

## UTAH AIR QUALITY BOARD MEETING

May 4, 2011 – 1:30 p.m.

State Office Building Auditorium

450 North State Street

Salt Lake City, Utah

### FINAL MINUTES

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#### I. Call-to-Order

Ernie Wessman called the meeting to order at 1:30 p.m.

Board members present: Nan Bunker, Steve Sands, Joel Elstein, Ernie Wessman, Robert Paine, Amanda Smith, Kathy Van Dame, Kerry Kelly, Craig Petersen, Darrell Smith

Acting Executive Secretary: Rusty Ruby

#### II. Date of the Next Air Quality Board Meeting: June 1, 2011

#### III. Approval of the Minutes for April 6, 2011, Board Meeting.

Mr. Sands corrected that Marty Gray presented the Kaizen update and Dave Beatty presented the greenhouse gas rule update not Regg Olsen as listed.

- Nan Bunker moved to approve with the correction by Mr. Sands. Joel Elstein seconded. The Board approved unanimously.

Mr. Wessman states that the order of the agenda will be changed. The informational items will be presented next so the remainder of the meeting can be spent on the final adoption to amend Utah State Implementation Plan, Emission Limits and Operating Practices, Section IX.H.2.h. Kennecott Utah Copper: Mine; and to amend R307-110-17. Section IX Control Measures for Area and Point Sources, Part H, Emissions Limits.

#### IV. Informational Items.

##### A. Initial Designation Recommendations to EPA for Revised Federal SO<sub>2</sub> Standard. Presented by Bruce Allen.

Bruce Allen, Environmental Scientist at DAQ, stated the Clean Air Act (CAA) requires for Governor Herbert submit to EPA's regional administrator, a list of all areas of the state that should be designated as nonattainment, attainment, or unclassifiable for the revised one hour SO<sub>2</sub> standard by June 3, 2011.

To be designated attainment an area must comply with both monitoring and modeling requirements. An area is considered in compliance with the revised standard if the fourth highest SO<sub>2</sub> daily one hour maximum concentrations averaged over a three year period does not exceed 75 parts per billion (ppb), and that each source in the area can demonstrate through dispersion modeling that they do not cause a violation of the standard.

DAQ has identified 14 point sources in the state whose SO<sub>2</sub> emissions are more than 100 tons per year. DAQ is not currently modeling these sources, as modeling guidance has only recently been issued by the EPA. The letter under Governor Herbert's signature to EPA, recommends that Utah be designated unclassifiable. By June 3, 2012, the EPA will issue its final classification recommendations based on a review of DAQ's monitoring data from 2008 through 2010 and any available modeling data that is required.

In answer to questions from the Board, Mr. Allen stated the previous primary SO<sub>2</sub> standard was a 24-hour standard of 140 ppb and the annual standard was 30 ppb. Both of these standards have been revoked with the new one-hour standard. Also, a high value at a monitoring site may be because it's a source oriented monitoring site located around a smelter or refinery. In addition, to be in attainment monitoring and modeling requirements must be met and we don't know the modeling data yet for these large sources. Until a site is modeled it is designate as unclassifiable.

**B. Unavoidable Breakdown Rule EPA State Implementation Plan Call. Presented by Bryce Bird.**

Bryce Bird, Planning Branch Manager at DAQ, stated that on April 17, 2011, EPA issued a final State Implementation Plan (SIP) call which gives notice to the state that EPA has determined a significant deficiency in a portion of our SIP. May 18, 2011, is the effective date and from this date the state has 18 months to address the SIP call. At that point two clocks start in which EPA is required to develop a Federal Implementation Plan and then two years from that a clock for sanctions starts. Beginning on May 9, 2011, DAQ will start the stakeholder process with an initial meeting to discuss our options at addressing this, whether we accept the SIP call or do we challenge EPA and then discuss ways to address it through rulemaking.

**C. Air Toxics. Presented by Robert Ford.**

**D. Compliance. Presented by Jay Morris and Harold Burge.**

**E. Monitoring. Presented by Neal Olsen.**

Mr. Olsen updated the Board on the monitoring graphs and indicates the network monitoring report will be done by the end of May and will be out for public comment the first of June.

**V. Final Adoption: Amend Utah State Implementation Plan, Emission Limits and Operating Practices, Section IX.H.2.h. Kennecott Utah Copper: Mine. Amend R307-110-17. Section IX Control Measures for Area and Point Sources, Part H, Emissions Limits. Presented by Bryce Bird.**

Mr. Wessman expressed appreciation for all of the comments received on this proposal and the work of staff to respond to all of the comments and sort through the many issues on this item. This item for final adoption is whether to amend the PM10 maintenance plan with respect to one issue, to change the amount of material Kennecott Utah Copper

may move at the Bingham Canyon Mine from 197,000,000 tons to 260,000,000 tons per 12 month period. A timeline of events from January 2011 to today's action item was given. Mr. Wessman continued that this meeting is not scheduled by the Board to take additional comments on the rule. That process is complete and public comments are posted on the DAQ web site. Today the Board will deliberate and evaluate whether to adopt the rule as proposed. The meeting will be conducted in a manner that results in a careful and thoughtful consideration of the pertinent aspects of the proposal consistent with the mission of the Board and the DAQ which is first and foremost to protect public safety and health.

Steve Sands states that he is currently in the mining seat on the Air Quality Board. His current employer is Kennecott Utah Copper and he is recusing himself from all voting and discussion on this agenda item.

