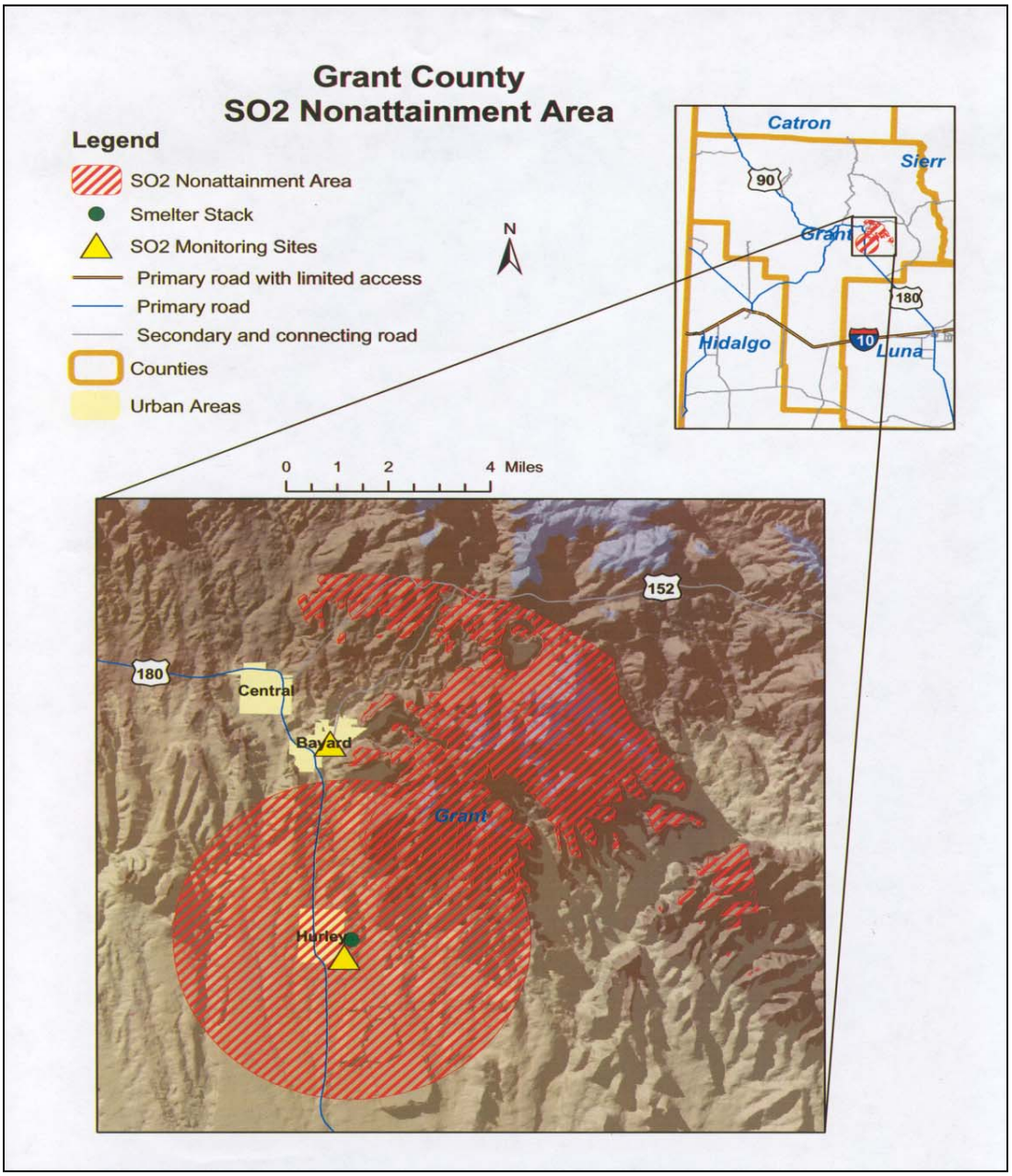
SULFUR DIOXIDE
LIMITED MAINTENANCE PLAN
FOR THE
GRANT COUNTY, NEW MEXICO
MAINTENANCE AREA

AIR QUALITY BUREAU
NEW MEXICO ENVIRONMENT DEPARTMENT
525 CAMINO DE LOS MARQUEZ, SUITE 1
SANTA FE, NEW MEXICO 87505

I. INTRODUCTION

In 1978, the US Environmental Protection Agency (EPA) designated Air Quality Control Region 012: Grant County, New Mexico as a partial nonattainment area for violating the National Ambient Air Quality Standard (NAAQS) for sulfur dioxide (SO_2). This designation was based on emissions from one major point source within the nonattainment area. This source smelted and mined copper ore in Hurley, NM. The nonattainment area includes a 3.5 mile (mi) radius surrounding the former copper smelter facility and any land above 6,470 feet (ft) within an 8 mi radius of the former smelter (Figure 1).

Figure 1: Grant County SO_2 Nonattainment Area*



The Bayard monitor was discontinued in August 2002.

Sulfur dioxide is a colorless gas with a pungent odor that is highly soluble in water. Sulfur dioxide belongs to the family of gases called sulfur oxides (SO_x). These gases are formed when fuel containing sulfur, mostly coal and oil, is burned, and during metal smelting. Sulfur dioxide and nitrogen oxides are the major precursors of acid rain. The major health concerns associated with exposure to high concentrations of SO_2 include effects on breathing, respiratory illness, alterations in pulmonary defenses, and aggravation of existing cardiovascular disease. Children, the elderly and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to adverse health effects associated with exposure to SO_2.

The Clean Air Act (CAA) requires all areas of the United States to attain and maintain the NAAQS. If an area does not attain and maintain the NAAQS and violations occur, the area will be designated nonattainment by EPA for the particular NAAQS that has been violated. Once an area has been designated nonattainment it must show at least three consecutive years of clean data and provide EPA with a maintenance plan and a redesignation request to be eligible for redesignation to attainment/maintenance of the standard. A maintenance plan must meet the requirements of CAA Section 175A, including a demonstration that the area will maintain the NAAQS for a period of at least ten years following redesignation to attainment of the standard by EPA. The plan must also contain a contingency measure that would be implemented in the event that a violation of the standard occurs during the maintenance period.

II. GRANT COUNTY LIMITED SO_2 MAINTENANCE PLAN

The CAA Section 107(d)(3)(E) mandates that for a nonattainment area to be reclassified to attainment, EPA must fully approve a maintenance or limited maintenance plan for the area that meets the requirements of CAA Section 175A. A maintenance plan is a state implementation plan (SIP) revision that must provide for maintenance of a NAAQS for at least ten years after EPA redesignates the area to maintenance/attainment. NMED submitted a Redesignation Request and Maintenance plan for the Grant County 24-hour SO_2 nonattainment area to EPA in February 2003. This submittal was approved by EPA on September 18, 2003 (68 FR 54672). The end date for NMED's 2003 Grant County SO_2 Maintenance plan is 2015. As required under CAA Section 175A(b), NMED is submitting a revised SO_2 limited maintenance plan for the continued maintenance of the SO_2 NAAQS for an additional 10 year period after the expiration of the 2003 Grant County SO_2 Maintenance plan.

EPA allows nonattainment and maintenance areas that are at or below 85 percent of the exceedance level for a NAAQS at the time of redesignation to submit a less rigorous plan that EPA refers to as a limited maintenance plan.[1] The Grant County 24-hour SO_2 maintenance area currently has no major SO_2 sources and has monitored negligible levels of SO_2 for the past 5 years. Based on the lack of SO_2 major point sources and emissions within the Grant County maintenance area, New Mexico is choosing to submit a limited maintenance plan for the Grant County maintenance area.

EPA is allowed up to 18 months to approve or disapprove a SIP submittal. To allow for EPA's review of the Grant County SO_2 limited maintenance plan and the state's rulemaking review process, while still affording for the 10 year CAA Section 175A planning period requirement, the limited maintenance plan's end date will be 2025.

EPA guidance for limited maintenance plans under CAA Section 175A provides a general framework for developing a maintenance plan that includes five elements.

