UTAH STATE
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

UTAH AIR QUALITY BOARD MEETING

November 13, 2001

PLEASE PRINT

NAME	AFFILIATION
Dan Nelson	Mountainland Assn. Govt's
Kristine Snow	SAIC TOCDF
Ron Jibson	QUESTAR
Ellen Echels	Wasatch Clean Air Coalition
[illegible]	[illegible]
Ernie Wessman	PacifiCorp/Utah Power
Lydia Salmon	Kennecott Utah Copper
Steve Alder	Utah County
Clyde Rhoad	YES! Environmental Inc.
Cheryl Heying	DAQ
[illegible]	Interplan

State of Utah

Utah Air Quality Board

Michael O. Leavitt
Governor

David B. George
Chair

John M. Veranth
Vice Chair

Richard W. Sprott
Executive Secretary

Karl F. Brooks
David B. George
James R. Horrocks
Dannie R. McConkie
Dianne R. Nielson
Richard R. Olson
Wayne M. Samuelson
JoAnn B. Seghini
Joseph D. Thompson
Jeffrey K. Utley

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AIR QUALITY BOARD MEETING

FINAL AGENDA

Tuesday, November 13, 2001
1:30 P.M.

168 N. 1950 W. (Building #2) Room 101

I. Call to Order
II. Date of Next Meeting
III. Approval of Minutes of the September 5, 2001, Board Meeting
IV. **Proposed for Public Comment: Operating Permit Program Proposed Fee for Fiscal Year 2003 (David Beatty)**
V. **Approval Order Modification:** Kennecott Utah Copper **(Nando Meli)**
VI. Information Items
   A. Conformity Update for Utah County **(Cheryl Heying)**
   B. Questar: New Gas Blend **(Ron Jibson, Questar)**
   C. Compliance Activities for August/September/October 2001 **(Jeff Dean)**
   D. HAPs Compliance Activities for August/September 2001 **(Bryce Bird)**
   E. Monitoring Data for September/October 2001 **(Bob Dalley)**
VII. Miscellaneous

In compliance with the Americans with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Charlene Lamph, Office of Human Resources, at 536-4413 (TDD 536-4414) at least five working days prior to the scheduled meeting/hearing.

- MINUTES -

UTAH AIR QUALITY BOARD MEETING
NOVEMBER 13, 2001

I. Call to Order

David B. George called the meeting to order at 1:30 p.m.

Board members present:

Karl F. Brooks	Jeffrey K. Utley	James R. Horrocks
David B. George	Dianne R. Nielson	Richard R. Olson

Board members participating via telephone:

JoAnn B. Seghini
Dannie R. McConkie
John M. Veranth

II. Date of Next Board Meeting

The next meeting of the Board will be held Wednesday, January 9, 2001, at 1:30 p.m. The Board will not meet in December.

III. Approval of Minutes of the September 5, 2001, Board Meeting

Richard Olson made the motion to approve the minutes of the September 5, 2001, Board meeting. Jeff Utley seconded the motion. The motion passed.

IV. Proposed for Public Comment: Operating Permit Program Proposed Fee for Fiscal Year 2003

Presenter: David Beatty, Manager, Operating Permits Section

The Operating Permits Program establishes an annual emissions fee to fund the cost of running the program. The fiscal year 2003 fee of $35.05/ton, which is being proposed, was calculated by taking the fiscal year 2002 proposed budget and increasing it by a personnel merit increase of 2.75%. The result is an estimate of $3,014,662 to fund the Operating Permit Program for fiscal year 2003.

Mr. Beatty explained the reasons behind the fee increase, which included a large increase in personnel costs due to a market comparability study which became effective at the beginning of fiscal year 2002.

This fee will be included in the Department's fee package that will be presented at a public hearing in December 2001. Staff recommends the Board propose this fee for public comment.

MOTION: JoAnn Seghini made the motion to take this fee to public comment. Dannie McConkie seconded the motion. The motion passed.

V. Approval Order Modification: Kennecott Utah Copper

Presenters: Nando Meli, Environmental Engineer; Lydia Salmon, Kennecott Utah Copper

Since Kennecott is a listed source in the PM10 SIP, Board approval is necessary before this AO can be issued. Kennecott has moved a soda ash handling system from the Copperton concentrator to the Bonneville primary crusher.

A public comment period was held and no comments were received. Staff recommends approval of this modification.

(At this point in the meeting, John Veranth joined the meeting by phone.)

MOTION: Karl Brooks made the motion to approve this approval order modification. Richard Olson seconded the motion. The motion passed.

VI. Information Items

A. Conformity Update

Cheryl Heying discussed a proposed schedule for the PM10 maintenance plan in Utah County. A draft maintenance plan will be presented to the Board on January 9, 2002. Ms. Heying explained that Utah is requesting redesignation to attainment for the PM10 National Ambient Air Quality Standard in Utah County, the history behind this request, and the necessary requirements for redesignation.

Dianne Nielson commended members of the Division of Air Quality, the Department of Transportation, EPA, and consultants for their work on this maintenance plan.

(David George commented that he recused himself from voting on the Kennecott approval order modification. He is employed by Kennecott)

B. Questar – New Gas Blend

Ron Jibson, General Manager of Questar, presented this item.

The composition of natural gas entering Questar's system will be changing—mixing high and low btu gas. To maximize the efficiency of appliances (mostly furnaces and some water heaters), Questar is developing a new range at which appliances should be set. The national safe operating range, as established by the American Gas Association, is between 980 and 1170 btu, which is the range Questar is recommending. The old safe operating range ran from 1020 to 1320 btu.

Residential users need to have furnaces and water heaters adjusted to accept this new operating range. If this is not done, it could increase the chance of a problem with carbon monoxide.

A discussion ensued regarding the effect of low btu gas on air quality. Mr. Jibson commented that, to date, no one has done a study which models the NOx or SOx emissions associated with a lower btu content (lower heat value). David George asked that if Questar becomes aware of information regarding the emissions associated with this new operating range, that DAQ be notified of the findings.

C. Compliance Activities

No questions or comments.

D. HAPS Compliance Activities

Bryce Bird noted a correction to the September information—no notices of violation.

E. Monitoring Data

Bob Dalley reviewed the monitoring data for September and October. Reporting of woodburning conditions will now include Cache County.

F. SIPs Update

This information was given in the Utah County update.

VII. Miscellaneous

Rick Sprott introduced Ernest Wessman, Vice President of Environmental Health and Safety at PacifiCorp, as the new Board member representing manufacturing, replacing Joseph Thompson.

Dianne Nielson extended an invitation to anyone interested in joining meetings of the Western Regional Air Partnership, which is a partnership of states and tribes in the western region that have been working since 1996 under the "WRAP" tag and before that as the Visibility Transport Commission, to adopt a regional program to handle haze and improve visibility in the West. There will be a WRAP meeting at the Hilton Hotel in Salt Lake City starting at 1:00 p.m. November 14, and 8:00-3:00 on November 15.

The meeting adjourned at 2:17 p.m.

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MEMORANDUM

TO: Air Quality Board DAQ-083-01

THROUGH: Richard W. Sprott, Executive Secretary
Air Quality Board

FROM: David Beatty, Manager
Operating Permits Section

DATE: October 29, 2001

SUBJECT: Proposed for Public Comment: Operating Permit Program Proposed Fee for Fiscal Year 2003

Background:

Title V of the Clean Air Act Amendments of 1990 (CAAA) requires the State of Utah to develop an Operating Permit Program (OPP) to include a fee system which is to be used to fund all direct and indirect costs associated with administering the OPP. Section 19-2-109.1 (4)(a) of the Utah Conservation Act authorizes the Air Quality Board (the Board) to propose to the legislature an annual emission fee that conforms to Title V of the CAAA for each ton of regulated pollutant.