Bryce Bird, Planning Branch Manager at DAQ, stated that this is a modification to an emission limitation that is contained in the SIP. This is the culmination of the Board's process to review, receive public comment, and finally to act on the revision to the SIP. This includes revisions to Section IX.H.2.h. of the SIP which includes the operation of operating practices and limitations for Kennecott Utah Copper Mine and to amend R307-110-17.

The current limitation in place at the Kennecott Utah Copper Mine is 197,000,000 of material which includes material moved out of the mine and represents all of the emissions associated with the operations of the mine. The SIP, which considered all the requirements of the CAA, was approved by the Board in 2005.

As staff reviewed this proposal the guiding regulation that lead their review was the 40 CFR Part 51.112. This portion of the federal regulations governs the establishment and modification of SIP limits, in particular, control strategies. The methods used to determine the effectiveness of control strategies is through air quality modeling. The demonstration includes a summary of the emissions, expected concentrations, and a description of the modeling. The demonstration also considers all emissions represented by the new surrogate limit. The evaluation was conservative in that no pit retention was included in the modeling and that all NOX was converted to particulate nitrate.

It was not possible to make the adequacy demonstration using the original UAM-AERO model developed for the 2005 PM<sub>10</sub> Maintenance SIP because that model is no longer in use by any government or private source. To make the demonstration, Kennecott and DAQ selected a mechanism that relied on the output of the original 2005 model, and through additional modeling from CALPUFF added a proportional amount of emissions to the grid cells impacted by the emissions from the Bingham Canyon Mine expansion.

In relation to comments to the various methods for calculating emissions that have resulted in different numbers used in each demonstration, Mr. Bird explained the increase amount presented is the result from the 2005 SIP modeling effort. Since that time there have been changes in operations and equipment. Looking at today's operational practices at the mine there is benefit from some of the operational changes that actually reduced emissions.

Results of the adequacy demonstration showed that modeling demonstrated for the projection years 2011 and 2015 did not cause any grid cell to exceed the PM<sub>10</sub> standard,

thus demonstrating that the proposed SIP revision under consideration remains adequate to provide timely attainment and maintenance of the PM<sub>10</sub> standard.

Some commenter's raised concerns that the area fails to meet the standard for PM<sub>10</sub>. Spring and summer wind events should be excluded from comparisons to the standard.

The exceptional events rule was published by EPA in 2007 and EPA released draft guidance this week. Since 2007 the state has attempted to meet the tests necessary and is working with EPA to exclude, or flag, exceptional events from consideration in evaluating attainment with the PM<sub>10</sub> National Ambient Air Quality Standards.

In relation to questions to the 1994 SIP demonstration, Mr. Bird explained there was a process in place where a source could come to the Executive Secretary, go through the new source review process for an emissions limits change, and the state would submit those to EPA as being changes to the SIP. In 1999 Kennecott Utah Copper went through that process when the original limit of 150,000,000 tons per year was changed to 197,000,000 tons per year. EPA did not act on the change and their approval of the 1999 changes to the emission limits of the 1994 SIP was never acted upon.

Mr. Bird explained that the SIP is not only about emissions limitations but is the adoption of the entire air quality program as a plan that is relied upon in all of its facets to protect air quality and result in air quality levels that are below the standards. This item only changes one small part of the SIP, but is so reliant upon the greater air quality program to provide protection in relation the PM<sub>10</sub> standard. Staff interpreted CAA Section 110(I) as this action does not interfere with the development of future SIPs or the implementation of any applicable requirement of the CAA and staff review considered elements noted in EPA's proposal to disapprove the SIP. Furthermore, EPA's proposed action is not yet final and the DAQ has provided comments to EPA on its intent to disapprove and is interested in working with EPA to address their concerns.

There were some corrections to documents submitted to the Board. In text for R307-110-17 the strikeout of April 6 was added, the header on the printed SIP Section IX Part H was changed to the correct date, and DAQ's response to comment II.1 on page 5 was changed to remove an interpretation of EPA's prior actions.

Staff recommends the Board adopt amendments to the Utah SIP, Emission Limits and Operating Practices, Section IX.H.2.h. Kennecott Utah Copper: Mine.; and to adopt the change to R307-110-17.

Each Board member was then given the opportunity to ask questions. There is concern from some Board members on the tone of EPA's response and our ability to make progress towards attainment. The Board asked what steps are being taken to resolve differences with EPA and how future communication will be handled. There is also concern that even though PM<sub>2.5</sub> is not part of this discussion it is a subset of PM<sub>10</sub> and how is that being addressed, particularly as it relates to pit escape factors. Staff was also asked to address modeling differences, inadequate documentation of the emissions offset, and what would happen if the rule was allowed to lapse in June. The Board then discussed the "Response to Public Comments" document and Board members were given the opportunity to comment or ask questions on each item. After the initial motion to approve was made, some Board members again expressed concern and they feel today's vote is premature and that there are some level of uncertainties involved.

- Craig Petersen moved to approve staff's recommendation to adopt amendments to the Utah SIP, Emission Limits and Operating Practices, Section IX.H.2.h. Kennecott Utah Copper: Mine.; and adopt the change to R307-110-17. Nan Bunker seconded. The motion carries with a vote of five in favor (D. Smith, C. Petersen, A. Smith, N. Bunker, and J. Elstein) and four opposed (E. Wessman, R. Paine, K. Van Dame and K. Kelly).

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Meeting was adjourned at 4:41p.m.

Minutes approved: June 1, 2011