1. Attainment Inventory
2. Maintenance Demonstration
3. Monitoring Network
4. Verification of Continued Attainment
5. Contingency Plan

1. ATTAINMENT INVENTORY

The EPA guidance for limited maintenance plans (see Appendix A of this plan) provides that an emission inventory should be developed to identify the level of emissions in the maintenance area that is sufficient to attain the NAAQS. There are currently no major SO_2 sources in the

[1] *See* "Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas," Memo from Sally L. Shaver to EPA regional air directors, Nov. 16, 1994 (see Appendix A of this plan). In the absence of guidance specific to SO_2, EPA Region 6 has directed New Mexico to follow the Guidance for ozone non-attainment areas. (Medina, Dayana. "EPA Guidance on Limited Maintenance Plan Option." Message to Rita Bates. 3 March 2012. Email)

Grant County maintenance area. In July 2006, the only major source of SO_2 located within the maintenance area boundary, the aforementioned copper ore smelting facility, was dismantled and the stacks removed. The facility also modified their Title V and New Source Review (NSR) permits (see Appendix B of this plan) to remove all equipment associated with the smelting of copper ore.

There are presently two Title V sources in Grant County (outside of the Grant County SO_2 maintenance area): the Chino Mine (formally the Hurley Mine) and the Tyrone Mine, neither of which are major sources for SO_2. The 2011 SO_2 actual emissions for the Chino Mine were 0.272 tons per year (tpy) and 6.3 tpy for the Tyrone Mine. The primary sources of SO_2 emissions for both facilities are blasting fugitives and diesel generator engines. Table 1 below shows the actual SO_2 emissions for Title V sources in Grant County for the years 2007-2011. As the table shows, the combined SO_2 emissions from these Title V sources are well below the major source threshold. Table 2 below shows the allowable SO_2 emissions for all minor point sources located in Grant County for the years 2007-2011. There are currently four (4) minor point sources located within the Grant County maintenance area with total allowable SO_2 emissions of 150.0 tpy for 2011. All of the minor point sources located within the Grant County maintenance area are aggregate quarrying, crushing and screening operations that are registered under General Construction Permit (GCP-2) for Quarrying, Crushing, and Screening Facilities that includes default allowable emission limits. Although the GCP-2 allowable SO_2 emission limit is set at 50.0 tpy, the actual SO_2 emissions generated from these types of sources are minimal.

Table 1
SO_2 Emission Inventory for Grant County Title V Sources

YEAR	ACTUAL EMISSIONS (TPY OF SO_2)	** ACTUAL EMISSIONS WITH RULE EFFECTIVENESS (TPY OF SO_2)	*** DAILY EMISSIONS (TPD OF SO_2)
2007	*4.14	4.97	0.011
2008	0.82	0.98	0.002
2009	*4.66	5.59	0.013
2010	*5.70	6.84	0.016
2011	*6.57	7.88	0.018

* *Actual emissions include un-permitted fugitive SO_2 emissions.*
** *EPA's default rule effectiveness of 80% compliance was applied to the actual emissions data.*
***For the SO_2 daily emissions calculation, 365 days per year operation was assumed.*

Table 2
SO_2 Emission Inventory for Grant County Minor Point Sources

YEAR	ALLOWABLE EMISSIONS (TPY OF SO_2)	*DAILY EMISSIONS (TPD OF SO_2)
2007	316.30	0.866
2008	316.30	0.866

2009	316.34	0.866
2010	316.34	0.866
2011	316.34	0.866

**For the SO_2 daily emissions calculation, 365 days per year operation was assumed.*

2. MAINTENANCE DEMONSTRATION

To demonstrate maintenance of the NAAQS for a nonattainment area, the CAA requires a state to show that future emissions of a pollutant or its precursor will not exceed the attainment inventory developed for the area or to provide modeling to show that future sources and emissions will not cause an exceedance of the NAAQS.

For limited maintenance plans, however, the maintenance demonstration requirement is considered to be satisfied for nonattainment areas if the monitoring data for the area shows that the monitored air quality is equal to or less than 85 percent of exceedance levels for a specific NAAQS. There is no requirement to project emissions over the maintenance period. EPA's guidance for limited maintenance plans states that if the area begins the maintenance period at or below 85 percent of exceedance levels, the air quality along with the continued applicability of PSD requirements, any control measures already in the SIP, and federal measures should provide adequate-assurance of maintenance over the initial 10-year maintenance period.

As discussed in the next section, the SO_2 design value for the 24-hour SO_2 NAAQS (0.14 parts per million (ppm)) has been 0.0 ppm for each of the five most recent years for which certified ambient air quality data is available for the Grant County maintenance area monitor. The maintenance demonstration is therefore satisfied.

3. MONITORING NETWORK

An appropriate air quality monitoring network must be maintained by the state to verify compliance with the NAAQS for SO_2 once an area has been redesignated to attainment/maintenance. The monitoring network must be in accordance with 40 CFR Part 58.

New Mexico currently operates one SO_2 monitor for the Grant County maintenance area in Hurley, NM (35-017-0003-42401-1). This monitor has been in operation since 1997. The state operated four (4) SO_2 monitors for more than thirty years in the area. Historical monitoring data for this area shows that there has not been a violation of the primary or secondary SO_2 NAAQS since 1975 (*Sulfur Dioxide Redesignation Request and Maintenance Plan for the Grant County, New Mexico Nonattainment Area; 2003*). Current monitoring data for Grant County (shown below in Table 3) shows zero concentrations of SO_2 in the Grant County maintenance area over the past four years.

Table 3: SO_2 Monitoring Data for Grant County Monitor 35-017-0003-42401-1

YEAR	DESIGN VALUE (ppm)
2007	0.0
2008	0.0
2009	0.0
2010	0.0
2011	0.0

Due to the limited amount of SO_2 emissions and emission sources within the Grant County maintenance area, NMED is requesting that EPA grant New Mexico a waiver to discontinue SO_2 monitoring within the maintenance area, and instead implement the alternative SO_2 monitoring methodology described in Section II.4.

4. ALTERNATIVE SO_2 MONITORING METHODOLOGY

New Mexico will implement an alternative SO_2 monitoring methodology for the Grant County SO_2 maintenance area which does not utilize a gaseous analyzer for determining compliance with the SO_2 NAAQS. The Grant County SO_2 maintenance area has monitored negligible levels of SO_2 for the last five (5) years (see Table 3). For this reason, the use of an alternative methodology other than gaseous monitoring is appropriate to monitor maintenance of the SO_2 NAAQS for the maintenance area. Such a method would not compromise data collection for the NAAQS and will continue to meet the requirements of 40 CFR Part 58, Appendix D.

The alternative SO_2 monitoring method will consist of the use of PSD and Title V modeling and any required post-construction monitoring for new and modified air quality permits and an annual emission review of all major SO_2 sources located in the Grant County SO_2 maintenance area. These two methodologies will allow the State to determine if there is a potential violation of the SO_2 NAAQS within the maintenance area.

Contingency Plan

If PSD or Title V modeling, PSD or Title V post-construction monitoring, or the annual emission review of major SO_2 sources within the Grant County maintenance area indicates there is a significant increase in SO_2 emissions that may cause a potential SO_2 NAAQS violation, NMED will reinstitute a gaseous SO_2 monitor at the Hurley, NM monitoring location (35-017-0003-42401-1) or at a site expected to read greater SO_2 levels than that site. If the monitored SO_2 values after one year are at or below 50% of the 24-hour or annual SO_2 NAAQS, or both, the monitor may again be removed and the alternative SO_2 monitoring methodology reinstated. This process will be repeated each time PSD or Title V modeling, PSD or Title V post-construction monitoring, or the annual emission review of major SO_2 sources within the maintenance area indicates a potential SO_2 NAAQS violation.

5. VERIFICATION OF CONTINUED ATTAINMENT

To ensure that attainment will be continued in the future, the state must retain the legal authority to implement and enforce all air quality measures needed to attain and maintain the NAAQS for SO_2. Current state regulations listed below verify that the State of New Mexico has the continued legal authority needed to implement and enforce air quality controls to maintain the NAAQS for SO_2 in Grant County in the future.

- 20.2.3 NMAC – Ambient Air Quality Standards
- 20.2.31 NMAC – Coal Burning Equipment – Sulfur Dioxide
- 20.2.35 NMAC – Natural Gas Processing Plant – Sulfur
- 20.2.36 NMAC – Petroleum Refinery – Sulfur
- 20.2.39 NMAC – Sulfur Recovery Plant – Sulfur
- 20.2.40 NMAC – Sulfuric Acid Production Units – Sulfur Dioxide, Acid Mist and Visible Emissions
- 20.2.41 NMAC – Nonferrous Smelters – Sulfur
- 20.2.70 NMAC – Operating Permits
- 20.2.72 NMAC – Construction Permits
- 20.2.74 NMAC – Permits – Prevention of Significant Deterioration (PSD)
- 20.2.77 NMAC – New Source Performance Standards
- 20.2.78 NMAC – Emission Standards for Hazardous Air Pollutants
- 20.2.81 NMAC – Western Backstop Sulfur Dioxide Trading Program
- 20.2.82 NMAC – Maximum Achievable Control Technology Standards for Source Categories of Hazardous Air Pollutants

6. CONTINGENCY PLAN

As a requirement of CAA Section 175A, a contingency plan must be developed to correct any violations of the SO_2 NAAQS in Grant County after the area has been redesignated. The plan must be an enforceable part of the SIP and must ensure that the appropriate measures will be adopted in the event that the SO_2 NAAQS is exceeded.