Utah began collecting an emission fee of $7/ton of air pollution during fiscal year 1993 to fund development of the program. The fee was raised to $15/ton during fiscal year 1994 to fund continuing development and beginning implementation of the program. However, due to a rollover of existing funds from the previous year, the actual fee charged was $12.50/ton for fiscal year 1994. For fiscal year 1995 and again in fiscal year 1996, the fee was $21.70/ton. The fee was raised to $26.08/ton for fiscal year 1997, to $26.44 for fiscal year 1998, and to $27.75 for fiscal year 1999. For fiscal year 2000 the approved fee was $29.43/ton, and due to a surplus in fiscal year 1999, a rollover was applied to the funding requirements for fiscal year 2000 to reduce the actual fee charged to $26.53/ton, or $2.90 less than allowed by the legislature. In fiscal year 2001 the fee charged was $29.43, and the current fee for fiscal year 2002 is $31.22/ton.

During the November 1, 2000, Board meeting, Dianne Nielson informed the Board members that the Department of Human Resources Management (DHRM) completes studies each year to determine whether certain positions have corresponding pay rates with similar jobs in other states. The studies for that time period included environmental scientists and engineers. The

Board passed the motion to recommend the proposed fee "subject to a possible adjustment in accordance with DHRM's across-the-board recommendations for environmental scientists and engineers." The state legislature adopted the DHRM recommendation, and salary increases became effective July 1, 2001. The fee for fiscal year 2002 adopted by the legislature was not adjusted and was approved at the proposed rate of $31.22 per ton of emissions. The impact to the Operating Permit Program of these increases along with a merit increase is approximately $218,000 in salary expenses for fiscal year 2002 and beyond. The result is a forecasted shortfall in fiscal year 2002 and an increase in the fee proposal for fiscal year 2003 of $3.83 per ton of emissions.

Operating Permit Emission Fee for Fiscal Year 2003:

FY2003 Projected Salary + Benefits	$2,394,265	
FY2003 Merit Increase @ 2.75%	$65,842	
FY2003 8 Hour Extra Day Salary (2088 Hours) Included Above		
FY2003 Projected Vacancy Savings @ 2.5%	-$61,503	
FY2003 Projected Salary + Benefits		$2,398,605
FY2003 Indirect Costs (Using 13.06% From FY2002)	$313,258	
FY2003 Direct Costs	$302,800	
FY2003 Projected Total Expenditures		$3,014,662
FY2003 Projected Fee Tonnage (Using FY2002 Billing as Basis)	86,000	
FY2003 Proposed Fee Rate Per Ton of Emissions		**$35.05**

Therefore, staff recommends that the Board submit as part of the Department's fee schedule a proposed fee of **$35.05** for the Operating Permit Program for fiscal year 2003.

As part of the fee development process, the fee is included as part of the Department's fee schedule each fall. Additionally, a public hearing to allow public comment on the fee schedule for the entire department will be scheduled during November 2001.

A public comment period will be held to allow an opportunity for interested parties to comment on the Department fee schedule. Notice of the comment period and public hearing will be provided in the Legal Notices section of the major newspapers in the state.

Michael O. Leavitt
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DAQE-812-01
Project Code: N0572-012

MEMORANDUM

TO: Air Quality Board

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Nando Meli

DATE: October 15, 2001

SUBJECT: Move Lime Handling System from Copperton Concentrator to Bonneville Primary Crusher

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Kennecott Utah Copper Corporation (KUC) intends to move a soda ash handling system from the Copperton Concentrator and use it as a lime handling system at the Bonneville Primary Crusher. KUC plans to utilize the soda ash handling system currently permitted at the Copperton Concentrator by moving the system and associated pollution control device to the Bonneville Primary Crusher where it will be operated as the "Bonneville Primary Crusher Lime Handling System". The addition of lime at the Primary Crusher will alleviate problems currently encountered with excessively wet ore thus enhancing the economic viability of the North Concentrator operations. The emissions from the lime silo will be routed to the primary crusher baghouse via a duct emanating from the top of the silo extending down to the enclosed lime conveyor system. This modification will not result in any increase in emissions, change in pollutant characteristics or change in volumetric flow rate from the primary crusher baghouse stack.

The Bonneville Primary Crusher is a SIP source (Section IX, Part H, and Subparts H.2.b.BB) and is currently covered by the Approval Order DAQE-911-96, dated September 20, 1996. A public comment period was held on the Intent to Approve DAQE-582-01, dated July 19, 2001, and no comments were received.

The Copperton Concentrator is a SIP source (Section IX, Part H, and Subparts H.2.b.X) and is currently covered by the Approval Order DAQE-1062-95, dated November 17, 1995. A public comment period was held on the Intent to Approve DAQE-751-01, dated September 5, 2001, and no comments were received.

The Kennecott Bonneville Primary Crusher is a SIP source, and, therefore required to have Air Quality Board Approval before the AO can be issued. The New Source Review Section recommends that the board approve the modification of the Kennecott Bonneville Primary Crusher.

RWS:NM:re

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Richard W. Sprott
Director

State of Utah

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DAQE-751-01

September 5, 2001

Paula H. Doughty
Environmental Manager
Kennecott Utah Copper Corporation
8315 West 3595 South
P. O. Box 6001
Magna, Utah 84044-6001

Dear Ms. Doughty:

Re: Intent to Approve Relocation of Lime Handling System to Bonneville Primary Crusher From Copperton Concentrator, Salt Lake County - CDS A; NA; NSPS; MAINT: TITLE V MAJOR
Project Code: N0572-011

The attached document is an Intent to Approve for the above-referenced project. The Approval Order will only be issued following the Executive Secretary's evaluation and approval.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Nando Meli. He may be reached at (801) 536-4052.

Sincerely,

Rusty Ruby, Manager
New Source Review Section

RR:NM:re

cc: Salt Lake Valley Health Department
Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE RELOCATION OF LIME HANDLING SYSTEM TO BONNEVILLE PRIMARY CRUSHER FROM COPPERTON CONCENTRATOR

Prepared By: Nando Meli, Engineer
(801) 536-4052

INTENT TO APPROVE NUMBER

DAQE-751-01

Date: September 5, 2001

Kennecott Utah Copper Corporation

Source Contact
Bill Adams
(801) 569-7553

Richard W. Sprott
Executive Secretary
Utah Air Quality Board

Abstract

Kennecott Utah Copper Corporation (KUC) intends to move a soda ash handling system from the Copperton Concentrator and use it as a lime handling system at the Bonneville Primary Crusher. This modification will not result in any increase in emissions. Salt Lake County is a nonattainment area of the National Ambient Air Quality Standards (NAAQS) for PM_{10} and SO_2, and is a maintenance area for ozone. The New Source Performance Standards (NSPS) 40CFR Part 60, Subpart LL (Metallic Mineral Processing Plants) and Title V of the 1990 Clean Air Act applies to this source.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-4. A notice of intent to approve will be published in the Salt Lake Tribune on September 11, 2001. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-4. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This Approval Order (AO) applies to the following company:

   Site Office
   Kennecott Utah Copper Corporation
   P.O. Box 6001
   Magna, Utah 84044-6001

   Phone Number: (801) 569-7553
   Fax Number: (801) 569-6408

   PLANT LOCATION:

   Copperton Concentrator Facility, Copperton, Utah

   Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
   4,493 kilometers Northing, 407 kilometers Easting, Zone 12

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code Rule 307 (UAC R307), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence, unless specifically defined otherwise herein.

3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401, UAC.

4. Any future changes or modifications to the equipment and processes approved by this AO that could affect the emissions covered by this AO must be approved in accordance with R307-401-1, UAC.

5. All records referenced in this AO which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for the following minimum periods:

A.	All Records	Two years
B.	Emission inventories	Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.

6. Kennecott Utah Copper (KUC) shall conduct its operations of the Copperton Concentrator in accordance with the terms and conditions of this AO, which was written pursuant to KUC's Notice of Intent submitted to the Division of Air Quality (DAQ) on September 16, 1999, and additional information submitted to the DAQ on November 4, 1999, January 25, 2001, January 29, 2001, February 21, 2001, April 24, 2001, May 11, 2001, June 13, 2001, July 5, 2001, and August 10, 2001.

