency
BAPC	Nevada Bureau of Air Pollution Control
Bureau	Nevada Bureau of Air Pollution Control
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAM	Compliance Assurance Monitoring
CARB	California Air Resources Board
CEMS	Continuous Emissions Monitoring System
C.F.R.	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
EPA	U.S. Environmental Protection Agency
MACT	Maximum Achievable Control Technology
NAAQS	National Ambient Air Quality Standard
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NESHAP	National Emission Standards for Hazardous Air Pollutants, 40 C.F.R. Parts 61 & 63
NOV	Notice of Violation
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 C.F.R. Part 60
NSR	New Source Review
OIG	EPA Office of Inspector General
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter less than 10 micrometers in diameter
PM <sub>2.5</sub>	Particulate Matter less than 2.5 micrometers in diameter
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
SoB	Statement of Basis