There are currently no major SO_2 sources within the Grant County SO_2 maintenance area. In the event that an SO_2 source(s) should move into or within close proximity to the Grant County SO_2 maintenance area, NMED will ensure that such source(s) will comply with all applicable state and federal SO_2 regulations and requirements. In addition, NMED will maintain a comprehensive compliance and enforcement program to identify sources of violation of the SO_2 NAAQS within the maintenance area and to undertake aggressive follow up measures to ensure compliance with the SO_2 NAAQS. In conformance with CAA Section 175A(d), NMED will implement all measures with respect to the control of air pollutants which were contained in the SIP for the area before its designation as an attainment area, to the extent such measures are applicable to any sources which may exist at the time of any NAAQS exceedance.

III. Conclusion

The NMED requests that EPA designate the Grant County maintenance area as a limited maintenance/attainment area. NMED also requests that EPA grant the state a waiver to shut down the current monitoring station (35-017-0003-42401-1) located in Hurley, NM and allow the State to implement the requested alternative SO_2 monitoring methodology. Due to the lack of major SO_2 point sources within the Grant County maintenance area, the limited number of SO_2 point sources within the area surrounding the maintenance area, and the negligible concentrations of SO_2 as shown by monitoring, New Mexico does not deem it necessary to continue utilizing a gaseous SO_2 analyzer to verify continued maintenance of the 24-hour and annual SO_2 standards.

Appendix A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

NOV 16 1994

MEMORANDUM

SUBJECT: Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas

FROM: Sally L. Shaver, Director
Air Quality Strategies & Standards Division (MD-15)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

I. Purpose

This memorandum sets forth new guidance on maintenance plan requirements for certain nonclassifiable ozone nonattainment areas seeking redesignation to attainment. In particular, nonclassifiable ozone areas whose design values are at or below 0.106 ppm (85 percent of exceedance levels of the ozone NAAQS) at the time of redesignation may choose to submit a less rigorous maintenance plan than was formerly required. This new option is being termed a limited maintenance plan. Nonclassifiable ozone areas with design values greater than 0.106 ppm will continue to be subject to full maintenance plan requirements described in the September 4, 1992 memorandum, "Procedures for Processing Requests to Redesignate Areas to Attainment," from John Calcagni, former Director of the OAQPS Air Quality Management Division to the Regional Air Division Directors.

There are three types of nonclassifiable ozone areas: submarginal, transitional, and incomplete/no data. A description of these areas is included as Attachment A.

II. Background

Section 107(d)(3)(E) of the Act provides that a nonattainment area can be redesignated to attainment if the following criteria are met:

1. The EPA has determined that the NAAQS for the applicable pollutant has been attained.

2. The applicable implementation plan has been fully adopted under section 110(k).

3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.

4. The State has met all applicable requirements for the area under section 110 and part D.

5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under section 175A.

Section 175A of the Act provides the general framework for maintenance plans. The maintenance plan must provide for maintenance of the NAAQS for at least 10 years after redesignation,[1] including any additional control measures as may be necessary to ensure such maintenance. In addition, maintenance plans are to contain such contingency provisions as EPA deems necessary to assure the prompt correction of a violation of the NAAQS that occurs after redesignation. The contingency measures must include, at a minimum, a requirement that the State will implement all control measures contained in the nonattainment SIP prior to redesignation.

Beyond these requirements, however, section 175A does not define the content of a maintenance plan. Thus, EPA has the authority to exercise reasonable discretion to determine those requirements. The EPA has previously issued guidance on meeting all five criteria for redesignation including maintenance plans (see Attachment B). The EPA now believes that it is justifiable and appropriate to apply a different set of maintenance plan requirements (described herein) to a limited category of ozone nonattainment areas--nonclassifiable areas whose monitored air quality is equal to or less than 85 percent of exceedance levels of the ozone NAAQS. The EPA does not believe that the full maintenance plan requirements need be applied to these areas because they have achieved air quality levels well below the

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[1]Section 175A also requires that 8 years after redesignation, the State must submit an additional plan to provide for maintenance for a second follow-on 10-year period.

standard without the application of control measures required by the Act for classified ozone nonattainment areas. Also, these areas do not have either a recent history of monitored violation of the ozone NAAQS or a long prior history of monitored air quality problems. The EPA believes that the continued applicability of prevention of significant deterioration (PSD) requirements, any control measures already in the SIP, and Federal measures (such as the Federal motor vehicle control program) should provide adequate assurance of maintenance for these areas.

III. Qualifying for the Limited Maintenance Plan Option

To qualify for the limited maintenance plan option, the ozone design value for the area, based on the 3 years of data used to demonstrate attainment, must be at or below 0.106 ppm (85 percent of exceedance levels of the ozone NAAQS). Additionally, the design value for the area must continue to be at or below 0.106 ppm until the time of final EPA action on the redesignation. The method for calculating design values is presented in the June 18, 1990 memorandum, "Ozone and Carbon Monoxide Design Value Calculations," from William G. Laxton, former Director of the OAQPS Technical Support Division to Regional Air Directors. The memorandum focuses primarily on determining design values for nonattainment areas in order to classify the areas as marginal, moderate, serious, severe, or extreme. Therefore, the document discusses determining the design value for an area based on the monitors which are exceeding the standard. In the case of a nonattainment area seeking redesignation to attainment, all monitors must be meeting the standard. To assess whether a nonclassifiable area meets the applicability cutoff for the limited maintenance plan, a separate design value must be developed for every monitoring site. The highest of these design values is the design value for the whole area. If the area design value is at or below 0.106 ppm, the State may select the limited maintenance plan option for the first 10-year maintenance period. If the design value for the area exceeds 0.106 prior to final EPA action on the redesignation, the area no longer qualifies for the limited maintenance plan and must instead submit a full maintenance plan. The EPA will issue guidance in the future on the applicability of the limited maintenance plan option to the second follow-on 10-year maintenance period.

IV. Limited Maintenance Plan Elements

Following is a list of core provisions which should be included in a limited maintenance plan. Any final EPA determination regarding the adequacy of a limited maintenance plan will be made following review of the plan submittal in light of the particular circumstances facing the area proposed for redesignation and based on all relevant available information.

a. Attainment Inventory

The State should develop an attainment emissions inventory to identify a level of emissions in the area which is sufficient to attain the NAAQS. This inventory should be consistent with EPA's most recent guidance[2] on emissions inventories for nonattainment areas available at the time and should represent emissions during the time period associated with the monitoring data showing attainment. The inventory should be based on actual "typical summer day" emissions of VOC and NOx (ozone precursors). Emissions of CO are not necessary in the attainment inventory because they will not be tracked for maintenance purposes.

b. Maintenance Demonstration

The maintenance demonstration requirement is considered to be satisfied for nonclassifiable areas if the monitoring data show the area is meeting the air quality criteria discussed above. There is no requirement to project emissions over the maintenance period. The EPA believes if the area begins the maintenance period at or below 85 percent of exceedance levels, the air quality along with the continued applicability of PSD requirements, any control measures already in the SIP, and Federal measures, should provide adequate assurance of maintenance over the initial 10-year maintenance period.

When EPA approves a limited maintenance plan, EPA is concluding that an emissions budget may be treated as essentially not constraining for the length of the maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the ozone NAAQS would result.

c. Monitoring Network/Verification of Continued Attainment

To verify the attainment status of the area over the maintenance period, the maintenance plan should contain provisions for continued operation of an appropriate, EPA-approved air quality monitoring network, in accordance with 40 CFR part 58. This is particularly important for areas using a limited maintenance plan because there will be no cap on emissions.

