MEMORANDUM

To: Kenncott Utah Copper – Install New Crusher Plant for Crushed Rock for Tailings Impoundment - Source File 105720028-12
Through: Marty Gray, New Source Review Section Manager, UDAQ
From: Nando Meli, Engineer, New Source Review Section, UDAQ
Date: November 25, 2013
Subject: Response to Public Comments

On September 26, 2011, Kenncott Utah Copper LLC (KUC) submitted a Notice of Intent (NOI) requesting an Approval Order (AO) for the Bonneville Borrow Plant (BBP). The BBP will be a new crushed stone processing plant, specifically a crushing and screening plant. The product from the BBP will be used to supply building materials related to the construction of the expansion of the Tailings Impoundment.

This is a support facility for the Tailings Impoundment (TI) expansion and operation. The operation of the TI includes construction of the dikes. The BBP will provide material for the construction of the dikes for the TI expansion and future operation. More than 50% of the material from the operation of the BBP will be used for the dikes on the proposed TI expansion and future operation when the dikes are constructed, for when the existing TI (South TI), the current TI expansion (North TI) and the future TI expansion are combined into one TI. This future expansion is part of the continuous operation of the TI site.

The Utah Division of Air Quality (UDAQ) reviewed and analyzed the request and prepared a draft AO or “Intent to Approve” (ITA) for the modification request. A public comment period was held from January 10, 2012 to February 10, 2012. Comments were received that resulted in new conditions and requirements being added to the proposed BBP AO. A second comment period was held to enable the public the opportunity to review the new Intent to Approve. The second public comment period was held from March 16, 2013 to April 15, 2013.

On April 15, 2013, a GRAMA request for documents relating to the project was submitted. This request was not addressed before the comment period ended, so UDAQ extended the comment period to May 1, 2013.

Comments were received from one commenter and were considered before final issuance of the AO. The written comments received during the second comment period are identified below along with DAQ’s response to the comments. It may be noted that these responses, along with changes made to the ITA based on the comments from the first comment period, are responsive to comments raised during both comment periods.
Comments

1. The Director failed to consider whether the crusher plant should be aggregated with other Kennecott facilities as a single source in accordance with 40 CFR § 51.166(b)(5) and 40 CFR § 51.166(b)(6).\(^\text{1}\)

**DAQ Response:** The DAQ disagrees, as aggregation was considered.

Utah Admin. Code R307-101-2 defines “source” as:

any structure, building, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act and which is located on one or more continuous or adjacent properties and which is under the control of the same person or persons under common control. A building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same “Major Group” (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (US Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).

40 C.F.R. § 51.166(b)(5) contains a definition that is identical in all material respects. As the commenter points out, the scope of a “stationary source” is based on three primary factors. Polluting emitting activities are considered to be part of the same stationary source if they (i) belong to the same industrial grouping based on SIC code, (ii) are located on contiguous or adjacent properties, and (iii) are under common control. Source determinations are case-by-case determinations.

UDAQ has previously divided Kennecott’s operations into the following three separate stationary sources based on these criteria:

- Smelter and Refinery (including MAP).
- UPP, Lab and Tailings Impoundment. This source originally included the Magna Concentrator which has since been decommissioned. UPP was determined to be a support facility for the concentrator.
- Bingham Canyon Mine and Copperton Concentrator.

These determinations were expressly addressed during implementation of the Title V program in Utah. The Smelter and Refinery each have a separate AO but are combined into the same Title V permit with the ID # of 10346.

Historically, the Magna Concentrator, Power Plant, Tailings Impoundment and Laboratory have been combined into one Title V permit, but each site has (or in the case of the Magna Concentrator, had) a separate AO. The source ID for these operations is 10572. The Magna Concentrator, which originally defined the source, is no longer in existence. The Power Plant was considered a support facility to the

\(^{1}\) The first two comments submitted by the commenter address the question of aggregation. This response addresses both related comments.
concentrator. The tailings impoundment had been grouped with this source because of its association with the Magna Concentrator which sent its tails to the impoundment. Collectively, these various operations exceeded the Title V major source threshold. The proposed Bonneville Borrow Area is considered by UDAQ to constitute a support facility to the tailings impoundment.

The Bingham Canyon Mine and Copperton Concentrator have been designated as a single minor source (source ID 10571) with each having a separate AO.

In any event, as defined by UAC R307-101-2, within the definition of “source,” a “building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same “Major Group” (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual,” i.e., pollutant-emitting activities which belong to the same industrial grouping (SIC codes).

