



2013 Regional SO₂ Emissions and Milestone Report

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2013 Regional SO₂ Emissions and Milestone Report

Executive Summary

Under Section 309 of the Federal Regional Haze Rule, nine western states and tribes within those states have the option of submitting plans to reduce regional haze emissions that impair visibility at 16 Class I areas on the Colorado Plateau. Five states -- Arizona, New Mexico, Oregon, Utah, and Wyoming -- and Albuquerque-Bernalillo County initially exercised this option by submitting plans to EPA by December 31, 2003. Oregon elected to cease participation in the program in 2006 and Arizona elected to cease participation in 2010. The tribes were not subject to the deadline and still can opt into the program at any time. Under the Section 309 plans, the three participating states and Albuquerque-Bernalillo County have tracked the emissions of the applicable stationary sources as part of the pre-trigger portion of the SO₂ Milestone and Backstop Trading Program. The Western Regional Air Partnership (WRAP) is assisting these states and city with the implementation and management of the regional emission reduction program. As used in this document, "Section 309 states" means the states of New Mexico, Utah, and Wyoming and Albuquerque-Bernalillo County. (For CAA purposes, Albuquerque-Bernalillo County is treated as a state, because it has authority under federal and state law to administer the CAA separately from the rest of New Mexico.)

As part of this program, the Section 309 states must submit an annual Regional Sulfur Dioxide (SO₂) Emissions and Milestone Report that compares emissions to milestones. A milestone is a maximum level of annual emissions for a given year. The first report was submitted in 2004 for the calendar year 2003.

The regional milestone for 2013 is 185,795 tons. The 2011, 2012, and 2013 adjusted emissions from the Section 309 states were averaged, and this average was compared to the 2013 milestone to determine whether the milestone was met. The adjustments to reported emissions were required to allow the basis of current emission estimates to be comparable to the emissions monitoring or calculation method used in the most recent base year inventory.

As presented in Table Es-1, the Section 309 states reported 100,391 tons of SO₂ emissions for the calendar year 2013. The total emissions increased to 101,381 tons of SO₂ after making adjustments to account for changes in monitoring and calculation methods. The adjustments result in an additional 990 tons of SO₂ emissions. The adjusted emissions values for 2011 and 2012 were 118,395 and 96,430 tons, respectively. The average of 2011, 2012, and 2013 adjusted emissions is 105,402 tons.

Based on the adjusted milestone and emissions data, the average of 2011, 2012, and 2013 emissions is about 43% below the 2013 three-state regional milestone.

Based on this average annual emissions estimate, the Section 309 states determined that emissions in 2013 were below the regional SO₂ milestone for 2013. The states' Section 309 plans contain provisions to adjust the milestones to account for enforcement actions (to reduce

the milestones where an enforcement action identified that emissions in the baseline period were greater than allowable emissions). Based on emissions data received from the states and plan requirements regarding adjustments to the milestones, no enforcement action adjustment is required.

The plans also require that the annual report identify, first, changes in the total number of sources from year to year and, second, significant changes in a source's emissions from year to year. The significant emission changes from 2012 to 2013 are included in Section 6 of this report. A list of facilities added to or removed from the list of subject sources in the original base year inventories is included in Appendix B.

**Table ES-1
 Overview of 2013 Regional Milestones and Emissions for Section 309 Participating States***

| | |
|---|--------------|
| <u>2013 Sulfur Dioxide Milestones</u> | |
| Regional 2013 Milestone** | 185,795 tons |
| Adjusted 2013 Milestone | 185,795 tons |
| <u>2013 Sulfur Dioxide Emissions</u> | |
| Reported 2013 Emissions | 100,391 tons |
| Adjustments*** | |
| Emission Monitoring and Calculation Methods | 990 tons |
| Adjusted 2013 Emissions (rounded number) | 101,381 tons |
| <u>Average Sulfur Dioxide Emissions (2011, 2012, & 2013)</u> | |
| Adjusted 2013 Emissions | 101,381 tons |
| Adjusted 2012 Emissions | 96,430 tons |
| Adjusted 2011 Emissions | 118,395 tons |
| Average of, 2011, 2012, & 2013 Adjusted Emissions | 105,402 tons |
| <u>Comparison of Emissions to Milestone</u> | |
| Average of 2011, 2012, & 2013 Adjusted Emissions | 105,402 tons |
| Adjusted Three-State 2013 Milestone | 185,795 tons |
| Difference (Negative Value = Emissions < Milestone) | -80,393 tons |
| 2011 – 2013 Emissions Average as Percent of 2013 Milestone | 57% |

* Section 309 participating states means the states of New Mexico, Utah, and Wyoming and Albuquerque-Bernalillo County.

** See the Regional Milestones section of each state's 309 plan.

*** See the Annual Emissions Report section of each state's 309 plan.

2013 Regional SO₂ Emissions and Milestone Report

1.0 Introduction

1.1 Background

Under Section 309 of the Federal Regional Haze Rule (40 CFR Part 51), nine western states and the tribes within those states have the option of submitting plans to reduce regional haze emissions that impair visibility at 16 Class I areas on the Colorado Plateau. Five states -- Arizona, New Mexico, Oregon, Utah, and Wyoming -- and Albuquerque-Bernalillo County exercised this option by submitting plans to EPA by December 1, 2003. In October 2006, when EPA modified Section 309, Oregon elected to cease participation in the SO₂ Milestone and Backstop Trading Program by not resubmitting a Section 309 State Implementation Plan (SIP). In 2010, Arizona elected to cease participation in the Program. The tribes were not subject to this deadline and still can opt into the program at any time.

Under the Section 309 SIPs, these three states and one city have been tracking emissions under the pre-trigger requirements of the SO₂ Milestone and Backstop Trading Program since 2003. The Western Regional Air Partnership (WRAP) is assisting these states with the implementation and management of this regional emission reduction program.