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[2]The EPA's current guidance on the preparation of emissions inventories for ozone areas is contained in the following documents: "Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone: Volume I" (EPA-450/4-91-016), "Emission Inventory Requirements for Ozone State Implementation Plans" (EPA-450/4-91-010), and "Procedures for Emission Inventory Preparation: Volume IV, Mobile Sources" (EPA-450/4-81-026d).

d. Contingency Plan

Section 175A of the Act requires that a maintenance plan include contingency provisions, as necessary, to promptly correct any violation of the NAAQS that occurs after redesignation of the area. These contingency measures do not have to be fully adopted at the time of redesignation. However, the contingency plan is considered to be an enforceable part of the SIP and should ensure that the contingency measures are adopted expeditiously once they are triggered by a specified event. The contingency plan should identify the measures to be promptly adopted and provide a schedule and procedure for adoption and implementation of the measures. The State should also identify specific indicators, or triggers, which will be used to determine when the contingency measures need to be implemented. While a violation of the NAAQS is an acceptable trigger, States may wish to choose a pre-violation action level as a trigger, such as an exceedance of the NAAQS. By taking early action, a State may be able to prevent any actual violation of the NAAQS and, therefore, eliminate any need on the part of EPA to redesignate an area back to nonattainment.

V. Conformity Determinations Under Limited Maintenance Plans

The transportation conformity rule (58 FR 62188; November 24, 1993) and the general conformity rule (58 FR 63214; November 30, 1993) apply to nonattainment areas and maintenance areas operating under maintenance plans. Under either rule, one means of demonstrating conformity of Federal actions is to indicate that expected emissions from planned actions are consistent with the emissions budget for the area. As discussed above in section IV(b), emissions budgets in limited maintenance plan areas may be treated as essentially not constraining for the length of the initial maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the ozone NAAQS would result. In other words, EPA would be concluding that emissions need not be capped for the maintenance period. Therefore, in areas with approved limited maintenance plans, Federal actions requiring conformity determinations under the transportation conformity rule could be considered to satisfy the "budget test" required in sections 93.118, 93.119, and 93.120 of the rule. Similarly, in these areas, Federal actions subject to the general conformity rule could be considered to satisfy the "budget test" specified in section 93.158(a)(5)(i)(A) of the rule.

For further information regarding the limited maintenance plan option for nonclassifiable ozone areas, please contact Carla Oldham at (919) 541-3347. For information regarding transportation conformity requirements, please contact Kathryn Sargeant of the Office of Mobile Sources at (313) 668-4441. For

information regarding general conformity requirements, please contact Doug Grano at (919) 541-3292.

Attachments

ATTACHMENT A

The EPA used 1987-89 as the primary data years in determining designations and classifications for ozone areas set forth in the November 6, 1991 final rule on Air Quality Designations and Classifications (56 FR 56694). Certain ozone nonattainment areas could not be classified as marginal or above under Table 1 of section 181(a)(1) of the Clean Air Act either because of incomplete monitoring data or because they were nonattainment pre-enactment but did not violate the standard during 1987-89. These areas are collectively called nonclassifiable areas. Nonclassifiable ozone areas consist of transitional, submarginal, and incomplete/no data areas.

Transitional areas

An area is considered transitional under section 185A if it was designated nonattainment both prior to enactment and at the time of enactment, and did not violate the primary NAAQS for ozone over the 3-year period from 1987-1989.

Section 185A of the Act required EPA to make a determination, by June 30, 1992, whether the designated transitional areas had continued to meet the ozone NAAQS through December 31, 1991. All 12 transitional areas were attaining the NAAQS through December 31, 1991 and none are known to have violated the standard since. In May and June of 1992, Regional Administrators sent letters to Governors of States with transitional areas notifying them of EPA's determination.

Submarginal areas

Compliance with the ozone NAAQS is determined on the basis of expected exceedances which include an adjustment for missing data.[1] The submarginal category includes areas that violated the ozone NAAQS during 1987-89 but had a design value for the period of less than .121 ppm (the lower limit for marginal areas) due to the adjustment for missing data when calculating expected exceedances. Presently, there are no submarginal areas.

Incomplete/no data areas

Certain ozone areas designated nonattainment prior to enactment and at enactment did not have sufficient air quality monitoring data to determine whether they were or were not violating the NAAQS. These areas are termed incomplete/no data areas. These include areas which do not have monitors. Currently, there are 47 incomplete/no data areas.

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[1]This adjustment procedure is described in 40 CFR part 50.9, appendix H.

ATTACHMENT B

The EPA policies for implementing sections 107 and 175A of the Act for redesignations are contained in the following memorandums.

1. "Procedures for Processing Requests to Redesignate Areas to Attainment," John Calcagni, Director, Air Quality Management Division, September 4, 1992.

2. "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992," Michael Shapiro, Acting Assistant Administrator for Air and Radiation, September 17, 1993.

3. "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines," John Calcagni, Director, Air Quality Management Division, October 28, 1992.

4. "Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations," G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, June 1, 1992.

5. "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (57 FR 13498; April 16, 1992).

Appendix B

State of New Mexico
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BILL RICHARDSON
Governor

RON CURRY
Secretary

CINDY PADILLA
Deputy Secretary

Certified Mail No: 7004 0750 0001 3312 7028
Return Receipt Requested

OPERATING PERMIT NO: P066R1
Tempo/IDEA ID No.: 526–PRT20040001
AIRS No. 35-017-00001
FACILITY NAME: Chino Mine – Hurley Facility

PERMITTEE: Chino Mines Company
PO Box 7
Hurley, NM 88043

RESPONSIBLE COMPANY OFFICIAL: David F. Rhoades

Air Permit Contact: Timothy E. Eastep

ISSUED BY: New Mexico Environment Department

M. a. Uhl

Mary Uhl
Bureau Chief
Air Quality Bureau

MAY 23 2007
Date of Issuance

INTRODUCTION

Operating Permit Number **P066R1** is issued by the Air Quality Bureau of the New Mexico Environment Department ("Department") to Chino Mines Company pursuant to the federal Clean Air Act ("federal Act"), the New Mexico Air Quality Control Act ("state Act") and regulations adopted pursuant to the state and federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits. This permit authorizes the operation of this facility located at UTM Zone 12, UTMH 772.0 km UTMV 3620.0 km, near Hurley, New Mexico in Grant County.

This permit is valid only for the named permittee, owner, and operator. A permit modification is

State of New Mexico
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Deputy Secretary

Certified Mail No: 7004 0750 0001 3312 7028
Return Receipt Requested

OPERATING PERMIT NO: P066R1
Tempo/IDEA ID No.: 526–PRT20040001
AIRS No. 35-017-00001
FACILITY NAME: Chino Mine – Hurley Facility

PERMITTEE: Chino Mines Company
PO Box 7
Hurley, NM 88043

RESPONSIBLE COMPANY OFFICIAL: David F. Rhoades

Air Permit Contact: Timothy E. Eastep

ISSUED BY: New Mexico Environment Department

_____ _____

Mary Uhl
Bureau Chief
Air Quality Bureau

Date of Issuance

INTRODUCTION

Operating Permit Number **P066R1** is issued by the Air Quality Bureau of the New Mexico Environment Department ("Department") to Chino Mines Company pursuant to the federal Clean Air Act ("federal Act"), the New Mexico Air Quality Control Act ("state Act") and regulations adopted pursuant to the state and federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits. This permit authorizes the operation of this facility located at UTM Zone 12, UTMH 772.0 km UTMV 3620.0 km, near Hurley, New Mexico in Grant County.

This permit is valid only for the named permittee, owner, and operator. A permit modification is

required to change any of those entities. This facility is a support facility for mining operations. The major processes associated with the facility are power generation, copper ore mining, copper ore concentration, and concentrated ore storage and transportation via conveyors and rail.

This renewal consists of removal of all equipment associated with the former Hurley smelter, combining the remaining Hurley Facility operations (power plant and filter plant, NSR 0376M5R4, R3, R2, R1, M4, M3, M2) and the Ivanhoe Concentrator (NSR 0298M3 & M4R1, M4R2) into this permit.

The term of this permit is five (5) years. It will expire five years from the date of issuance, pursuant to 20.2.70.302.B NMAC. Application for renewal of this permit is due twelve (12) months prior to the date of expiration, pursuant to 20.2.70.300.B.2 NMAC.

Pursuant to 20.2.70.302.A.1 NMAC, the Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued.

Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department. Pursuant to 20.2.70.302.A.5 NMAC, all terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the federal Act.

PERMIT SHIELD

Pursuant to 20.2.70.302.J NMAC, compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in Table A.1 of Appendix A. The requirements in Table A.1 are applicable to this facility with specific requirements identified for individual emission units.

The Department has determined that the requirements in Table A.2 of Appendix A as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.