7. Regardless of any inconsistency between conditions of this AO and Section IX, Part H, and Subparts H.2.b.X of Section IX, Part H (Emission Limitations) of the SIP, this AO shall take precedence as provided by R307-305-2, UAC. The language of Section IX, Part H, 2.a and Section IX, Part H, 2.b.X have been incorporated into this AO.

8. This AO shall replace the AO (DAQE-1062-95) dated November 17, 1995.

9. The approved installations shall consist of the following equipment or equivalent*:

A. Feed Molybdenite Dryers (up to three) with Venturi Scrubbers
B. Feed Molybdenite Dryer Heaters (one for each Feed Molybdenite Dryer)
C. Molybdenite Rotary Kiln with Venturi Scrubber
D. Molybdenite Rotary Kiln Heater
E. Product Molybdenite Dryers (2) with Venturi Scrubbers
F. Steam Boiler (10,000 lb/hour)
G. Molybdenite Storage Bins (6) and Drum Loading Facility, with Baghouse
H. Molybdenite Storage Bins (2) with Baghouse
I.. Molybdenite Bag Loading Facility
J. Vacuum Cleaning System with Baghouse
K. Metallurgical Laboratory with Baghouses (2)
L. Moly Water Treatment Soda Ash Silo Baghouse
M. Cyanide Leach Circuit
N. Degreasing parts washers

O. Gasoline fueling stations
P. Other Associated Equipment

* Equivalency shall be determined by the Executive Secretary.

Limitations and Tests Procedures

10. Emissions to the atmosphere from the indicated emission points shall not exceed the following rates and concentrations:

A. Feed Molybdenite Dryers (each)

PM_{10} ..... 0.25 lbs/hr ..... 0.016 grains/dscf

B. Molybdenite Rotary Kiln

PM_{10} ..... 0.20 lbs/hr ..... 0.016 grains/dscf
SO_2 ..... 26.2 lbs/hr .... 1,455. ppmdv (3-hr running average)

C. Product Molybdenite Dryers (each)

PM_{10} ..... 0.15 lbs/hr ..... 0.016 grains/dscf

11. Stack testing to show compliance with the emission limitation of condition #10 shall be performed in accordance with 40 CFR 60, Appendix A; 40 CFR 51 Appendix M and as directed by the Executive Secretary. The following emission points shall be tested for the indicated air contaminants at the indicated schedule:

Source		Pollutant	Test Every
A.	Feed Molybdenite Dryers	PM_{10}	Test every five years
B.	Molybdenite Rotary Kiln	PM_{10}	Test every five years
		SO_2	CEM, five years Relative Accuracy Test (condition 12)
C.	Product Molybdenite Dryers	PM_{10}	Test every five years

If a unit is not in operation when a stack test is due, the test may be postponed until no later than 180 days after the unit resumes operation.

Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2

PM_{10}

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. All particulate captured shall be considered PM_{10}.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Executive Secretary.

The back half condensibles shall also be tested using the method specified by the Executive Secretary. The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

Sulfur Dioxide (SO_2)

40 CFR 60, Appendix A, Method 6, 6A, 6B or 6C

Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and

any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years. If the maximum production rate achieved in the previous 3 years can not be achieved at the time of the test, the following procedure shall be followed:

1) Testing shall be at no less than 90% of the production rate achieved during the last 90 days prior to the test.

2) If the test is passed, the source may operate at any production rate up to 110% of the tested achieved rate, but not more until the source is successfully tested at a higher rate.

3) The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. If the test is passed, the source may operate at any production rate up to 110% of the tested achieved rate, but not more until the source is successfully tested at a higher rate.

12. Visible emissions from the following emission points shall not exceed the following values:

A. Baghouse Stack on Molybdenite Storage Bins/Drum Loading (Subject to NSPS, Subpart LL) - 7% opacity

B. Baghouse on Molybdenite Storage Bins (subject to NSPS, Subpart LL) - 7% opacity

C. Fugitive emission points (subject to NSPS, Subpart LL) - 10% opacity

D. All other points - 10% opacity

Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

13. The Molybdenite Rotary Kiln shall be operated as a dryer with water or alkaline solution as the Scrubbing Solution in the venturi scrubber.

If the temperature of the molybdenite product exiting the rotary kiln exceeds 450 °F for more than one hour at a time, as measured by the product temperature probe, the rotary kiln is operating as a heat treater.

The rotary kiln shall not be operated as a heat treater more than 6570 hours annually. When used as a heat treater, the following measures shall be taken:

A. The SO_2 scrubber will be fully activated.

B. The installed continuous emissions monitor (CEM) shall be used to determine compliance with the SO_2 limitation (26.2 lb/hr, three hour running average, calculated hourly).

C. The monitor shall meet all requirements listed in Section R307-170, UAC.

D. Quarterly reports of the results of continuous emissions monitoring shall be submitted to the Executive Secretary during any quarter in which the heat treatment process was used. The reports shall include all excess emission episodes.

E. The CEM shall be calibrated and the results reported on the following schedule:

1) Quarterly calibration results submitted with the quarterly reports.

2) Calibration of the CEM within 24 hours of any transition of the rotary kiln from dryer mode to heat treater mode or heat treating operations shall be discontinued.

F. All continuous monitoring data shall be kept for a minimum of two years after the date on which emissions occurred and shall be made available to the Executive Secretary upon request.

Compliance with the annual limitation on operating hours as a heat treater shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total based on the first day of each month using data from the previous 12 months. Records of temperature shall be kept for all periods when the molybdenite rotary kiln is in operation. Records of temperature, and rolling 12-month totals of operating hours as a heat treater and as a dryer shall be made available to the Executive Secretary or his representative upon request and shall include a period of two years ending with the date of the request.

14. Baghouses shall be operated as follows:

A. Whenever the moly water treatment soda ash storage silo is being filled, all displaced air shall pass through the bin vent baghouse.

B. Whenever the vacuum cleaning system is in use, all exhaust gases from the vacuum cleaning system shall pass through the baghouse.

C. All exhaust gases from the metallurgical laboratory sample preparation hoods shall pass through an operating baghouse.

D. Whenever the molybdenite storage bins (6) and/or drum loading is in use, all air drawn from the facilities shall pass through an operating baghouse.

E. Whenever the molybdenite storage bins (2) are in use, all air drawn from the facilities shall pass through an operating baghouse.

Fuels

15. The owner/operator shall use only natural gas as a primary fuel and LPG as a backup fuel. If any other fuel is to be used, an AO shall be required in accordance with R307-1-3.1, UAC.

16. Natural gas consumption shall not exceed the following limitations for the equipment listed:

Molybdenite Rotary Kiln	4.8×10^6 SCF per 30 days
Feed Molybdenite Dryers (ea)	4.1×10^6 SCF per 30 days
Steam Boiler	12.0×10^6 SCF per 30 days

Records of consumption shall be kept for all periods when the plant is in operation. Records of consumption shall be made available to the Executive Secretary upon request and shall include a period of two years ending with the date of the request. Natural gas shall be metered at each location.

Federal Limitations and Requirements

17. In addition to the requirements of this AO, all provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subparts A and LL, 40 CFR 60.1 to 60.18 and 40 CFR 60.380 to 60.386 (Standards of Performance for Metallic Mineral Processing Plants) apply to this installation.

18. For sources that are subject to NSPS visible emission observations that are performed during the initial compliance inspection shall consist of 30 observations of six minutes each in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9. It is the responsibility of the owner/operator of the source to supply these observations to the Executive Secretary. A certified observer must be used for these observations. Emission points that are subject to the initial observations are:

A. Molybdenite Rotary Kiln
B. Feed Molybdenite Dryers
C. Product Molybdenite Dryer
D. Storage and Shipping Facilities

Monitoring - General Process

19. The following operating parameters shall be continuously monitored:

A. Pressure drop through every wet scrubber

B. Liquid flow rate through every wet scrubber

C. pH in flotation circuit upstream of leach circuit

D. Temperature of product molybdenite exiting the rotary kiln

All of the wet scrubbers shall comply with 40 CFR 60.384 and 60.385.