Under the milestone phase of the program, Section 309 states have established annual SO₂ emissions targets (from 2003 to 2018). These voluntary emissions reduction targets represent reasonable progress in reducing emissions that contribute to regional haze. If the participating sources fail to meet the milestones through this voluntary program, then the states will trigger the backstop trading program and implement a regulatory emissions cap for the states, allocate emissions allowances (or credits) to the affected sources based on the emissions cap, and require the sources to hold sufficient allowances to cover their emissions each year.

This report is the eleventh annual report for the milestone phase of this program. The report provides background on regional haze and the Section 309 program, the milestones established under the program, and the emissions reported for 2013. Based on the first eleven years, the voluntary milestone phase of the program is meeting its reasonable progress targets, and emissions are well below the target levels.

What is Regional Haze?

Regional haze is air pollution that is transported long distances and reduces visibility in national parks and wilderness areas across the country. Over the years, this haze has reduced the visual range from 145 kilometers (90 miles) to 24 – 50 kilometers (15 – 31 miles) in the East, and from 225 kilometers (140 miles) to 56 – 145 kilometers (35 – 90 miles) in the West. The pollutants that create this haze are sulfates, nitrates, organic carbon, elemental carbon, and soil dust. Human-caused haze sources include industry, motor vehicles, agricultural and forestry burning, and windblown dust from roads and farming practices.

What U.S. EPA Requirements Apply?

In 1999, the Environmental Protection Agency (EPA) issued regulations to address regional haze in 156 national parks and wilderness areas across the country. These regulations were published in the Federal Register on July 1, 1999 (64 FR 35714). The goal of the Regional Haze Rule (RHR) is to eliminate human-caused visibility impairment in national parks and wilderness areas across the country. It contains strategies to improve visibility over the next 60 years, and requires states to adopt implementation plans.

EPA's RHR provides two paths to address regional haze. One is 40 CFR 51.308 (Section 308), and requires most states to develop long-term strategies out to the year 2064. These strategies must be shown to make "reasonable progress" in improving visibility in Class I areas inside the state and in neighboring jurisdictions. The other is 40 CFR 51.309 (Section 309), and is an option for nine states -- Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and Wyoming -- and the 211 tribes located within these states to adopt regional haze strategies for the period from 2003 to 2018. These strategies are based on recommendations from the Grand Canyon Visibility Transport Commission (GCVTC) for protecting the 16 Class I areas on the Colorado Plateau. Adopting these strategies constitutes reasonable progress until 2018. These same strategies can also be used by the nine western states and tribes to protect the other Class I areas within their own jurisdictions.

EPA revised the RHR on July 6, 2005 (70 FR 39104), and again on October 13, 2006 (71 FR 60612) in response to two legal challenges. The October 13, 2006 revisions modified Section 309 to provide a methodology consistent with the Court's decision for evaluating the equivalence of alternatives to Best Available Retrofit Technology (BART), such as the alternative Section 309 strategy based on the GCVTC recommendations.

How Have the WRAP States Responded to EPA Requirements?

Of the nine states (and tribes within those states) that have the option under Section 309 of participating in a regional strategy to reduce SO₂ emissions, five states originally submitted Section 309 SIPs to EPA. These states were Arizona, New Mexico, Oregon, Utah, and Wyoming. In addition, Albuquerque-Bernalillo County also submitted a Section 309 SIP. Due to legal challenges, EPA did not approve the initial SIP submittals. EPA did, however, fully approve the regional milestone and backstop trading program in 2012.

Oregon and Arizona have opted out of submitting a revised Section 309 SIP under the modified RHR, which leaves three participating states and Albuquerque-Bernalillo County. To date, no tribes have opted to participate under Section 309, and the other four states of the original nine opted to submit SIPs under Section 308 of the RHR.

The following summarizes SO₂ related elements of the Section 309 process for the participating Section 309 states:

1. Section 309(d)(4)(i) requires SO₂ milestones in the SIP and includes provisions for making adjustments to these milestones if necessary. The milestones must provide for steady and continuing emission reductions through 2018 and greater reasonable progress than BART.
2. Section 309(d)(4)(iii) requires monitoring and reporting of stationary source SO₂ emissions in order to ensure the SO₂ milestones are met. The SIP must commit to reporting to the WRAP as well as to EPA.
3. Section 309(d)(4)(iv) requires that a SIP contain criteria and procedures for activating the trading program within five years if an annual milestone is exceeded. A Section 309 SIP also must provide for assessments of the state's progress in 2013 and 2018.

This report responds to Item 2, above, and provides the annual report that compares the 2013 emissions against the milestones for the states and city that have submitted Section 309 SIPs to EPA.

What Elements Must the Regional SO₂ Emissions and Milestone Report Contain?

To facilitate compliance with the Section 309 SIPs, the WRAP has committed to compiling a regional report on emissions for each year. In accordance with the SIPs, the WRAP will compile the individual state emission reports into a summary report that includes:

1. Reported regional SO₂ emissions (tons/year).
2. Adjustments to account for:
 - Changes in emissions monitoring or calculation methods; or
 - Enforcement actions or settlement agreements as a result of enforcement actions.
3. As applicable, average adjusted emissions for the last three years (which are compared to the regional milestone). Per requirements in the Section 309 SIPs, 2011, 2012, and 2013 emissions are averaged.

How Is Compliance with the SO₂ Milestone Determined?

While the WRAP assists with the preparation of this report, each Section 309 state reviews the information in the report, and proposes a draft determination that the regional SO₂ milestone has either been met or exceeded. The draft determination is then submitted for public review and comment during the first part of 2015, culminating in a final report sent to EPA by March 31, 2015.

1.2 Report Organization

This report presents the regional SO₂ emissions and milestone information required by the 309 SIPs for the Section 309 states. The report is divided into the following sections, including two appendices:

- Reported SO₂ Emissions in 2013;
- Emissions Adjustments Related to Monitoring Methodology;
- Three-Year Average Emissions;
- Enforcement Milestone Adjustments;
- Quality Assurance (Including Source Change Information);
- Milestone Determination;
- Appendix A -- Facility Emissions and Emissions Adjustments; and
- Appendix B -- Changes to SO₂ Emissions and Milestone Source Inventory.