This permit shield does not extend to administrative amendments, to minor permit modifications, to changes made under Section 502(b)(10) of the federal Act, or to permit terms for which notice has been given to reopen or revoke all or part.

TOTAL POTENTIAL EMISSIONS

The total potential emissions from this facility, excluding insignificant or trivial activities, are shown in the following table. Emission limitations for individual units are shown in section 3.2.

Table 1, Total Potential Criteria Pollutant Emissions from Entire Facility (for information only, not an enforceable condition):

Pollutant	**Emissions** (tons per year)
Nitrogen Oxides (NOx)	185.5
Carbon Monoxide (CO)	93.3
Volatile Organic Compounds (VOC)	15.1
Sulfur Dioxide (SO_2)	1.9
Particulate Matter (total suspended)	62.0
Particulate Matter (10 microns or less)	48.5

Table 2, Total Potential HAPS that exceed 0.5 ton per year (for information only, not an enforceable condition):

Pollutant	**Emissions** (tons per year)
None greater than 0.5 tpy	

PERMIT TERMS AND CONDITIONS

1.0 GENERAL CONDITIONS

1.1 The following permit terms and conditions are placed upon the permittee in accordance with 20.2.70.301.B NMAC and 20.2.70.302.A.2 NMAC.

1.1.1 The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the federal Act.

1.1.2 It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

1.1.3 If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC.

1.1.4 The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee.

1.1.5 A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit.

1.1.6 This permit does not convey property rights of any sort, or any exclusive privilege.

1.1.7 In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA.

1.2 The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or federal Acts, or any applicable state or federal regulation or law. This condition is pursuant to 20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2.

1.3 If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. This condition is pursuant to 20.2.70.302.A.1.d NMAC.

1.4 The permittee shall pay fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. This condition is pursuant to 20.2.70.302.A.1.e NMAC.

1.5 A responsible official (as defined in 20.2.70 NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. This condition is pursuant to 20.2.70.300.E NMAC.

1.6 Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. This condition is pursuant to 20.2.70.201.B NMAC.

1.7 The permittee shall submit an emissions inventory for this facility annually. The emissions inventory shall be submitted by the later of April 1 or within 90 days after the Department makes such request. This condition is pursuant to 20.2.73 NMAC and 20.2.70.302.A.1 NMAC.

1.8 The source will continue to comply with all applicable requirements. For applicable

requirements that will become effective during the term of the permit, the source will meet such requirements on a timely basis. This condition is pursuant to sections 300.D.11.c and 302.G.3 of 20.2.70 NMAC.

1.9 Compliance with this operating permit is sufficient to comply with all NSR permits listed in Table A.1. This condition is pursuant to 20.2.70.302.A.1 NMAC.

2.0 FACILITY INFORMATION

The following conditions are placed upon the permittee pursuant to 20.2.70.302.A.7 NMAC and NSR Permits 0376M5R4, R3, R2, R1, M4, M3, and M2; 0298M3, M4R1, and M4R2.

2.1 All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Table 2.1, Power Plant and Filter Plant:

Emission Unit No.	Equipment Type	Equipment Manufacturer & Model	Serial Number
F-1-1-4.1	Conveyor	N/A	N/A
F-1-1-4.2	Conveyor	N/A	N/A
F-1-1-4.3	Conveyor	N/A	N/A
F-1-1-4.4	Conveyor	N/A	N/A
F-1-1-4.5	Conveyor	N/A	N/A
F-1-3-2	Loading/Unloading Rack	N/A	N/A
F-2-1-1.4	455 MMBtu/hr, 37.5MW, Gas Turbine	Westinghouse, Model W251 B12	TBD
F-2-1-1.5	Heat Recovery Steam Generator w/ 48.8 MMBtu/hr Gas-Fired Duct Burner	Nooter/Ericksen, Model TBD	TBD
Misc Fugitives-all areas	Fugitives	N/A	N/A

N/A means Not Applicable; TBD means To Be Determined.

Table 2.1.1, Regulated Equipment for the Ivanhoe Concentrator

Unit #	Description	Capacity	Construction date
IC-01	Molybdenum heater treater (electric heat, w/ wet scrubber)	N/A	Prior to 1994
CV-01A	Coarse ore stockpile conveyer, flight #1	3750 TPH	Prior to 1994
CV-01B	Coarse ore stockpile conveyer, flight #2	3750 TPH	Prior to 1994

Unit #	Description	Capacity	Construction date
PC-01	Primary Crusher	3360 TPH	Prior to 1994
CTS-01	Conveyer Transfer System and associated controls (enclosed)	3360 TPH	Prior to 1994
CV-01C	Coarse Ore Conveyer Transfer	3360 TPH	Prior to 1994
SAG-F1	SAG Mill Feeders	3300 TPH	Prior to 1994
LUS-01	Lime Unloading System and associated controls (wet scrubber)	45.4 TPH	Prior to 1994
LHS-01	Lime Handling System and associated controls (wet scrubber)	45.4 TPH	Prior to 1994
PCB H-01	Primary crusher baghouse	NA	Prior to 1994

2.2 All the pollution control equipment required for this facility is listed in the table shown below. Each emission point is identified by the same number that was assigned to it in the permit application:

Table 2.2, Emission Control Equipment:

Control Unit No.	Control Equipment Type	Control Equipment Mfg & model (or equivalent)	Control For Unit(s)
N/A	Filter Plant - Conveyor Belts	Covered Belts with High moisture Concentrate	F-1-1-4.1 thru F-1-1-4.5
PCB H-01	Concentrator - Primary Crusher Baghouse	Ecolaire #625-4	PC-01
N/A	Concentrator - Moly Heat Treater Wet Scrubber	Ducon, Model TBD	Moly Heat Treater
LUS-01	Concentrator - Lime Unloading System Wet Scrubber	Emtrol, Model TBD	LUS-01
LHS-01	Concentrator - Lime Handling System Wet Scrubber	Emtrol, Model TBD	LHS-01

This control equipment is located within the facility at the following places and serves the following functions: particulate emissions are controlled through out the entire operation by covered conveyor belts.

3.0 REQUIREMENTS FOR INDIVIDUAL EMISSIONS UNITS

Information regarding applicable requirements, emission limits, operational limitations and requirements, work practices, and monitoring, testing and recordkeeping requirements is provided below for each emissions unit or set of similar units.

3.1 Applicable Requirements
All applicable requirements for this facility are listed in Appendix A, Table A.1. This condition is pursuant to 20.2.70.302.A.1 NMAC.

3.2 Emissions Limits
Table 3.2 lists the emission units, and their allowable emission limits. This condition is pursuant to 40CFR50, Paragraphs 1, 7 and 8 of 20.2.70.302.A NMAC and NSR Permits 0376M2, M4 and 0298M3.

Table 3.2: Maximum Allowable Non-Fugitive Emission Rates in lb/hr and ton/y*

Emission Unit No.	NO_x lb/hr	NO_x tons/y	CO lb/hr	CO tons/y	VOC lb/hr	VOC tons/y	TSP lb/hr	TSP tons/y	PM_{10} lb/hr	PM_{10} tons/y	SO lb/hr	SO_2 tons/y
F-2-1-1.4	39.9	175	20.0	87.4	2.8	12.4	2.3	10.0	2.3	10.0	0.4	1.8
F-2-1-1.5	42.3	185.5	21.3	93.3	3.4	15.1	2.6	11.3	2.6	11.3	0.43	1.92
IC-01							1.1	4.3	1.1	4.3		
PCB H-01							2.2	9.6	1.0	4.5		
CTS-01							0.7	0.2	0.3	0.1		
SAG F1							0.7	0.2	0.3	0.1		
LUS-01							.032	.014	.032	.014		
LSH-01							.001	.0001	.001	.0001		
Total Allowables**		**185.5**		**93.3**		**15.1**		**25.6**		**20.3**		**1.9**

* Pounds per hour/tons per year
** Total Allowables are for information, not enforceable conditions, and used to determine annual Operating Fees.
*** Emission Limits for F-2-1-1.5 represent the combined total emissions of units F-2-1-1.4 and F-2-1-1.5.

Table 3.2.1 Performance Standards for Ivanhoe Concentrator Equipment

Unit	Grain Loading	Opacity
Molybdenum heater treater (electric heat, w/ wet scrubber)	0.022 g/dscf	NA
PCB H-01 (Primary crusher baghouse)	0.022 g/dscf	7%
(CTS-01) Conveyer Transfer systems	NA/NA	10%
SAG-F1 Mill Feeders	NA/NA	10%

3.2.1 Nitrogen Dioxide Emissions for Turbines: To comply with NSPS Subpart GG, the exhaust

gases to the atmosphere from the turbine shall not contain nitrogen oxides (NOx) in excess of 184 parts per million by volume at 15 percent oxygen on a dry basis. Nitrogen oxide emissions include all oxides of nitrogen expressed as NO_2. This condition was brought forward from NSR Permit 376M4, Condition 2.g.