20. The pH of the cyanide leach circuit shall be maintained at a value of no less than 9.5.

Roads and Fugitive Dust

21. The facility shall abide by all applicable requirements of UAC R307-205 and R307-309 for PM_{10} nonattainment areas for Fugitive Emission and Fugitive Dust sources.. The provisions of R307-205 or 309 shall not apply to any sources for which limitations for fugitive dust or fugitive emissions are assigned pursuant to R307-401 or R307-305 nor shall they apply to agricultural or horticultural activities.

Records & Miscellaneous

22. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years.

23. The owner/operator shall comply with UAC, R307-150 Series. Inventories, Testing and Monitoring.

24. The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns..

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of

Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: http://www.eq.state.ut.us/eqair/aq_home.htm

The annual emission estimations below include point source, fugitive emissions, fugitive dust, grandfathered emissions etc. and do not include road dust, and tail pipe emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, nonattainment area, maintenance area, and Title V source requirements of the UAC R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the Copperton Concentrator are currently calculated at the following values:

	Pollutant	Tons/yr
A.	PM_{10}	8.54
B.	SO_2	86.40
C.	NO_x	17.70
D.	CO	14.90
E.	VOC	25.70
F.	HCN	2.24

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final Approval Order.

Sincerely,

Rusty Ruby, Manager
New Source Review Section

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Richard W. Sprott
Director

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

150 North 1950 West
P.O. Box 144820
Salt Lake City, Utah 84114-4820
(801) 536-4000 Voice
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(801) 536-4414 T.D.D.
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FILE

DAQE-582-01

July 19, 2001

Paula H. Doughty
Environmental Manager
Kennecott Utah Copper Corporation
8315 W. 3595 S.
P.O. Box 6001
Magna, Utah 84044-6001

Dear Ms. Doughty:

Re: Intent to Approve for Moving Lime Handling System from Copperton Concentrator to Bonneville Crusher
Salt Lake County, CDS-A1, Non-Attainment, Title V
Project No. N0572-012

The attached document is an Intent to Approve for the above-referenced project. The Approval Order will only be issued following the Executive Secretary's evaluation and approval.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Nando Meli. He may be reached at (801) 536-4052.

Sincerely,

Rusty Ruby, Manager
New Source Review Section

RR:NM:dn

cc: Salt Lake City-County Health Department
Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE FOR MOVING LIME HANDLING SYSTEM TO BONNEVILLE PRIMARY CRUSHER FROM COPPERTON CONCENTRATOR

Prepared By: Nando Meli, Engineer
(801) 536-4052

INTENT TO APPROVE NUMBER

DAQE-582-01

Date: July 19, 2001

Kennecott Utah Copper Corporation

Source Contact
Bill Adams
(801) 569-6408

Richard W. Sprott
Executive Secretary
Utah Air Quality Board

Abstract

Kennecott Utah Copper Corporation (KUC) intends to move a soda ash handling system from the Copperton Concentrator and use it as a lime handling system at the Bonneville Primary Crusher. KUC plans to utilize the soda ash handling system currently permitted at the Copperton Concentrator by moving the system and associated pollution control device to the Bonneville Primary Crusher where it will be operated as the "Bonneville Primary Crusher Lime Handling System". The addition of lime at the Primary Crusher will alleviate problems currently encountered with excessively wet ore thus enhancing the economic viability of the North Concentrator operations. The emissions from the lime silo will be routed to the primary crusher baghouse via a duct emanating from the top of the silo extending down to the enclosed lime conveyor system. This modification will not result in any increase in emissions, change in pollutant characteristics or change in volumetric flow rate from the primary crusher baghouse stack. Salt Lake County is a Nonattainment area of the National Ambient Air Quality Standards (NAAQS) for PM_{10} and SO_2, and is a Maintenance area for Ozone. Title V of the 1990 Clean Air Act applies to this source.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A public comment period will be held in accordance with UAC R307-401-4. A notice of intent to approve will be published in the Salt Lake Tribune and Deseret News on July 26, 2001. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-4. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This AO applies to the following company:

   Site Office

   Kennecott Utah Copper Corporation
   P.O. Box 6001
   Magna, Utah 84044-6001
   Phone Number (801) 569-7553
   Fax Number (801) 569-6408

   PLANT LOCATION:

   Bonneville Concentrator Facility, Magna, Utah

   Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
   4,506 kilometers Northing, 405 kilometers Easting, Zone 12

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code Rule 307 (UAC R307), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence, unless specifically defined otherwise herein.

3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401, UAC.

4. Any future changes or modifications to the equipment and processes approved by this AO that could affect the emissions covered by this AO must be approved in accordance with R307-401-1, UAC.

5. All records referenced in this AO which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for a minimum period of two years. Emission inventories shall be kept for a period of five years from the due date of each emission statement or until the next inventory is due, whichever is longer.

6. Kennecott Utah Copper (KUC) shall install and operate the lime handling system and shall conduct its operations of the Bonneville Concentrator and the Magna Sand Tower in accordance with the terms and conditions of this AO, which was written pursuant to KUC's NOI submitted to the Division of Air Quality (DAQ) on September 16, 1999, and additional information submitted to the DAQ on November 4, 1999, January 25, 2001, January 29, 2001, February 21, 2001, April 24, 2001, May 11, 2001, and June 13, 2001.

7. Regardless of any inconsistency between conditions of this AO and Section IX, Part H, and Subparts H.2.b.BB of Section IX, Part H (Emission Limitations) of the SIP, this AO shall take precedence as provided by R307-305-2, UAC. The language of Section IX, Part H, 2.a and Section IX, Part H, 2.b.BB have been incorporated into this AO.

8. This AO shall replace the AO (DAQE-911-96) dated September 20, 1996.

9. The approved installations shall consist of the following equipment or equivalent*:

   A. Primary crusher and primary crusher lime handling system, both controlled by the primary crusher reverse jet Steelcraft baghouse

   B. Syntron feeder with scrubber

   C. Secondary crusher
   Secondary crusher reverse jet Steelcraft baghouse

   D. Secondary crusher - Screen and conveyor
   Secondary crusher - Screen and conveyor reverse jet Steelcraft baghouse

E. Scissor belt with baghouse

F. Tertiary crusher
Tertiary crusher reverse jet Steelcraft baghouse

G. Tertiary discharge
Tertiary discharge reverse jet Steelcraft baghouse

H. Fine ore transfer and storage

I. Fine ore storage (3 units)

J. Fine ore feeder floor discharge (4 units)

K. Magna Sand Tower with baghouse
Magna Sand Tower Torit cabinet collector baghouse

L. Grinding building lime handling system with bin vent baghouse

M. Various degreasing parts washers

N. Gasoline fueling stations

O. Other associated equipment

* Equivalency shall be determined by the Executive Secretary.

Limitations and Tests Procedures

10. At all times PM_{10} emissions to the atmosphere from the indicated emission point shall not exceed the following rates and concentrations:

Source	lbs/hr	grains/dscf (68°F, 29.92 in Hg)
Primary Crusher	6.0	0.016
Syntron Feeder	2.4	0.016
Secondary Crusher	4.8	0.016
Secondary Crusher - Screen & Conveyor	4.6	0.016
Scissor Belt	0.6	0.016
Tertiary Crusher	4.3	0.016
Tertiary Discharge	3.6	0.016

11. Stack testing to show compliance with the PM_{10} emission limitations stated in the above condition shall be performed as specified below:

	Source	Method	Retest
A.	Primary Crusher with lime handling system	201/201a	every year
B.	Syntron Feeder	201/201a	every 3 years
C.	Secondary Crusher	201/201a	every 3 years
D.	Secondary Crusher - Screen and Conveyor	201/201a	every 3 years
E.	Scissor Belt	201/201a	every 3 years
F.	Tertiary Crusher	201/201a	every 3 years
G.	Tertiary Discharge	201/201a	every 3 years

Initial testing has been completed.