2.0 Reported SO₂ Emissions in 2013

The Section 309 SIPs require all stationary sources with reported emissions of 100 tons or more per year in 2000 or any subsequent year to report annual SO₂ emissions. Table 1 summarizes the annual reported emissions from applicable sources in each state. The 2013 reported SO₂ emissions for each applicable source are in Appendix A, Table A-1.

Table 1. Reported 2013 SO₂ Emissions by State

| State | Reported 2013 SO ₂ Emissions (tons/year) |
|------------|---|
| New Mexico | 17,515 |
| Utah | 24,609 |
| Wyoming | 58,267 |
| TOTAL | 100,391 |

3.0 Emissions Adjustments Related to Monitoring Methodology

The annual emissions reports for each state include proposed emissions adjustments to ensure consistent comparison of emissions to the milestone. The reported emissions are adjusted so that the adjusted emissions levels are comparable to the levels that would result if the state used the same emissions monitoring or calculation method that was used in the base year inventory (2006). The net impact throughout the region as a result of these adjustments is an increase of 990 tons from the reported 2013 emissions. Table 2 summarizes the emissions adjustments made for a total of three facilities.

Table 2. Adjustments for Changes in Monitoring Methodology

| State | Source | Reported 2013 SO₂ Emissions (tons) | Adjusted 2013 SO₂ Emissions (tons) | Monitoring Methodology Adjustment (tons) | Description |
|--------------|---|--|--|---|--|
| UT | Chevron Products Co. – Salt Lake Refinery | 26 | 711 | 685 | Increase in Adjusted 2013 SO ₂ Emissions is due to a correction in the calculation of Adjusted 2013 SO ₂ Emissions. The formula used to calculate SO ₂ was corrected and updated. |
| UT | Big West Oil-Flying J Refinery | 45 | 198 | 153 | Now using CEM data |
| UT | Holcim – Devil’s Slide Plant | 172 | 324 | 152 | Facility changed emissions calculation methodology from stack tests to CEM |

4.0 Three-Year Average Emissions (2011, 2012, and 2013)

The SIPs require multi-year averaging of emissions from 2004 to 2017 for the milestone comparison. From 2005 to 2017, a three-year average (which includes the reporting year and the two previous years) will be calculated to compare with the milestone. The average of the three-years' emissions from 2011 to 2013 is 105,402 tons. Table 3 shows the adjusted emissions for each year and three-year average emissions. The following report sections describe the adjusted milestone determination.

Table 3. Average Sulfur Dioxide Emissions (2011, 2012, & 2013)

| Year | Adjusted SO ₂ Emissions (tons/year) |
|---------------------------------------|--|
| 2011 | 118,395 |
| 2012 | 96,430 |
| 2013 | 101,381 |
| Three-Year Average (2011, 2012, 2013) | 105,402 |

5.0 Enforcement Milestone Adjustments

The SIPs require that each state report on proposed milestone adjustments due to enforcement actions, which affect baseline year emissions. The purpose of this adjustment is to remove emissions that occurred above the allowable level in the baseline year from the baseline and the annual milestones. The enforcement milestone adjustments require an EPA-approved SIP revision before taking effect.

Enforcement Milestone Adjustment

There were no proposed enforcement action related milestone adjustments reported for 2013.

6.0 Quality Assurance

The states provided 2013 emissions data based on their state emissions inventories. For this report, additional quality assurance (QA) procedures were used to supplement the normal QA procedures the states follow for their emissions inventories. First, each state submitted a source change report, and second, the states compared their inventory data for utility sources against 40 CFR Part 75 Acid Rain Program monitoring data.

6.1 Source Change Report

The SIPs require that this annual SO₂ emissions and milestone report include a description of source changes or exceptions report to identify the following:

- Any new sources that were not contained in the previous calendar year's emissions report, and an explanation of why the sources are now included in the program.

- Identification of any sources that were included in the previous year's report and are no longer included in the program, and an explanation of why this change has occurred.
- An explanation for emissions variations at any applicable source that exceeds $\pm 20\%$ from the previous year.

Table 4 provides explanations for the emissions variations from applicable sources from 2012 – 2013 that are greater than 20%. Plants with variations greater than 20%, but reported emissions of less than 20 tons in both 2012 and 2013, are not included in Table 4. Information on these plants is provided in Appendix A.

Appendix B provides a list of all sources added or removed from the program inventory in previous reporting years. There were two sources added since the 2012 report. During a quality assurance evaluation, New Mexico identified the need to include the ConocoPhillips-Midland Office MCA Tank Battery No. 2 facility and the ConocoPhillips-Midland Office East Vacuum Liquid Recovery and CO₂ Plant facility in this report because their reported emissions meet the emissions threshold criteria.