3.2.2 Sulfur Dioxide Emissions for Turbines: To comply with NSPS Subpart GG, the exhaust gases to the atmosphere from the turbine shall not contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis, or the fuel burned in the turbine shall not contain sulfur in excess of 0.8 percent by weight. This condition was brought forward from NSR Permit 376M4, Condition 2.h.

3.3 Operational Requirements
This condition is pursuant to Paragraphs 1, 7 and 8 of 20.2.70.302.A NMAC.

3.3.1 At the Ivanhoe Concentrator, the production rate of the concentrating circuit shall not exceed an annual average of 60,000 tons per day. The maximum single hourly production rate through the concentrator circuit shall not exceed 3,300 tons per hour. The maximum daily throughput for the crusher system shall not exceed 80,640 tons per day. This condition was brought forward from NSR 0298M3, Condition 1.c.

3.3.2 The Ivanhoe Concentrator operation is authorized to operate 24 hours per day, 7 days per week, and 52 weeks per year for a total of 8,760 hours per year. This condition was brought forward from NSR 0298M3, Condition 1.d.

3.4 Emissions Monitoring and Testing Requirements
The conditions of Section 3.4 are pursuant to 20.2.70.302.C NMAC and NSR Permits 0376M4 and 0298M3.

3.4.1 General Monitoring Requirements

3.4.1.1 The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.

3.4.1.2 If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing

the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

3.4.1.3 The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated as follows:

3.4.1.3.1 If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.

3.4.1.3.2 If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

3.4.1.3.3 A minimum of one of each type of monitoring activity shall be conducted during the five-year term of this permit.

3.4.1.4 The permittee is not required to report a deviation for any monitoring or testing in section 3.4.2 if the deviation was authorized in the General Monitoring Requirements section 3.4.1.

3.4.1.5 For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the full normal load as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% load cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report that is required to be furnished to the Department.

3.4.1.6 When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

3.4.1.7 Monitoring shall become effective 120 days after the date of permit issuance if the monitoring is new or in addition to monitoring imposed by an existing applicable requirement. Any pre-existing monitoring requirements incorporated in this permit shall continue to be in

force from the date of permit issuance.

3.4.1.8 Startup, Shutdown and Malfunction Conditions: For operations and equipment subject to 40CFR60, excess emissions, or operations under startup, shutdown, or malfunction shall be addressed in accordance with the requirements of 40CFR60.7(c) or 40CFR60.8(c), as appropriate. This condition is pursuant to 20.2.70.302.A.1 NMAC.

3.4.2 Unit Specific Monitoring Requirements: The following table lists emission units and their required monitoring. Descriptions of required monitoring follow the table.

Table 3.4.2, Required Monitoring

Emission unit Nos.	Parameters To Monitor	To Comply With	Monitoring Required	Monitoring Conditions
F-2-1-1.4 and F-2-1-1.5	Visible emissions	20.2.61 NMAC	Opacity	3.4.2.1
Monitoring for Turbines				
F-2-1-1.4	Maintenance and Repair Activities	Emission Limits specified in Table 3.2	Maintenance and Repair	3.4.2.2
F-2-1-1.4	NOx, and SO_2	40 CFR 60.330, Subpart GG and general provisions in Subpart A	Specific requirements of 40 CFR 60.330, Subpart GG and general provisions in Subpart A	3.4.2.3
F-2-1-1.4	Fuel Sulfur concentration	40CFR60 Subpart GG, and NSR 376M4, Condition 3.d.	Custom Fuel Monitoring Schedule Attachment A to NSR Permit 376M4 or Fuel Monitoring per 40 CFR 60, Subpart GG	3.4.2.4
F-2-1-1.5	Fuel Usage	NSR 376M4, Condition 3.e.	Meter fuel usage and record daily.	3.4.2.5
Monitoring for Ivanhoe Concentrator				
IC-01, CV-01A, CV-01B, PC-01, CTS-01, CV-01C, SAG-F1, LUS-01, LHS-01, & PCB H-01	TSP and PM_{10}	40CFR60 Subpart LL, and NSR 298M3, Condition 2.b.	Pressure drop across wet scrubbers; liquid flow rate for wet scrubbers	3.4.2.6

Note: The numbering of conditions in this table are in the same sequence for the next three major Sections of the permit: Monitoring, Recordkeeping, and Reporting.

3.4.2.1 Opacity Monitoring (For Units F-2-1-1.4 and F-2-1-1.5): Use of pipeline quality natural

gas fuel or natural gas liquids constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20%. At such time as fuel other than pipeline quality natural gas or natural gas liquids is used, opacity shall be measured in accordance with the procedures at 40CFR60, Appendix A, Method 9. Opacity measurements shall continue on a quarterly basis per calendar year for each effected unit until such time as pipeline quality natural gas or natural gas liquids are used.

3.4.2.1.1 Pipeline quality natural gas is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (scf) and is either composed of at least 70% methane by volume or has a gross calorific value between 950 and 1100 Btu per standard cubic foot.

3.4.2.1.2 For the purposes of Condition 3.4.2.1 of this permit, "natural gas liquids" means those substances meeting the definition in 40 CFR 60.631.

3.4.2.2 Maintenance and Repair Monitoring (For Turbine, Unit F-2-1-1.4): Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Maintenance and repair activities that involve adjustment, replacement, or repair of functional components with the potential to affect operation of an emission unit shall be documented as they occur for the following events.

a) Routine Maintenance that takes a unit out of service for more than two hours during any twenty-four hour period.

b) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.

3.4.2.3 <u>Monitoring Requirements (For Turbine, Unit F-2-1-1.4):</u>
This condition was brought forward from NSR Permit 0376M4, Condition 3.a, 3.b, and 3.c.

a) A continuous emissions monitoring system (CEMS) shall be installed and operated to measure the oxides of nitrogen (NO_X) and oxygen (O_2) concentrations (ppmv) in the exhaust gas of the turbine (Unit F-2-1-1.4) and HRSG (Unit F-2-1-1.5). Monitoring for the turbine and HRSG shall meet the requirements of 40 CFR, Part 60, Section 60.13 – <u>Monitoring requirements</u>.

The CEMS shall obtain a reading of the NOx and O_2 concentrations at least once every fifteen (15) minutes. A flow measurement device shall be installed to accurately measure the exhaust flow rates at various load rates during performance testing. This shall be achieved by:

- a pitot tube, or
- multiple pitot tubes, as necessary, or
- EPA Reference Method 19 to determine exhaust flow, or
- an equivalent flow measurement device

The output of the CEMS shall be (1) in ppmv of NOx and $\%O_2$ at actual stack conditions and (2) in pounds per hour (pph) of NOx.

The CEMS shall be installed, certified and tested in accordance with NSR Permit 376M4, Condition 6. Certification for the NOx monitor shall be done according to 40 CFR 60, Appendix B, Performance Specification 2 and for the O_2 monitor according to 40 CFR 60, Appendix B, Performance Specification 3.

b) All required continuous emissions monitoring equipment shall have a minimum data capture rate of ninety percent (90%) per calendar month. The data capture rate is defined as the amount of time the equipment generates the required data divided by the time the unit is in operation. The 10% non-capture residual is intended for periods of malfunction, calibration, or adjustment.

c) In the event that the 90% data capture rate cannot be met due to analyzer malfunction, an emission factor derived from the initial compliance test, along with fuel flow data, may be used to measure NOx emissions from the turbine and HSRG upon approval from the Department.

3.4.2.4 To comply with the fuel monitoring requirements of NSPS Subpart GG, the permittee may use the custom fuel monitoring schedule contained in Attachment A. However, if the conditions of the custom schedule cannot be met, the permittee shall revert to the fuel monitoring requirements of NSPS Subpart GG, 60.334(h). This condition was brought forward from NSR Permit 0376M4, Condition 3.d.

Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbines as per USEPA document EMTIC GD-009 (March 12, 1990).

The permittee shall comply with all applicable NSPS monitoring, record keeping, and reporting requirements as specified in 40 CFR 60.334 - Monitoring of operations.

3.4.2.5 Fuel usage by the HRSG (Unit F-2-1-1.5) duct burner shall be monitored with a fuel meter and recorded daily. This condition was brought forward from NSR Permit 0376M4, Condition 3.e.