If a unit is not in operation when a stack test is due, the test may be postponed until no later than 180 days after the unit resumes operation.

Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

The production rate during all compliance testing shall be no less than 90% of the production rate at which the facility will normally operate.

Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location

Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2

$\underline{PM_{10}}$

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. All particulate captured shall be considered $\underline{PM_{10}}$.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Executive Secretary.

The back half condensibles shall also be tested using the method specified by the Executive Secretary. The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

12. Conditions on Fine Ore Transfer and Storage (Emission Unit NOC008),
Fine ore storage (3 units), and
Fine ore feeder floor discharge (4 units):

All air drawn by fans from the emission unit shall pass through a properly maintained and operated baghouse.

13. Whenever the primary crusher lime storage silo is being filled, all displaced air shall pass through the primary crusher baghouse. Whenever the grinding building lime storage silo is being filled, all displaced air shall pass through the bin vent baghouse.

14. Visible emissions from the following emission points shall not exceed the following values:

A. All Baghouses, scrubbers, screens, and conveyor transfer points - 10% opacity
B. All crushers, and fugitive emissions - 15% opacity
C. All diesel engines, conveyor drop points, an all other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

15. The ore throughput of the primary crusher shall not exceed the following limits:

A. 12,5000,000 tons per rolling 12-month period

B. 2,000 tons per hour based on a 24-hour average

To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Ore throughput shall be determined by examination of concentrator plant records. Records of throughput shall be kept for all periods when the plant is in operation. The records shall be kept on a daily basis.

16. The total base acreage of the outdoor storage pile(s) shall not exceed 6.0 acres.

Roads and Fugitive Dust

17. Ore reporting to the outdoor storage pile(s) shall be watered to minimize generation of fugitive dusts as dry conditions warrant or as determined necessary by the Executive Secretary.

18. The facility shall abide by all applicable requirements of UAC R307- 205 and R307-309 for PM_{10} nonattainment areas for Fugitive Emission and Fugitive Dust sources.. The provisions of R307-205 or 309 shall not apply to any sources for which limitations for fugitive dust or fugitive emissions are assigned pursuant to R307-401 or R307-305 nor shall they apply to agricultural or horticultural activities.

Records & Miscellaneous

19. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years.

20. The owner/operator shall comply with UAC, R307-150 Series, Inventories, Testing and Monitoring.

21. The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the DAQ. The Utah Administrative Code R307 rules used by DAQ, the NOI guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:
http://www.eq.state.ut.us/eqair/aq_home.htm

The annual emission estimations below include point source, fugitive emissions, fugitive dust, grandfathered emissions, and do not include road dust, and tail pipe emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, nonattainment area, Maintenance area, and Title V source requirements of the UAC R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the Bonneville Concentrator are currently calculated at the following values:

	Pollutant	Tons/yr
A.	PM_{10}	124.63
B.	VOC	3.00

The DAQ is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Sincerely,

Rusty Ruby, Manager
New Source Review Section

Proposed Schedule for PM10 Maintenance Plan in Utah County

Significant Dates:

Stakeholder Meeting	.....	week of 12/17/01
Interagency Meeting	.....	week of 12/17/01
Air Quality Board Meeting	.....	week of 1/2/02
Begin Public Comment	.....	2/1/02

EPA Begins its Review on this date as well

State Comment Period lasts 30 days

Major Tasks:

Finish the written document 12/14/01

CMB Modeling Results	11/30/01
Present Monitored Data	12/7/01
Inventory Finalized	12/7/01
Emission Limits Section	12/7/01
Contingency Measures	12/7/01
UAM Modeling Results	12/14/01

Technical Support Compiled 1/31/02

Outline: PM10 Maintenance Plan

Introduction

In this section, we state that the State of Utah is requesting redesignation to Attainment for the PM10 National Ambient Air Quality Standard (NAAQS) in Utah County. We summarize that this request for redesignation includes a demonstration that we have attained the NAAQS and a Maintenance Plan (MP) that demonstrates that we will be able to meet the NAAQS for 10 years from when EPA approves the MP. Finally, it will state that, for purposes of conformity, this MP also includes a specific budget for the MPO to use in their conformity determinations from the end of the MP through 2030 which has been requested by the Mountainland Association of Governments (MAG). This section will also include a table of all the requirements of the Clean Air Act and EPA guidance on redesignations with a brief description of the requirement and a reference to where that is addressed in the MP.

History

In this section, we will include an historic background leading up to the development of the MP, including the development of the PM10 NAAQS in 1987, the areas initial designation as a Moderate Area under that standard, the development of the original PM10 SIP and its subsequent approval by EPA. There will also be a discussion of the submittal of the one-year extension allowed in the Act for areas that were meeting the NAAQS but did not yet have the three years worth of data necessary to demonstrate attainment by the mandatory 12/31/94 date. Finally, there will be a brief discussion of the recent actions by EPA to approve those requests for extensions of the attainment date and EPA's finding that the area has, indeed, attained the NAAQS.

Pre-requisites for Redesignation:

The Clean Air Act allows (does not require) a state to request redesignation from nonattainment to attainment if they meet five criteria. This section outlines those criteria and discusses how the State has met them.

Demonstration of Attainment

In this section, we will cite the criteria for demonstrating attainment of the NAAQS. We will note that in the Technical Support Document (TSD), we include data from 1993 through the present showing that we have met this requirement by the time required in the Act and for and additional six years. In the MP itself, we will include several charts and graphs and data tables showing the data and trends from the monitors in Utah County. We are also required to demonstrate that our monitoring network is adequate and representative of the area. In this section, we will reference our annual Monitoring Network Review which is submitted to EPA and approved.

Fully Approved SIP

In this section, we will cite the reference for EPA's full approval of the SIP for Utah County.

Demonstration That All Part D and Section 110 Requirements are Met

Part D and Section 110 of the Clean Air Act list the requirements for states to meet to have a fully approved SIP. Although the fact that EPA fully approved our SIP should be a *de facto* demonstration of this, we still are required to demonstrate it. We will list the 22 specific requirements with a brief summary of how we have met each.

Demonstration That Improvements are Permanent and Enforceable

Using histograms , etc., of the three highest and annual average monitoring values for each monitor, we will show that the monitored PM10 concentrations have continued downward since the application of RACT in the original PM10 SIP.

We will list our existing rules and controls as contained and implemented in the PM10 SIP. We will describe our NSR permitting program and demonstrate how that helps us attain and maintain compliance with the NAAQS. Finally, we will state that these controls are permanent because the controls in the current SIP are carried forward in the MP. We will discuss actions taken previously by the Board to keep the nonattainment area requirements in place even after redesignation in order to avoid the back-sliding provisions in the Act.

We will demonstrate the all the improvement we have seen in the air quality was not due to an economic slowdown – including citing the enormous economic growth we have experienced over the past decade as proof that the plan actually worked.

Maintenance Plan Required

This will introduce the Maintenance Plan that will follow.

The Maintenance Plan

Statutory Requirements

In this section, we will begin by citing the statutory requirements for a redesignation, although they are very elemental – that we must show clean air for 10 years and commit to re-evaluate the whole thing after eight year and have a new MP to EPA that they can approve before the 10-year life of the current MP is over; a commitment that if we violate the PM10 NAAQS after the MP is approved, we will implement contingency measures contained in the Plan; and that all the requirements in our SIP will continue to apply until such time as EPA approves the MP. We will also re-emphasize that the Board has already changed our rules so that these requirements don't even go away then.