Table 4. Sources with an Emissions Change of > ±20% from the Previous Year

| State | County FIPS | State Facility Identifier | Plant Name | Reported 2012 SO ₂ Emissions (tons) | Reported 2013 SO ₂ Emissions (tons) | Description Change > 20% 2012 to 2013 |
|-------|-------------|---------------------------|---|--|--|--|
| NM | 15 | 350150002 | Frontier Field Services /Empire Abo Plant [Old name: Arco Permian/Empire Abo Plant; BP America Production] | 860 | 478 | 2013 Emissions from one of the acid gas process flares and the SRU were greatly reduced. |
| NM | 15 | 350150011 | DCP Midstream/Artesia Gas Plant | 229 | 284 | 2013 Emissions from SSM events were increased. |
| NM | 25 | 350250035 | DCP Midstream/Linam Ranch Gas Plant [Old name: GPM GAS/LINAM RANCH GAS PLANT] | 441 | 648 | 2013 Emissions from the Amine Sweetening Units were greatly increased. |
| NM | 15 | 350150008 | OXY USA WTP Limited Partnership - Indian Basin Gas Plant [Old Name - Marathon Oil/Indian Basin Gas Plant] | 27 | 44 | 2013 Emissions from Residue Gas Flare (Pilot, Purge and SSM) and SSM flare (Pilot, Purge and SSM) were greatly increased. |
| NM | 45 | 350450902 | Public Service Co of New Mexico/San Juan Generating Station | 4,624 | 6,076 | 2013 Emissions from coal-fired boilers were greatly increased. The percent Sulfur content of the fuel and the amount of fuel consumed by the boilers were increased. |
| NM | 25 | 350250008 | Regency Field Services/Jal #3 [Old Name Southern Union Gas] /Jal #3 | 666 | 1,002 | 2013 Emissions greatly increased from the SRU unit with thermal oxidizer. |
| NM | 25 | 350250061 | Versado Gas Processors, LLC / Monument Plant [Old name(s):TARGA MIDSTREAM SERVICES LP, WARREN PETROLEUM/MONUMENT PLANT] | 115 | 723 | The Acid Gas Injection System and the SRU had greatly increased SSM emissions in 2013 which were routed to the Acid Gas Flare. |
| NM | 45 | 350450247 | Western Gas Resources/San Juan River Gas Plant | 42 | 58 | 2013 Emissions from the tail gas incinerator of the SRU were increased. |
| NM | 25 | 350250075 | ConocoPhillips-Midland Office / MCA Tank Battery No. 2 | 118 | 195 | The process flare had greatly increased emissions in 2013. |
| NM | 25 | 350250113 | ConocoPhillips-Midland Office / East Vacuum Liquid Recovery and CO ₂ Plant | 66 | 156 | The process flare had greatly increased emissions in 2013. |

| State | County FIPS | State Facility Identifier | Plant Name | Reported 2012 SO ₂ Emissions (tons) | Reported 2013 SO ₂ Emissions (tons) | Description Change > 20% 2012 to 2013 |
|-------|-------------|---------------------------|---|--|--|---|
| UT | 49 | 10790 | Brigham Young University -- Main Campus | 97 | 120 | Increase in SO2 emissions due to increase in sulfur content of coal. |
| UT | 11 | 10119 | Chevron Products Co. -- Salt Lake Refinery | 20 | 26 | Increased SO2 due to increased CEM value at Sulfur Plant #2. |
| UT | 11 | 10122 | Big West Oil Company - Flying J Refinery | 92 | 45 | Decrease in SO2 emissions due to decrease in sulfur content. |
| UT | 27 | 10313 | Graymont Western US Inc. -- Cricket Mountain Plant | 38 | 52 | Increase in SO2 emissions due to increase in amount of coal burned. |
| UT | 29 | 10007 | Holcim-Devil's Slide Plant | 87 | 172 | Increase in SOx emissions due to increase amount of fuel burned. |
| UT | 11 | 10123 | Holly Refining and Marketing Co. -- Phillips Refinery | 129 | 101 | Decreased SO2 due to decreased CEM value. |
| UT | 27 | 10327 | Intermountain Power Service Corporation -- Intermountain Generation Station | 3,551 | 4,724 | Increase in SO2 emissions due to increase amount of coal burned. |
| UT | 35 | 10572 | Kennecott Utah Copper Corp. -- Power Plant/Lab/Tailings Impoundment | 1,413 | 1,810 | Increase in SO2 emissions due to more coal burned in 2013 than in 2012. |
| UT | 35 | 10346 | Kennecott Utah Copper Corp. -- Smelter & Refinery | 560 | 727 | Increased SO2 due to increased CEM Value |
| UT | 7 | 10096 | Sunnyside Cogeneration Associates -- Sunnyside Cogeneration Facility | 586 | 917 | Increase due to increase in CEM value of SO2 due to increased sulfur content in coal. |
| UT | 35 | 10335 | Tesoro West Coast -- Salt Lake City Refinery | 852 | 664 | Decrease due to decrease from 357 days in 2012 to 285 days at FCU |

| State | County FIPS | State Facility Identifier | Plant Name | Reported 2012 SO ₂ Emissions (tons) | Reported 2013 SO ₂ Emissions (tons) | Description Change > 20% 2012 to 2013 |
|-------|-------------|---------------------------|--|--|--|--|
| UT | 43 | 10676 | Utelite Corporation -- Shale processing | 127 | 80 | Decrease due to decrease in amount of coal burned. |
| WY | 11 | 3 | American Colloid Mineral Co -- West Colony | 69 | 96 | Increased emissions due to a higher overall tonnage of coal being used. The Colony East and Colony West plants have been merged under one permit. |
| WY | 5 | 63 | Black Hills Corporation - Neil Simpson II | 420 | 511 | 20% Difference caused by an abnormal amount of 40CFR75 SO2 monitor downtime which resulted in additional data. Additionally, there was a 12.9% increase in coal consumption and a 2% increase in the sulfur content of the coal consumed. |
| WY | 5 | 146 | Black Hills Corporation - Wygen 1 | 394 | 566 | 20% Difference caused by an abnormal amount of 40CFR75 SO2 monitor downtime which resulted in additional data. Additionally, there was a 2.8% increase in coal consumption and a 7.7% increase in the sulfur content of the coal consumed. |
| WY | 41 | 9 | Chevron USA -- Carter Creek Gas Plant | 37 | 596 | Plant underwent a turnaround from July 17th to Sept 7th. |
| WY | 13 | 8 | Devon Gas Services, L.P. -- Beaver Creek Gas Plant | 142 | 49 | Less gas was Flared in 2013 |
| WY | 23 | 1 | Exxon Mobil Corporation -- Labarge Black Canyon Facility | 7 | 139 | Increased flaring emissions due to September shutdown/turnaround |
| WY | 23 | 13 | Exxon Mobil Corporation -- Shute Creek | 494 | 885 | Increased flaring emissions due to September shutdown/turnaround |
| WY | 21 | 1 | Frontier Oil & Refining Company -- Cheyenne Refinery | 174 | 267 | upset/excess emissions were much more frequent in 2013 at the Coker Unit and Main Flare |
| WY | 29 | 7 | Marathon Oil Co -- Oregon Basin Gas Plant | 233 | 182 | Emissions from the Clause Plant Gas Incinerator have decreased by 28% from 2012 due to improved catalyst material and improved process controls |