3.4.2.5.1 Measurements from the NOx CEM, initial compliance test results, and fuel usage shall be used to tabulate a monthly emission rate to establish a twelve (12) month rolling average for the NOx emissions limitation for the turbine and HRSG (Unit F-2-1-1.5) in Condition 3.2,

Emission Limits. This condition was brought forward from NSR Permit 0376M4, Condition 3.k.

3.4.2.6 Monitoring for 40CFR60, Subpart LL Compliance (Ivanhoe Facility): Any facility regulated by this permit, using a wet scrubber, shall be equipped with pressure gauges to measure pressure drop across the control device. Wet scrubbing systems shall be equipped with a continuous monitoring device to measure the scrubbing liquid flow rate. Pressure gauges and monitoring devices shall be installed, calibrated, maintained, and operated in accordance with the manufacturer specifications. Compliance with this will be based on Department inspections of the facility to verify that instruments have been installed and of the records as set forth in 40CFR60, Subpart LL. This condition was brought forward from NSR 0298M3, Condition 2.b.

4.0 RECORDKEEPING

Conditions of 4.0 are pursuant to 20.2.70.302.D NMAC.

4.1 General Recordkeeping Requirements:
Conditions of 4.1 are pursuant to 20.2.70.302.D.1 NMAC.

4.1.1 All sampling and measured data required by this permit for the emissions units in this facility shall be recorded. The minimum information to be included in these records is:

4.1.1.1 equipment identification (include make, model and serial number for all tested equipment and emission controls),
4.1.1.2 date, and time of sampling or measurements,
4.1.1.3 date analyses were performed,
4.1.1.4 the company or entity that performed the analyses,
4.1.1.5 analytical or test methods used,
4.1.1.6 results of analyses or tests,
4.1.1.7 operating conditions existing at the time of sampling or measurement.

4.1.2 The permittee shall keep copies of all monitoring and measurement data, equipment calibration and maintenance records, Data Acquisition and Handling System (DAHS) if used, other supporting information, and reports required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall show clearly to which emissions unit and/or piece of monitoring equipment it applies, and the date the data was gathered. This condition is pursuant to 20.2.70.302.D.2 NMAC.

4.1.3 The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. This condition is pursuant to 20.2.70.302.I.2 NMAC.

4.2 Unit Specific Recordkeeping Requirements:

Conditions are pursuant to Subsection C and Paragraph D(1) of 20.2.70.302 NMAC.

4.2.1 Opacity Recordkeeping (For Units F-2-1-1.4 and F-2-1-1.5): The permittee shall record dates and duration of use of any fuels other than pipeline quality natural gas or natural gas liquids and the corresponding opacity measurements.

4.2.2 Maintenance and Repair Activities Recordkeeping (For Turbine, Unit F-2-1-1.4): Records of maintenance and repair activities shall be maintained. Records of maintenance and repair activities shall include identification of emission units and the work involved.

4.2.3 40CFR60.334, Subpart GG Recordkeeping (For Turbine, Unit F-2-1-1.4): Turbines subject to NSPS Subpart GG shall comply with the recordkeeping requirements of 40 CFR 60.334 and 40 CFR 60.7

4.2.4 Records of the fuel usage and hours of operation of the Westinghouse turbine (Unit F-2-1-1.4). This condition was brought forward from NSR Permit 0376M4, Condition 4.f.

4.2.5 Records of the fuel usage and hours of operation of the Nooter/Ericksen Heat Recovery Steam Generator duct burner, monitored and recorded daily. This condition was brought forward from NSR Permit 0376M4, Condition 4.g.

4.2.6 Recordkeeping for 40CFR60, Subpart LL Compliance (Ivanhoe Facility): The permittee shall comply with the notification and record keeping requirements as set forth in 40CFR60, Subpart LL shown here:

a) The Owner/Operator shall submit a written report of the results of the performance tests as specified in 40 CFR §60.8(a).
b) The Owner/Operator shall record the measurements of change in pressure of the gas stream across the scrubber and scrubbing fluid flow rate weekly.
c) The Owner/Operator shall submit semiannual reports of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than ±30 % from the average obtained from the most recent performance test. These reports shall be postmarked within 30 days following the end of June and December.

5.0 REPORTING

Conditions of 5.0 are pursuant to 20.2.70.302.E NMAC.

5.1 General Reporting Requirements:

5.1.1 Reports shall clearly identify the subject equipment showing the emission unit ID number according to the operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the

required reports. Reports of all required monitoring activities for this facility shall be submitted to the Department on the following schedule. This condition is pursuant to 20.2.70.302.E.1 NMAC.

Table 5.1.1, Schedule of Monitoring Activity Report Submittal:

Report for Emissions Unit Nos.	Submittal Date
F-2-1-1.4 and F-2-1-1.5, and Ivanhoe units identified in Table 2.1.1	Within 45 days following the end of every 6-month period following the issuance date of permit P066, July 25, 2000.

5.1.2 The permittee shall submit reports of all deviations (including emergencies) from permit requirements to the Department. The permittee shall communicate initial notice of the deviation to the Department within twenty-four (24) hours of the start of the first business day following the discovery of the occurrence via telephone or facsimile. Within ten (10) calendar days of the start of the first business day following the discovery of the occurrence, written notice shall be submitted to the Department using the Department's Excess Emissions Form currently in use at time of discovery. This condition is pursuant to 20.2.70.302.E.2 NMAC.

5.1.3 At such time as new units are installed as authorized by NSR permit 0376M4, 0298M3, 0298M4R1, the permittee shall fulfill the notification requirements of condition 1 (Reporting) of the General Conditions in the NSR permit.

5.2 Unit Specific Monitoring Reports:
Conditions of 5.2 are pursuant to 20.2.70.302.E NMAC.

5.2.1 Opacity Reporting (For Units F-2-1-1.4 and F-2-1-1.5): The permittee shall report dates and duration of use of any fuels other than pipeline quality natural gas or natural gas liquids and the corresponding opacity measurements.

5.2.2 Maintenance and Repair Reporting (For Turbine, Unit F-2-1-1.4): These reports shall include a summary of the activities in section 4.2.2**.**

5.2.3 40CFR60.334, Subpart GG Reporting (For Turbine, Unit F-2-1-1.4):Turbines subject to NSPS Subpart GG (40 CFR 60.330) shall comply with the reporting requirements of 40 CFR 60.7.

5.2.4 and 5.2.5 Fuel Usage Reporting (For Turbine, Units F-2-1-1.4 and F-2-1-1.5): The permittee shall report the semi-annual results of hours of operation, and estimated emission rate based on fuel usage and compliance test results of the turbine (Unit F-2-1-1.4) and HSRG's (Unit F-2-1-1.5) twelve (12) month rolling average NOx emission limit. This condition was brought forward from NSR Permit 0376M4, Condition 5.l, and revised.

5.2.6 Reporting for 40CFR60, Subpart LL Compliance (Ivanhoe Facility): The permittee shall submit reports as required by 40CFR60, Subpart A and/or Subpart LL. This condition was brought forward from NSR 0298M3, Condition 9.

6.0 COMPLIANCE

6.1 The conditions of Section 6.1 are pursuant to 20.2.70.302.E.3 NMAC. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the current version of the Department's Compliance Certification Report Form (example attached to this permit) and submitted to the Department and to EPA at least every 12 months. This report is due no later than 30 days after each anniversary date of the first issued operating permit, **P066, July 25, 2000**.

6.1.1 For sources that have submitted air dispersion modeling that demonstrates compliance with state and federal ambient air quality standards, in accordance with 20.2.70.300.D.10 NMAC or 20.2.72.203.A.4 NMAC, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed to be compliance with state and federal ambient air quality standards (20.2.3NMAC NMAAQS and 40CFR50 NAAQS).

6.2 Conditions of 6.2 are pursuant to 20.2.70.302.G.1 NMAC. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following:

6.2.1 enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept,

6.2.2 have access to and copy, at reasonable times, any records that are required by this permit to be maintained,

6.2.3 inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operation regulated or required under the permit,

6.2.4 sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the federal Act.

6.3 A copy of this permit shall be kept at the permitted facility and shall be made available to Department personnel for inspection upon request. This condition is pursuant to 20.2.70.302.G.3 NMAC.