Emissions Inventories

The MP is required to specify the emissions inventory that is used to demonstrate that the state has attained the NAAQS. This section will include a summary table of the inventories used in the modeling. The actual inventory and all of the documentation for it will be included in the TSD. For CMB, the attainment inventory will be the projection year inventories with allowable numbers included for all industries. For UAM-Aero, it will be the 1999 inventory (based on actual emissions) and the projections based on the 1999 inventory.

This section will include a summary of why the State chose to use "actual" emissions for the UAM-Aero modeling instead of "Allowable" or "Potential to Emit (PTE)." This will include a discussion of aerosol chemistry and other concepts basic to the model. It will also discuss the concept provided for in the modeling protocol that "allowable" or "PTE" emissions would be used for hot-spot modeling analyses of major sources of primary PM10 emissions only if the UAM-Modeling showed PM10 concentrations in a given grid cell to be above a certain trigger level.

Mobile Source Inventories / Modeling

The State uses mobile source inventories (base-year and projections) provided by MAG in developing this MP. MAG will be providing all of the documentation and technical support for their inventories, and will address any concerns regarding those inventories during the hearing process.

The plan will discuss the use of MobileVI to model mobile source emissions instead of MobileV. Throughout the process of developing this plan, EPA has told us that we should use MobileVI because it should be approved soon. Using MobileVI is the only way the State can take advantage of several new mobile source control strategies (i.e., Tier II cars, On-Board Diagnostics, etc.). This was important enough to EPA that the State was allowed to be one of the two Beta-testers / de-buggers for the program in the country. We will also note that, should we fail to use MobileVI, we will soon be right back in this same position of having to revise the SIP so it will be built on the same mobile model the transportation planners use in their conformity determinations.

Computer Modeling Decision

Until the MP document is actually printed, we will be developing both the CMB and UAM-Aero modeling documentation necessary to go into the plan. It is anticipated that one will go into the actual MP to fulfill the federal requirement to demonstrate maintanence, and the other will be put into the TSD as a corroborative demonstration that, indeed, the area will maintain attainment of the NAAQS.

At the current time, both models demonstrate that no additional controls are required in Utah County through the 10 years of the MP, and are not required until out in the range of 2020 to 2030. Both models have both their strong and

weak points. This section of the MP will discuss those points and will justify the decision that is made for inclusion of one or the other.

CMB Modeling Summary

Next, we will summarize the modeling that has been done to demonstrate that we will be able to maintain attainment of the NAAQS for the 10 years required in the Act. This will be the meat of the entire document, and the most scrutinized. We will note that EPA guidance allows the use of the same model used in the approved SIP "*if the model is still current and none of the basic assumptions have changed.*" If CMB is used, we will discuss why we feel that the model is still the best tool to use even though we have changed some of the basic assumptions, including a whole new base-year inventory, the version of the mobile and CMB models, some control efficiencies, and some assumptions used to allocate secondary emissions throughout the county.

UAM-Aero Modeling Summary

We will then discuss the process we have followed in developing the UAM-Aero modeling demonstration as requested by EPA. We will discuss how this model takes much of the "guess work" out of apportioning the impact of the NOx and SOx by looking at the chemistry that occurs in the atmosphere. We will discuss the development of wind fields using a relatively new meteorological model, MM5, to address the complex terrain and meteorology along the Wasatch Front. We will also discuss the processing of our inventory using a modeling pre-processor, SMOKE, to help grid our inventory so that, unlike using CMB, a 100 ton/year NOx source that is 20 miles from downtown Provo will not have just as much impact as one located in downtown Provo.

Modeling Results

This section will include tables, charts, and graphs of the modeling results based on which ever model is used in the final MP.

Conformity Budget for 2013 – 2030

As mentioned above, the Act only *allows* EPA to approve a Maintenance Plan for ten years. However the Municipal Planning Organization is required to go out for 20 years in their long-range plans. EPA requires the state to explicitly specify the mobile source budget to be used for conformity purposes for those years past the 10 years of the plan. The plan will have a table listing the primary, SOx, and NOx conformity budgets for the years 2013-2030.

Point Source Controls / Emissions Limitations

This section will replace the current Part H of the Utah SIP where the operating conditions, emissions limits, testing, and other minutia are listed in great detail. In this section, we will discuss how we have identified the significant limits from the existing regulatory framework for each source. These SIP limits are reflected in the modeling.

Future Control Measures

As mentioned above, both models show that we do not need any additional control strategies through the Maintenance Plan portion of the plan. Both also show that something additional is required from 2020 through 2030. After consultation with the MAG, they have agreed to supply proposed controls that can be implemented to demonstrate attainment of the NAAQS in those out years. These controls do not have to be implemented now; nor do the rules implementing them have to be specifically adopted at this time. All that is required is enough description of the proposed programs to allow the inventories in the future year to be reasonably changed to reflect the implementation of those strategies. At this time, those controls discussed have been a significant road-sweeping program and enhancement of the wood-burning control program through the use of county / city employees to enforce the no-burn requirements or a mandatory replacement program for all woodburning devices.

Contingency Measures

The State is required to identify measures that will be implemented if the area should monitor a violation of the NAAQS after the MP has been approved by EPA. These measures need to be implemented quickly. The MP has to contain a schedule for their implementation after they have been triggered by the violation of the NAAQS. The three items being considered at this time include 1) requiring the implementation of the street sweeping program required above in the "Future Control Measures" section; 2) using local officials to assist with the enforcement of the woodburning prohibitions during the red-burn days, and 3) lowering the trigger level for calling a red-burn day. None of these would require a long lead time.

This section will also commit the State to review our PM10 SIP and the Maintenance Plan and identify any control strategies which have not been previously implemented and commit to implement them immediately.

Progress Tracking

The plan will be required to commit to track our progress. This means that we will need to commit to maintaining our PM10 monitoring network and get our PM10 monitoring data into the EPA's database as required by law. We may also include a commitment to provide them with our tri-annual emissions inventory for PM10 to demonstrate that it is remaining below what is projected in the SIP. While it is not required, it may provide EPA and the State with a significant degree of assurance that we will not wait until there is a significant problem in the future before we take care of it.

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Richard W. Sprott
Director

State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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(801) 536-4414 T.D.D.

MEMORANDUM

TO: Air Quality Board DAQ-086-01

FROM: Richard W. Sprott, Executive Secretary

DATE: October 29, 2001

SUBJECT: Compliance Activities - August 2001

Annual inspections conducted:

A	19
SM	28
B	21

Initial compliance inspections conducted:

A	5
SM	2
B	2

On-site stack test audits conducted	7
Stack test report reviews	12
On-site CEM audits conducted	5
Emission reports reviewed	9
Oxy fuels inspections conducted	0
[1]Miscellaneous inspections conducted	16
Complaints received	34

VOC inspections:

Tankers	2
Degreasers	9
Paint booths	27

[1]Miscellaneous inspections include, e.g., surveillance, level I inspections, complaints, on-site training, tanker vapor certifications, dust patrol, smoke patrol, open burning, etc.

Source Compliance Action Notices issued 0

Notices of Violation issued 4

Settlement Agreements resolved 3

Penalties collected $9,800

Notices of Violation issued to:

Central Utah Correctional Facility
ISG Resources, Inc.
Mikohn Gaming Corp.
Kennecott Utah Copper Corp.

Settlement Agreements reached:

Semling-Menke Co. of Utah	$ 1,800
Staker Paving	4,500
Nelson Metals	3,500

State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Michael O. Leavitt
Governor
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Salt Lake City, Utah 84114-4820
(801) 536-4000 Voice
(801) 536-4099 Fax
(801) 536-4414 T.D.D.