| State | County FIPS | State Facility Identifier | Plant Name | Reported 2012 SO ₂ Emissions (tons) | Reported 2013 SO ₂ Emissions (tons) | Description Change > 20% 2012 to 2013 |
|-------|-------------|---------------------------|--|--|--|---|
| WY | 29 | 0010 | Marathon Oil Co -- Oregon Basin Wellfield | 162 | 40 | Emissions decreased due to OBGP not performing turnaround and maintenance activities in 2013 |
| WY | 37 | 8 | Merit Energy Company - Brady Gas Plant (formerly Anadarko E&P Co LP) | 1,136 | 316 | Emissions from the Benfield Regenerator Heater (H-100B) and the Inlet Gas Regenerator Heater (H-10) increased due to an increase in operating hours |
| WY | 7 | 1 | Sinclair Oil Company -- Sinclair Refinery | 964 | 154 | Less gas was Flared in 2013 |
| WY | 37 | 5 | Solvay Chemicals -- Soda Ash Plant (Green River Facility) | 33 | 42 | % change is due to an average of 0.018lb/MMBTU SO ₂ in 2013 compared to an average of 0.010 lb/MMBTU SO ₂ in 2012 |

6.2 Part 75 Data

Federal Acid Rain Program emissions monitoring data (required by 40 CFR Part 75) were used to check reported power plant emissions.

Sources in the region subject to Part 75 emitted 66% of the region's reported emissions in 2013. We compared Acid Rain Program power plant emission data from EPA's Data and Maps website to plant totals reported by each state. The SIPs require the use of Part 75 methods for Part 75 sources. The reported emissions matched EPA's emission data^a.

^a The reported emissions for Pacificorp's Naughton Plant in WY contain an extra 26 tons of SO₂ emissions due to wastewater ponds that are not included in the acid rain data. The reported emissions for the San Juan Generating Station in NM contain an extra 20 tons of SO₂ emissions due to emission points that are not included in the acid rain data.

7.0 Preliminary Milestone Determination

The Section 309 regional 2013 milestone is 185,795 tons SO₂, which represents the average regional emissions milestone for the years 2011, 2012, and 2013. The average of 2011, 2012, and 2013 adjusted emissions was determined to be 105,402 tons SO₂. Therefore, the participating states have met the 185,795 tons SO₂ milestone.

8.0 Public Comments

New Mexico, Utah, Wyoming and Albuquerque-Bernalillo County each published a draft of this report for public review and comment. No comments were received.

Appendix A

**Table A-1
2013 Reported and Adjusted Emissions for Sources Subject to
Section 309 -- Regional Haze Rule**

| State | County FIPS | State Facility Identifier | ORIS | Plant Name | Plant SIC | Plant NAICS | Reported 2013 SO ₂ Emissions (tons) | Adjusted 2013 SO ₂ Emissions (tons) | 2013 General New Monitoring Calculation Method Adjustment (tons) |
|-------|-------------|---------------------------|------|--|-----------|-------------|--|--|--|
| NM | 15 | 350150024 | | Agave Energy Co./Agave Dagger Draw Gas Plant | 1311 | 211111 | 14 | 14 | |
| NM | 15 | 350150002 | | Frontier Field Services /Empire Abo Plant [Old name: Arco Permian/Empire Abo Plant; BP America Production] | 1321 | 211112 | 478 | 478 | |
| NM | 15 | 350150011 | | DCP Midstream/Artesia Gas Plant | 1321 | 211112 | 284 | 284 | |
| NM | 25 | 350250044 | | DCP Midstream/Eunice Gas Plant [Old name: GPM GAS EUNICE GAS PLANT] | 1321 | 211112 | 3,044 | 3,044 | |
| NM | 25 | 350250035 | | DCP Midstream/Linam Ranch Gas Plant [Old name: GPM GAS/LINAM RANCH GAS PLANT] | 1321 | 211112 | 648 | 648 | |
| NM | 15 | 350150138 | | Duke -- Magnum/Pan Energy -- Burton Flats | 1321 | 211112 | 0 | 0 | |
| NM | 15 | 350150285 | | Duke Energy/Dagger Draw Gas Plant | 1321 | 211112 | 0 | 0 | |
| NM | 25 | 350250060 | | VERSADO GAS PROCESSORS, LP/Eunice Gas Plant [Old name: WARREN PETROLEUM/EUNICE GAS PLANT] | 1321 | 211112 | 184 | 184 | |
| NM | 25 | 350250004 | | Frontier Field Services/Maljamar Gas Plant | 1321 | 211112 | 2,244 | 2,244 | |
| NM | 31 | 350310008 | | Western Refining Southwest Inc-Gallup Refinery (Old names:Western Refinery/Ciniza Refinery (Gallup) and GIANT REFINING/CINIZA] | 2911 | 32411 | 34 | 34 | |