7.0 EMERGENCIES
Conditions of 7.0 are pursuant to 20.2.70.304 NMAC.

7.1 An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

7.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a) An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b) This facility was at the time being properly operated;

c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

d) The permittee fulfilled notification requirements under Condition 5.1.2 of this permit. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

7.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

7.4 This provision is in addition to any emergency or upset provision contained in any applicable requirement.

8.0 PERMIT REOPENING AND REVOCATION

8.1 This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when 8.1.3 or 8.1.4 occurs. Conditions of 8.1 are pursuant to 20.2.70.405.A.1 NMAC.

8.1.1 Additional requirements under the federal Act become applicable to this source three (3)

or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.

8.1.2 Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.

8.1.3 The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.

8.1.4 The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.

8.2 Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. This condition is pursuant to 20.2.70.405.A.2 NMAC.

9.0 STRATOSPHERIC OZONE
This condition is pursuant to 20.2.70.302.A.1 NMAC.

9.1 The permittee shall comply with the following standards for recycling and emissions reductions pursuant to 40CFR82, Subpart F:

9.1.1 Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to subsection 82.156.

9.1.2 Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to subsection 82.158.

9.1.3 Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to subsection 82.161.

APPEAL PROCEDURES

Any person who participated in this permitting action before the Department and who is adversely affected by the action taken by the Department concerning this permit, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition must be made in writing to the board within thirty (30) days from the date notice is given of the Department's action.

This petition must specify the portions of the permitting action to which the petitioner objects and certify that a copy of the petition has been mailed or hand-delivered as required by 20.2.70.403.A.2 NMAC; a copy of the permitting action for which review is sought must be attached to the petition. Upon receipt of the appeal notice, the petitioner must mail or deliver a copy of the petition to the Department, and to the applicant or permittee if the petitioner is not the applicant/permittee. Requests for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg.
P.O. Box 26110
Santa Fe, New Mexico 87502

Unless a timely request for a hearing is made, the decision of the Department will be final. If a timely request for hearing is made, the board will hold a hearing within sixty (60) days of receipt of the petition in accordance with the New Mexico Air Quality Control Act NMSA 1978 § 74-2-7 and 20.2.70.403.A.3 NMAC.

Any person who is adversely affected by an administrative action taken by the board pursuant to 20.2.70.403.A NMAC may appeal to the Court of Appeals in accordance with New Mexico Air Quality Control Act NMSA 1978 § 74-2-9. Petitions for judicial review must be filed no later than thirty (30) days after the administrative action. This condition is pursuant to 20.2.70.403.B NMAC and New Mexico Air Quality Control Act NMSA 1978 § 74-2-9.

SUBMITTAL OF REPORTS AND CERTIFICATIONS

Test protocols, excess emission forms, test reports, compliance certification reports, monitoring results and reports, emissions sampling and measurement data, monitoring activity reports, compliance schedule progress reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Program Manager, **Compliance & Enforcement Section**
New Mexico Environment Department
Air Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502-0110

In accordance with 20.2.70.302.E.3 NMAC, Compliance Certifications Reports shall be submitted to the Administrator at the address below:

Chief, Air Enforcement Section
US EPA Region-6, 6EN-AA
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Questions about this permit should be referred to Joe Kimbrell of the Air Quality Bureau in Santa Fe at (505) 955-8026.

Copies of the following documents can be downloaded from the NMED web site at URL **http://www.nmenv.state.nm.us/aqb/permit/app_form.html** for your convenience, or requested from the Bureau.

Documents:

1) Excess Emission Form (for reporting deviations and emergencies)
2) Compliance Certification Report Form
3) Acronyms
4) SOP for Stack Test Protocol
5) SOP for Use of Portable Analyzers in Performance Tests
6) SOP for Contents of Stack Test Reports
7) Custom Fuel Monitoring Schedule Attachment A

APPENDIX A

Table A.1: APPLICABLE REQUIREMENTS FOR THIS FACILITY

The permittee shall comply with all applicable sections of the requirements listed in the following table.

Applicable Requirements	Federally Enforceable	Entire Facility	Unit Nos.
20.2.7 NMAC - Excess Emissions during Malfunction Startup, Shutdown and Maintenance	X	X	
20.2.22 NMAC - Fugitive Particulate Matter Emissions from Roads Within the Town of Hurley	X	X	
20.2.61.109 NMAC Control of Smoke and Visible Emissions	X		F-2-1-1.4, F-2-1-1.5
20.2.70 NMAC Operating Permits	X	X	
20.2.71 NMAC Operating Permit Emission Fees	X	X	
Air Quality Bureau Permit No: NSR Permits 0376M5R4, R3, R2, R1, M4, M3, M2; 0298M3 & M4R1, M4R2.	X	X	
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	X	
40 CFR 50 National Ambient Air Quality Standards	X	X	
40 CFR 60, General Provisions, Subpart A	X	X	
40 CFR 60.48c, Subpart Dc, Standards of performance for Small Industrial-Commercial-Institutional Steam Generating Units	X		F-2-1-1.5
40 CFR 60.330, Subpart GG, Stationary Gas Turbines	X		F-2-1-1.4
40 CFR 60.380, Subpart LL, Standards of Performance for Metallic Mineral Processing Plants	X		(1) CV-01A, CV-01B, PC-01, CTS-01, CV-01C, SAG-F1, LUS-01, LHS-01, & PCB H-01
40 CFR 61 General Provisions Subpart A, and Subpart M, National Emission Standards for Asbestos.	X	X	
40 CFR 82 Subpart F- Service, Maintenance and Repair of Air Conditioners	X	X	

(1) Applies to Ivanhoe Concentrator equipment only. Applies to the Molybdenum heater treater (electric

powered), PCB H-01 (Primary crusher and baghouse) and other units inclusively listed in the permit.

APPENDIX A

Table A.2: The Department has determined that the following requirements identified in the permit application are not applicable requirements for this facility, or the requirement does not impose any conditions in this permit.

Requirements identified in the Permit Application as applicable	Not Applicable For This Facility (1)	No Requirements (2)
20.2.1 NMAC - General Provisions (Sampling Equipment, Severability, Effective Date, and Conflicts)		X
20.2.2 NMAC Definitions		X
20.2.5 NMAC Source Surveillance		X
20.2.75 NMAC Permit Fees		X
20.2.72 NMAC Permits		X

(1) No existing or planned operation/activity at this facility triggers the applicability of these requirements.

(2) Although these regulations may provide guidance, they do not impose any specific requirements on the operation of the facility as described in this permit.

State of New Mexico
ENVIRONMENT DEPARTMENT
Air Quality Bureau
2048 Galisteo St.
Santa Fe, NM 87505
Phone (505) 827-1494
Fax (505) 827-1523
www.nmenv.state.nm.us

BILL RICHARDSON
GOVERNOR

RON CURRY
SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

January 6, 2006

CERTIFIED MAIL NO. 7004 0750 0001 3309 4801
RETURN RECEIPT REQUESTED

Dennis Vaughn
Environmental Engineer
Chino Mines Co
PO Box 7
Hurley, NM 88043

Administrative Permit Revision
20.2.72.219.A.1 NMAC
NSR No. 0376-M5R3
IDEA ID No. 526 - PRN20060001
Chino Mine
AIRS No. 350170001

Dear Mr. Vaughn:

This letter is to acknowledge your letter of December 30, 2005 to revise Air Quality Permit 0376-M5 (R2) for Chino Mines Co, Chino Mine. This revision is pursuant to Title 20 of the New Mexico Administrative Code Chapter 2 Part 72 (20.2.72 NMAC) Construction Permits Section 219.A.1. This revision consists of removing many permitted emission sources related to the dismantling of the smelter. The emission units to be removed are associated with the flash furnace, the converters, the anode, the acid plant, and some of the power plant units. The request was received by the New Mexico Environment Department's Air Quality Bureau (Department) on January 4, 2006.

A review of the information you submitted confirms that the requirements specified in 20.2.72 NMAC, Construction Permits, Permit Processing and Requirements, Section 219.A are met.

20.2.72.219.A.3 NMAC specifies that administrative permit revisions become effective upon receipt of the notification by the Department.

This letter shall be attached to Air Quality Permit No. 0376-M5 issued by the Department on December 21, 2001 to serve as acknowledgment by the Department that this administrative

permit revision is authorized. All terms and conditions from Air Quality Permit No. 376-M2 and 376-M4 are still in effect unless specifically superseded.

Final emission totals will be determined by the Operating Permit renewal currently being processed.

If you have any questions, please do not hesitate to contact me in Santa Fe at 505-955-8026.

Sincerely,

Joseph Kimbrell
Permit Engineer
Permitting Section

Enclosure: Industry/Consultant Feedback Questionnaire with envelope