DAQC-1562-2001

MEMORANDUM

TO: Air Quality Board

FROM: Richard W. Sprott, Executive Secretary

DATE: October 29, 2001

SUBJECT: Compliance Activities - September 2001

Annual Inspections Conducted:

A	25
SM	15
B	20

Initial Compliance Inspections Conducted:

A	2
SM	2
B	2

On-Site stack test audits conducted: 13
Stack test report reviews: 34

On-site CEM audits conducted: 12
Emission reports reviewed: 0

Oxy fuels inspections conducted: 0

[1]Miscellaneous inspections conducted: 11

Complaints received: 38
VOC inspections:

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[1]Miscellaneous inspections include, e.g., surveillance, level I inspections, complaints, on-site training, tanker vapor certifications, dust patrol, smoke patrol, open burning, etc.

Tankers 4
Degreasers 11
Paint Booths 5

Source Compliance Action Notice issued 2

Notices of Violation issued 5

Settlement Agreements resolved 3

Penalties Collected $15,050

Notices of Violations issued to:

Utah Metal Works
Western Pipe Coaters & Engineers
Lagoon Corporation
Construction Recycling, Inc.
Central Utah Correctional Facility

Settlement Agreements Reached:

Ralph Smith Co. $5,000
Brigham Young University 2,250
Stericycle 7,800

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

Richard W. Sprott
Director

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DAQC-1732-2001

MEMORANDUM

TO: Air Quality Board

FROM: Richard W. Sprott, Executive Secretary

DATE: November 6, 2001

SUBJECT: Compliance Activities - October 2001

Annual Inspections Conducted:

A	2
SM	2
B	15

Initial Compliance Inspections Conducted:

A	0
SM	0
B	0

On-Site stack test audits conducted:	15
Stack test report reviews:	9
On-site CEM audits conducted:	10
Emission reports reviewed:	0
Oxy fuels inspections conducted:	0
[1]Miscellaneous inspections conducted:	17

[1]Miscellaneous inspections include, e.g., surveillance, level I inspections, complaints, on-site training, tanker vapor certifications, dust patrol, smoke patrol, open burning, etc.

Complaints received: 41
VOC inspections:

Tankers 0
Degreasers 3
Paint Booths 1

Source Compliance Action Notice issued 4

Notices of Violation issued 9

Settlement Agreements resolved 4

Penalties Collected $11,000

Notices of Violations issued to:

Springville City, Inc.
U.S. Army Dugway Proving Ground
Geoworks
Sunroc Corp.
Ashdown Brothers Const.
Logan City Light & Power
Loyd H. Facer Trucking
Legrand Johnson Company
Pitt-Des Moines, Inc.

Settlement Agreements Reached:

Salt Lake County Public Works $7,000
Cardwell Distributing $1,000
Mikohn Gaming Corp. $1,000
Thatcher Company $2,000

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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MEMORANDUM

TO: Utah Air Quality Board DAQH-0576-01

FROM: Richard W. Sprott, Executive Secretary

DATE: September 18, 2001

SUBJECT: Hazardous Air Pollutant Section Compliance Activities - August, 2001

	7/01	8/01
Asbestos Demolition/Renovation Inspections	10	6
Asbestos in Schools Inspections	1	4
MACT Compliance Inspections	6	10
Other NESHAP Inspections	1	3
State Rules (Only) Inspections	0	0
Asbestos Notifications Approved	89	47
Asbestos Phone Calls Answered	309	238
Asbestos Individual Certifications: Approved/Disapproved	65/0	38/0
Company Certifications/Re-certifications	0/2	1/1
Alternate Asbestos Work Practices: Approved/Disapproved	0/0	1/0
Lead Based Paint (LBP) Inspections	0	0
LBP Notifications Approved	0	0
LBP Phone Calls Answered	117	128
LBP Letters prepared and mailed	71	99
LBP Courses Received/Approved	0/0	0/0
LBP Course Audits	0	0
LBP Certifications Approved/Disapproved	10/1	4/0
LBP Company Certifications	1	2
Notices of Violation Issued	2	2
Notices of Noncompliance (NON)	0	0
SCANS (warning letters) Issued	7	3
Settlement Agreements Finalized	0	0
Penalties Agreed to	$0	$74,000

Notice of Violation issued to: Rocky Mountain Asbestos Abatement - Asbestos work practices
Steve Luchsinger and Mark Yankee - Asbestos work practices

Settlement Agreements Reached: RT Manufacturing

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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MEMORANDUM

TO: Utah Air Quality Board DAQH-0668-01

FROM: Richard W. Sprott, Executive Secretary

DATE: November 5, 2001

SUBJECT: Hazardous Air Pollutant Section Compliance Activities - September, 2001

	8/01	9/01
Asbestos Demolition/Renovation Inspections	6	1
Asbestos in Schools Inspections	4	2
MACT Compliance Inspections	10	5
Other NESHAP Inspections	3	2
State Rules (Only) Inspections	0	0
Asbestos Notifications Approved	47	37
Asbestos Phone Calls Answered	238	236
Asbestos Individual Certifications: Approved/Disapproved	38/0	18/0
Company Certifications/Re-certifications	1/1	3/0
Alternate Asbestos Work Practices: Approved/Disapproved	1/0	0
Lead Based Paint (LBP) Inspections	0	0
LBP Notifications Approved	0	0
LBP Phone Calls Answered	128	136
LBP Letters prepared and mailed	99	177
LBP Courses Received/Approved	0/0	0/0
LBP Course Audits	0	0
LBP Certifications Approved/Disapproved	4/0	16/0
LBP Company Certifications	2	3
Notices of Violation Issued	2	2
Notices of Noncompliance (NON)	0	2
SCANS (warning letters) Issued	3	1
Settlement Agreements Finalized	0	0
Penalties Agreed to	$74,000	$0

Notice of Violation issued to: None

Settlement Agreements Reached: None

UTAH STATE DIVISION OF AIR QUALITY

PM2.5 Actual Concentration (24-hr average) in Micrograms per Cubic Meter

2001 September

Date	BR	BT	BX	CW	GV	HE	HW	HG	HV	LN	LX	L4	NP	N2	O2	SF	WT	WX	WV	VX
09/01	7.1			7.2			7.1	5.6	5.8	6.7		8.1	6.4	9.3	8.5	4.8	6.9		7.2	
09/02							6.9			5.7										
09/03							8.3			7.0										
09/04	6.8	6.9	7.2	7.0	4.4		7.5	7.0	1.4	7.1	7.9	7.2	7.4			6.3	6.4	6.8		
09/05							5.3			6.4										
09/06							5.7			4.7										
09/07	7.4	4.2		4.7	3.2		4.9	6.5	1.1	4.9		5.0	4.9	7.1	5.2	4.8	4.6		0.4	
09/08							3.3			3.9										
09/09							4.6			5.0										
09/10	5.2	5.2	7.0	5.9	3.0		5.6	4.0	1.9	5.7	6.3	5.5		9.2	6.3	4.5	5.1	5.8	6.8	
09/11							6.5			7.3										
09/12							7.9			8.6										
09/13	6.3	9.0		8.4	6.7		8.5		7.0	7.6		6.8	7.7	11.5	9.2	6.1			9.3	
09/14							7.5			7.9										
09/15							9.1			7.1										
09/16	4.9	6.5	6.8		4.2			6.0	5.2	6.3	7.0	5.6	6.0	6.9	6.1	5.6				6.9
09/17										6.0										
09/18										6.6										
09/19	5.9	6.4		7.9	4.4		7.0	5.7	5.0	5.8		6.9	7.1	9.3	7.0	5.7			6.9	
09/20							7.4			9.2										
09/21							8.1			8.0										
09/22	6.5	6.6	6.3	9.7	5.8		6.4	7.2	6.6	8.5	9.1	6.3	8.7	12.0		7.2				10.4
09/23							8.1			8.9										
09/24							14.3			14.8										
09/25	10.4	8.5		10.5			11.8			10.2		10.0	11.0	13.6					11.6	
09/26							10.0			6.7										
09/27							8.3			8.5										
09/28	7.0	6.1	6.0	8.5			8.5		4.3	9.8	9.9	7.1	9.8	9.4	7.2		6.7	6.0	9.1	8.4
09/29							8.0			7.2										
09/30							9.3			7.6										
Arith Mean	6.8	6.6	6.7	7.7	4.5		7.7	6.0	4.2	7.3	8.0	7.0	7.7	9.8	7.1	5.6	6.0	6.2	7.3	8.6
Max 24-hr Avg	10.4	9.0	7.2	10.5	6.7		14.3	7.2	7.0	14.8	9.9	10.0	11.0	13.6	9.2	7.2	6.9	6.8	11.6	10.4
Std. Dev	1.5	1.5	0.5	1.7	1.3		2.2	1.1	2.2	2.0	1.5	1.5	1.9	2.2	1.4	0.9	1.0	0.5	3.5	1.7
Days of Data	10	9	5	10	7		27	7	9	31	5	10	9	9	7	8	5	3	7	3
Yearly Mean	9.3	9.7	9.3	12.1	7.6	8.3	11.9	9.6	8.6	11.0	9.6	15.1	10.8	12.7	8.2	8.9	9.9	10.1	12.1	12.0