Appendix A
January 6, 2015

| State | County FIPS | State Facility Identifier | ORIS | Plant Name | Plant SIC | Plant NAICS | Reported 2013 SO ₂ Emissions (tons) | Adjusted 2013 SO ₂ Emissions (tons) | 2013 General New Monitoring Calculation Method Adjustment (tons) |
|-------|-------------|---------------------------|------|---|-----------|-------------|--|--|--|
| NM | 25 | 350250007 | | Davis Gas Processing/Denton Plant | 1311 | 211111 | 972 | 972 | |
| NM | 15 | 350150008 | | OXY USA WTP Limited Partnership - Indian Basin Gas Plant [Old Name - Marathon Oil/Indian Basin Gas Plant] | 1321 | 211112 | 44 | 44 | |
| NM | 15 | 350150010 | | Navajo Refining Co/Artesia Refinery | 2911 | 32411 | 39 | 39 | |
| NM | 45 | 350450902 | 2451 | Public Service Co of New Mexico/San Juan Generating Station | 4911 | 221112 | 6,076 | 6,076 | |
| NM | 7 | 350070001 | | Raton Pub. Service/Raton Power Plant | 4911 | 221112 | 0 | 0 | |
| NM | 25 | 350250008 | | Regency Field Services/Jal #3 [Old Name Southern Union Gas] /Jal #3 | 1321 | 211112 | 1,002 | 1,002 | |
| NM | 25 | 350250051 | | Versado Gas Processors, LP/Eunice South Gas Plant | 1321 | 211112 | 0 | 0 | |
| NM | 25 | 350250061 | | Versado Gas Processors, LLC / Monument Plant [Old name(s):TARGA MIDSTREAM SERVICES LP, WARREN PETROLEUM/MONUMENT PLANT] | 1321 | 211112 | 723 | 723 | |
| NM | 25 | 350250063 | | Versado Gas Processors, LLC/Saunders Plant [Old name(s): TARGA MIDSTREAM SERVICES, LP, WARREN PETROLEUM/SAUNDERS PLANT] | 1321 | 211112 | 369 | 369 | |
| NM | 31 | 350310032 | 87 | Tri-State Gen & Transmission/Escalante Station | 4911 | 221112 | 951 | 951 | |
| NM | 45 | 350450247 | | Western Gas Resources/San Juan River Gas Plant | 1321 | 211112 | 58 | 58 | |
| NM | 45 | 350450023 | | Western Refining Southwest Inc./Bloomfield Products Terminal [Old name: GIANT INDUSTRIES/BLOOMFIELD REF] | 2911 | 32411 | 0 | 0 | |
| NM | 25 | 350250075 | | ConocoPhillips-Midland Office / MCA Tank Battery No. 2 | 1311 | 211111 | 195 | 195 | |

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| State | County FIPS | State Facility Identifier | ORIS | Plant Name | Plant SIC | Plant NAICS | Reported 2013 SO ₂ Emissions (tons) | Adjusted 2013 SO ₂ Emissions (tons) | 2013 General New Monitoring Calculation Method Adjustment (tons) |
|-------|-------------|---------------------------|------|---|-----------|-------------|--|--|--|
| NM | 25 | 350250113 | | ConocoPhillips-Midland Office / East Vacuum Liquid Recovery and CO2 Plant | 1311 | 211111 | 156 | 156 | |
| UT | 49 | 10790 | | Brigham Young University -- Main Campus | 8221 | 611310 | 120 | 120 | |
| UT | 11 | 10119 | | Chevron Products Co. -- Salt Lake Refinery | 2911 | 324110 | 26 | 711 | 685 |
| UT | 11 | 10122 | | Big West Oil Company - Flying J Refinery | 2911 | 324110 | 45 | 198 | 153 |
| UT | 27 | 10313 | | Graymont Western US Inc. -- Cricket Mountain Plant | 1422 | 212312 | 52 | 52 | |
| UT | 29 | 10007 | | Holcim-Devil's Slide Plant | 3241 | 327310 | 172 | 324 | 152 |
| UT | 11 | 10123 | | Holly Refining and Marketing Co. -- Phillips Refinery | 2911 | 324110 | 101 | 101 | 0 |
| UT | 27 | 10327 | 6481 | Intermountain Power Service Corporation -- Intermountain Generation Station | 4911 | 221112 | 4,724 | 4,724 | |
| UT | 35 | 10572 | | Kennecott Utah Copper Corp. -- Power Plant/Lab/Tailings Impoundment | 1021 | 212234 | 1,810 | 1,810 | |
| UT | 35 | 10346 | | Kennecott Utah Copper Corp. -- Smelter & Refinery | 3331 | 331411 | 727 | 727 | |
| UT | 27 | 10311 | | Materion Natural resources - Delta Mill (was Brush Resources) | 1099 | 212299 | 0 | 0 | |
| UT | 7 | 10081 | 3644 | PacifiCorp -- Carbon Power Plant | 4911 | 221112 | 7,702 | 7,702 | |
| UT | 15 | 10237 | 6165 | PacifiCorp -- Hunter Power Plant | 4911 | 221112 | 5,055 | 5,055 | |
| UT | 15 | 10238 | 8069 | PacifiCorp -- Huntington Power Plant | 4911 | 221112 | 2,409 | 2,409 | |