UTAH STATE DIVISION OF AIR QUALITY

PM2.5 Actual Concentration (24-hr average) in Micrograms per Cubic Meter

2001 October

Date	BR	BT	BX	CW	GV	HE	HW	HG	HV	LN	LX	L4	NP	N2	O2	SF	WT	WX	WV	VX
10/01	7.2	7.6		10.5			9.5	7.4	7.1	8.5		8.5	10.2	16.2	8.5	9.0	7.5		11.2	
10/02							7.3			7.6										
10/03							6.6			6.6										
10/04	6.2	4.6	3.8	5.7	3.8			4.4	4.6	5.6	5.9		6.7	8.4	5.5	5.0	4.4	4.4	6.0	6.1
10/05							7.5			7.1										
10/06							10.1		6.2	7.0							6.5			
10/07	4.8	5.1		5.6	3.9		6.2	4.6		4.6			5.3	6.5	7.9	5.3			5.5	
10/08							7.3			5.1										
10/09							5.5		3.5	3.5							4.0	4.4		
10/10	3.6	4.3	4.2	7.8			6.6	4.8		4.6	5.1		6.1	7.8	8.3	3.5			6.5	9.3
10/11							5.2			5.0										
10/12							4.4			5.2										
10/13	2.3	2.9		4.0	1.7		5.1	3.0	2.5	3.1		3.4	3.5	6.1	4.3	2.6	2.9		3.9	
10/14							3.0			2.6										
10/15										3.8										
10/16	6.1	5.6	6.2		5.4		9.8	6.4	6.1	6.8	6.4	9.5	6.5	18.3		4.7	5.8	7.0	8.8	
10/17										5.7										
10/18										6.1										
10/19	6.2	5.3		8.9	4.1			11.2	0.2	9.7			7.4	8.8	8.3	6.0	5.8		7.0	
10/20										4.9										
10/21										5.4										
10/22	5.6				4.7		9.6	4.9	0.8	7.0	6.4		7.5		10.2	6.6	6.7	6.7	7.4	8.3
10/23							6.1			3.6										
10/24										4.2										
10/25						11.2	10.0	7.5		7.3			7.9			5.1			10.0	
10/26							14.6			17.4										
10/27							10.7			7.7										
10/28							8.6	7.5		7.1			8.0			6.9			7.4	7.3
10/29																				
10/30																				
10/31																				

	BR	BT	BX	CW	GV	HE	HW	HG	HV	LN	LX	L4	NP	N2	O2	SF	WT	WX	WV	VX
Arith Mean	5.2	5.1	4.8	7.1	3.9	11.2	7.7	6.2	3.9	6.2	6.0	7.1	6.9	10.3	7.7	5.5	5.4	5.6	7.4	7.6
Max 24-hr Avg	7.2	7.6	6.2	10.5	5.4	11.2	14.6	11.2	7.1	17.4	6.4	9.5	10.2	18.3	10.2	9.0	7.5	7.0	11.2	9.3
Std. Dev	1.6	1.4	1.3	2.2	1.3		2.7	2.3	2.5	2.8	0.6	3.3	1.8	4.9	1.9	1.8	1.6	1.4	2.2	1.2
Days of Data	8	7	3	7	6	1	20	10	8	28	4	3	10	7	8	10	8	4	10	5
Yearly Mean	8.9	9.3	9.0	11.8	7.4	8.3	11.6	9.2	8.1	10.6	9.3	14.8	10.4	12.5	8.0	8.6	9.6	9.7	11.7	11.5

UTAH STATE DIVISION OF AIR QUALITY

47mm Partisol: PM10 Concentration Adjusted to Sea Level (24-hr average) in Micrograms per Cubic Meter

2001 October

Date	Cottonwood	Hawthorn	Lindon	Logan 4	Magna(W)	Moab	NProvo	NProvo-X	NSL	NSL-X	Ogden2
10/02		26	45						61		29
10/03		28	46						51		34
10/04	33	26	38	38		19	32	29	49	50	31
10/05		40	48						78		42
10/06		42	42				35		60		
10/07	21	23	22	23			17		27		29
10/08		33	26						50		41
10/09		17	11						33		23
10/10	23	24	16	22	15	13	16	17	34	35	24
10/11		20	15						27		
10/12		4	13						31		
10/13	14	19	13	23					23		14
10/14		13	12		12				21		18
10/15		24	20						42		23
10/16	33	38	36	37		22	28	27	141	141	33
10/17		30	40						47		
10/18		24	35						47		
10/19	28	26	45						50		
10/20		20	31						45		
10/21		24	31						41		
10/22		37									
10/23		30									
10/24		17									
10/25		29									
10/26											
10/27											
10/28											
10/29											
10/30											
10/31											
11/01											
Arith Mean	25	26	29	28	14	18	25	25	48	75	28
Max 24-hr Avg	33	42	48	38	15	22	35	29	141	141	42
Std. Dev	8	9	13	8	2	5	8	6	26	57	9
Days of Data	6	24	20	5	2	3	5	3	20	3	12
Days >150											
Yearly Avg	31	29	33	33	26	20	29	29	44	52	33

UTAH STATE DIVISION OF AIR QUALITY

47mm Partisol: PM10 Concentration Adjusted to Sea Level (24-hr average) in Micrograms per Cubic Meter

2001 September

Date	Cottonwood	Hawthorn	Lindon	Logan 4	Magna(W)	Moab	NProvo	NProvo-X	NSL	NSL-X	Ogden2
09/01	30	25	31	30	23		27		31		32
09/02		21	29						28		28
09/03		26	40						30		30
09/04	37	37	52	36	27	25	36		58	62	34
09/05		29	42						46		41
09/06			38						62		31
09/07	32	25	26	29			33		49		36
09/08		10	24						24		17
09/09		16	25						27		22
09/10	33	30		27	25	24	25	25	54	55	47
09/11		27							58		49
09/12		41	61						72		56
09/13	31	33	35	23	24		29		57		32
09/14		24	33						41		27
09/15		27	33						40		31
09/16	23	22	34	22	20	17	25	26	34	34	25
09/17		13	20						33		20
09/18		20	28						29		20
09/19	27	29	28	30	17		25				29
09/20		28	47						68		31
09/21		38	42						62		38
09/22	34	32	40	30	24	21	33	33	54	53	35
09/23		29	38						45		31
09/24		45	58						86		44
09/25	43	43	46	46	38		35		61		30
09/26		40	40						67		
09/27		24	47						58		45
09/28	42	36	47	41	27	29	40	40	50	50	32
09/29		40	40						50		43
09/30		31	37						43		27

Arith Mean	33	29	38	31	25	23	31	31	49	51	33
Max 24-hr Avg	43	45	61	46	38	29	40	40	86	62	56
Std. Dev	6	9	10	8	6	4	5	7	16	10	9
Days of Data	10	29	28	10	9	5	10	4	29	5	29
Days >150											
Yearly Avg	31	29	33	33	26	20	29	29	44	52	33