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| State | County FIPS | State Facility Identifier | ORIS | Plant Name | Plant SIC | Plant NAICS | Reported 2013 SO ₂ Emissions (tons) | Adjusted 2013 SO ₂ Emissions (tons) | 2013 General New Monitoring Calculation Method Adjustment (tons) |
|-------|-------------|---------------------------|-------|---|-----------|-------------|--|--|--|
| UT | 37 | 10034 | | Patara Midstream LLC (was EnCana Oil & Gas (USA) Incorporated and Tom Brown Incorporated) - Lisbon Natural Gas Processing Plant | 2911 | 211111 | 5 | 5 | |
| UT | 7 | 10096 | | Sunnyside Cogeneration Associates -- Sunnyside Cogeneration Facility | 4911 | 221112 | 917 | 917 | |
| UT | 35 | 10335 | | Tesoro West Coast -- Salt Lake City Refinery | 2911 | 324110 | 664 | 664 | |
| UT | 43 | 10676 | | Utelite Corporation -- Shale processing | 3295 | 212399 | 80 | 80 | |
| WY | 11 | 2 | | American Colloid Mineral Co -- East Colony | 1459 | 212325 | 96 | 96 | |
| WY | 11 | 3 | | American Colloid Mineral Co -- West Colony | 1459 | 212325 | 0 | 0 | |
| WY | 5 | 45 | | Basin Electric -- Dry Fork Station | 4911 | 22112 | 830 | 830 | |
| WY | 31 | 1 | 6204 | Basin Electric -- Laramie River Station | 4911 | 221112 | 9,286 | 9,286 | |
| WY | 3 | 12 | | Big Horn Gas Proc -- Big Horn/Byron Gas Plant | 1311 | 22121 | 0 | 0 | |
| WY | 5 | 2 | 4150 | Black Hills Corporation - Neil Simpson I | 4911 | 22112 | 879 | 879 | |
| WY | 5 | 63 | 7504 | Black Hills Corporation - Neil Simpson II | 4911 | 22112 | 511 | 511 | |
| WY | 45 | 5 | 4151 | Black Hills Corporation - Osage Plant | 4911 | 22112 | 0 | 0 | |
| WY | 5 | 146 | 55479 | Black Hills Corporation - Wygen I | 4911 | 22112 | 566 | 566 | |
| WY | 5 | 225 | | Cheyenne Light Fuel and Power Company -- Wygen II | 4911 | 22112 | 172 | 172 | |
| WY | 5 | 281 | | Black Hills Corporation - Wygen III | 4911 | 221112 | 315 | 315 | |

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| State | County FIPS | State Facility Identifier | ORIS | Plant Name | Plant SIC | Plant NAICS | Reported 2013 SO ₂ Emissions (tons) | Adjusted 2013 SO ₂ Emissions (tons) | 2013 General New Monitoring Calculation Method Adjustment (tons) |
|-------|-------------|---------------------------|------|---|-----------|-------------|--|--|--|
| WY | 13 | 0009 | | Burlington Resources -- Bighorn Wells | 1300 | 21111 | 0 | 0 | |
| WY | 13 | 28 | | Burlington Resources -- Lost Cabin Gas Plant | 1311 | 211111 | 1,998 | 1,998 | |
| WY | 41 | 9 | | Chevron USA -- Carter Creek Gas Plant | 1311 | 211111 | 596 | 596 | |
| WY | 37 | 0177 | | Chevron USA -- Table Rock Field | 1300 | 21111 | 0 | 0 | |
| WY | 37 | 14 | | Chevron USA -- Table Rock Gas Plant (Formerly Anadarko E&P Co LP) | 1321 | 211111 | 22 | 22 | |
| WY | 41 | 0008 | | Chevron USA -- Whitney Canyon/Carter Creek Wellfield | 1300 | 21111 | 3 | 3 | |
| WY | 13 | 0007 | | Devon Energy Production Co., L.P. -- Beaver Creek Gas Field | 1300 | 21111 | 2 | 2 | |
| WY | 13 | 8 | | Devon Gas Services, L.P. -- Beaver Creek Gas Plant | 1311 | 211111 | 49 | 49 | |
| WY | 29 | 12 | | Encore Operating LP -- Elk Basin Gas Plant | 1311 | 211111 | 824 | 824 | |
| WY | 23 | 1 | | Exxon Mobil Corporation -- Labarge Black Canyon Facility | 1300 | 21111 | 139 | 139 | |
| WY | 23 | 13 | | Exxon Mobil Corporation -- Shute Creek | 1311 | 211111 | 885 | 885 | |
| WY | 37 | 48 | | FMC Corp -- Green River Sodium Products (Westvaco facility) | 2812 | 327999 | 2,942 | 2,942 | |
| WY | 37 | 49 | | FMC Wyoming Corporation -- Granger Soda Ash Plant | 1474 | 212391 | 344 | 344 | |
| WY | 21 | 1 | | Frontier Oil & Refining Company -- Cheyenne Refinery | 2911 | 32411 | 267 | 267 | |
| WY | 56043 | 397 | | Worland Plant (Formely Hiland Partners, LLC -- Hiland Gas Plant) | 1321 | 48621 | 25 | 25 | |
| WY | 29 | 7 | | Marathon Oil Co -- Oregon Basin Gas Plant | 1321 | 211112 | 182 | 182 | |

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| State | County FIPS | State Facility Identifier | ORIS | Plant Name | Plant SIC | Plant NAICS | Reported 2013 SO ₂ Emissions (tons) | Adjusted 2013 SO ₂ Emissions (tons) | 2013 General New Monitoring Calculation Method Adjustment (tons) |
|-------|-------------|---------------------------|------|--|-----------|-------------|--|--|--|
| WY | 29 | 0010 | | Marathon Oil Co -- Oregon Basin Wellfield | 1300 | 21111 | 40 | 40 | |
| WY | 37 | 8 | | Merit Energy Company - Brady Gas Plant (formerly Anadarko E&P Co LP) | 1321 | 211112 | 316 | 316 | |
| WY | 41 | 12 | | Merit Energy Company -- Whitney Facility | 1311 | 211111 | 1 | 1 | |
| WY | 41 | 0002 | | Merit Energy Company -- Whitney Canyon WellField | 1300 | 21111 | 0 | 0 | |
| WY | 1 | 2 | | Mountain Cement Company -- Laramie Plant | 3241 | 23571 | 273 | 273 | |
| WY | 37 | 3 | | P4 Production, L.L.C. -- Rock Springs Coal Calcining Plant | 3312 | 331111 | 754 | 754 | |
| WY | 9 | 1 | 4158 | Pacificorp - Dave Johnston Plant | 4911 | 221112 | 8,648 | 8,648 | |
| WY | 37 | 1002 | 8066 | Pacificorp -- Jim Bridger Plant | 4911 | 221112 | 11,397 | 11,397 | |
| WY | 23 | 4 | 4162 | Pacificorp -- Naughton Plant | 4911 | 221112 | 6,741 | 6,741 | |
| WY | 5 | 46 | 6101 | Pacificorp -- Wyodak Plant | 4911 | 221112 | 2,236 | 2,236 | |
| WY | 37 | 22 | | Simplot Phosphates LLC -- Rock Springs Plant | 2874 | 325312 | 1,222 | 1,222 | |
| WY | 7 | 1 | | Sinclair Oil Company -- Sinclair Refinery | 2911 | 32411 | 154 | 154 | |
| WY | 25 | 5 | | Sinclair Wyoming Refining Company -- Casper Refinery | 2911 | 32411 | 225 | 225 | |
| WY | 37 | 5 | | Solvay Chemicals -- Soda Ash Plant (Green River Facility) | 1474 | 325181 | 42 | 42 | |
| WY | 37 | 2 | | TATA Chemicals (Soda Ash Partners)-- Green River Plant (formerly General Chemical) | 1474 | 327999 | 4,662 | 4,662 | |
| WY | 15 | 1 | | The Western Sugar Cooperative -- Torrington Plant | 2063 | 311313 | 203 | 203 | |

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| State | County FIPS | State Facility Identifier | ORIS | Plant Name | Plant SIC | Plant NAICS | Reported 2013 SO ₂ Emissions (tons) | Adjusted 2013 SO ₂ Emissions (tons) | 2013 General New Monitoring Calculation Method Adjustment (tons) |
|-------|-------------|---------------------------|------|--|-----------|-------------|--|--|--|
| WY | 1 | 5 | | University of Wyoming - Heat Plant | 8221 | 61131 | 160 | 160 | |
| WY | 45 | 1 | | Wyoming Refining -- Newcastle Refinery | 2911 | 32411 | 263 | 263 | |

Appendix B

**Table B-1
Sources Added to the SO₂ Emissions and Milestone Report Inventory**

| State | County FIP Code | State Facility ID | Facility Name | Report Year of Change |
|--------------|------------------------|--------------------------|--|------------------------------|
| UT | 043 | 10676 | Utelite Corporation -- Shale processing | 2003 |
| WY | 011 | 0002 | American Colloid Mineral Company -- East Colony | 2003 |
| WY | 011 | 0003 | American Colloid Mineral Company -- West Colony | 2003 |
| WY | 037 | 0014 | Chevron USA (previously owned by Anadarko E&P Company LP) -- Table Rock Gas Plant | 2003 |
| WY | 005 | 0146 | Black Hills Corporation -- Wygen 1 | 2003 |
| WY | 041 | 0002 | BP America Production Company -- Whitney Canyon Well Field | 2003 |
| WY | 013 | 0009 | Burlington Resources -- Bighorn Wells | 2003 |
| WY | 037 | 0177 | Chevron USA -- Table Rock Field | 2003 |
| WY | 041 | 0008 | Chevron USA -- Whitney Canyon/Carter Creek Wellfield | 2003 |
| WY | 013 | 0008 | Devon Energy Corp. -- Beaver Creek Gas Plant | 2003 |
| WY | 035 | 0001 | Exxon Mobil Corporation -- Labarge Black Canyon Facility (also identified as Black Canyon Dehy Facility) | 2003 |
| WY | 013 | 0007 | Devon Energy Corp. -- Beaver Creek Gas Field | 2004 |
| WY | 005 | 0225 | Cheyenne Light, Fuel and Power (a subsidiary of Black Hills Corporation) -- Wygen II | 2008 |
| WY | 005 | 0281 | Black Hills Corporation -- Wygen III | 2010 |
| WY | 005 | 0045 | Basin Electric -- Dry Fork Station | 2011 |
| NM | 025 | 350250075 | ConocoPhillips-Midland Office / MCA Tank Battery No. 2 | 2013 |
| NM | 025 | 350250113 | ConocoPhillips-Midland Office / East Vacuum Liquid Recovery and CO ₂ Plant | 2013 |

Table B-2
Sources Removed from the SO₂ Emissions and Milestone Report Inventory

| State | County FIP Code | State Facility ID | Facility Name | 1998 Baseline Emissions (tons/year) | Reason for Change | Report Year of Change |
|------------|-----------------|-------------------|--|-------------------------------------|--|-----------------------|
| WY | 043 | 0001 | Western Sugar Company -- Worland | 154 | Emissions did not meet 100 TPY program criteria. | 2003 |
| WY | 017 | 0006 | KCS Mountain Resources -- Golden Eagle | 942 | Emissions did not meet 100 TPY program criteria. | 2003 |
| WY | 003 | 0017 | KCS Mountain Resources -- Ainsworth | 845 | Closed since 2000. | 2003 |
| WY | 017 | 0002 | Marathon Oil -- Mill Iron | 260 | Emissions did not meet 100 TPY program criteria. | 2003 |
| UT | 049 | 10796 | Geneva Steel -- Steel Manufacturing Facility | 881 | Plant is shut down and disassembled. | 2004 |
| WY | 023 | 0001 | Astaris Production -- Coking Plant | 1,454 | Plant is permanently shut down and dismantled. | 2004 |
| ABQ* NM | 001 | 00008 | GCC Rio Grande Cement | 1,103 | Not subject to program after baseline revisions.** | 2008 |
| ABQ NM | 001 | 00145 | Southside Water Reclamation Plant | 120 | Not subject to program after baseline revisions.** | 2008 |
| NM | 023 | 350230003 | Phelps Dodge Hidalgo Smelter | 16,000 | Facility is permanently closed. | 2008 |
| NM | 017 | 350170001 | Phelps Dodge Hurley Smelter/Concentrator | 22,000 | Facility is permanently closed. | 2008 |
| WY | 003 | 00012 | Big Horn Gas Processing -- Bighorn/Byron Gas Plant | 605 | Facility is permanently closed and dismantled. | 2011 |

* ABQ NM means Albuquerque-Bernalillo County.

** 1998 baseline emissions were based on the facilities' potential to emit (PTE), and not actual emissions. Actual annual emissions have always been below 100 tons. Once the year 2006 baseline became effective, these facilities were removed from the inventory.