The BBP is grouped with the Laboratory, Power Plant and Tailings Impoundment for Title V purposes but have different SIC codes. To be considered in the same SIC group, a source has to have the same first two digits of the SIC codes. The SIC code is 1442 (Construction Sand and Gravel) for the BBP, 4911 (Electric Services) for the Power Plant, 1021 (Copper Ores) for the Tailings Impoundment, and 8734 (Testing Laboratories) for the KUC Laboratory. The BBP does not have the same first two digits of any of the other sources grouped together under the Title V program.

In summary, the current KUC groupings have been in place for many years and are reflected, as the commenter points out, by the Title V permits issued for the smelter/refinery source and the UPP/lab/tailing impoundment, respectively. As noted, the Mine together with the Copperton Concentrator do not constitute a major Title V source. In making these (by now long-settled) determinations, UDAQ considered industrial groupings as indicated by SIC codes and the relationship, distance and intervening leaseholds and activities between the various facilities.

These determinations were specifically addressed during Utah’s implementation of the Title V program.2

Since the borrow area is a support facility for the tailings impoundment, and the modification of both sources is concurrent, the emissions from both the borrow area and the impoundment will be reviewed together and the appropriate permitting mechanism will be applied to this action and during review of the tailings impoundment NOI. All emission increases have been addressed and evaluated in the Engineering Review and appropriate requirements established in the ITA. UDAQ has thus addressed the emission increases in accordance with current DAQ policies and Federal and State Regulations.

2. The commenter claims that based on the conclusions of its first comment, aggregation is required, and that the Crusher Plant is a major modification to the Kennecott Utah Copper Power Plant/Lab/Tailing Impoundment and/or the Kennecott Utah Copper Smelter and Refinery. This is because the addition of the plant must be considered a modification to an existing facility rather than a new facility and the increase in emissions from the Crusher Plant is greater than the threshold for a major modification. Utah Admin. Code R307-101-2 (definition of “major modification” and “significant”). Thus, because the Crusher Plant will emit 266.4 tons per year of PM10 and 32.47 tons per year of PM2.5, the Crusher Plant constitutes

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2 See attached January 28, 1994 letter from UDAQ to KUC re: Part 70 Source Determination.
a major modification for the purposes of Utah regulations, including, but not limited to R307-401-19, R307-403, R307-405 and R307-410.

**DAQ Response:** The DAQ disagrees with the commenter that all KUC operations should be aggregated. The source determination the project engineer performed for the BBP included emissions from the BBP and the tailings impoundments, since the BBP is considered a support facility for the tailings impoundment.

Under the definition of “major source,” UAC R307-101-2 states that the fugitive emissions and fugitive dust of a stationary source shall not be included in determining for any of the purposes of the R307 rules whether it is a major stationary source, unless the source belongs to one of the listed stationary sources in that definition. The BBP is not a listed source. Because the mining source category is not one of the listed source categories, it is inappropriate to count fugitive emissions toward the major source or modification thresholds. The Tailings Impoundment is a minor source and has point source emissions less than five tons per year (TPY) of PM$_{10}$ (PM$_{2.5}$ is a subset of PM$_{10}$). The BBP is also a minor source with point source emissions less than 1.0 TPY.

Moreover, the emission increases referenced in the comment (266.4 tons per year of PM$_{10}$ and 32.47 tons per year of PM$_{2.5}$) are identified in the ITA as fugitive emissions. Point source emissions are specified as 0.56 tpy of PM$_{10}$ and 0.16 tpy of PM$_{2.5}$. To determine whether a source or modification is major, fugitive emissions are counted only if the source category is a listed source category. Mining activities are not a listed source category and hence fugitive emissions are not counted. See, e.g., UAC R307-405-10(1) (incorporating provisions of 40 CFR 52.21(i)(1)(vi) through (viii) by reference); 40 C.F.R. § 52.21 (i)(1)(vii) (providing an exemption if a “source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to [a specifically listed source category].”

Finally, to support its comment, the commenter employs a series of citations: “the Crusher Plant constitutes a major modification for the purposes of Utah regulations, including, but not limited to R307-401-19, R307-403, R307-405 and R307-410.” However, the comment never explains the relevance of the citations, or otherwise provides any specific analysis to place the agency on notice of how those provisions actually support the assertions made in the comment.

3. **The New Stone Crusher Plant is Subject to Title V.** While it is Unclear What the Director Has Decided, the Record Fails to Support a Determination that Title V Does Not Apply to the Crusher Plant. The Kennecott NOI states that Title V does not apply to the Crusher Plant (NOI at 4-1), while the Director states that it does (Source Plan Review at 3). The ITA should reflect the requirements of a Title V permit, including short term emission limits necessary to assure compliance with short term NAAQS such as the PM$_{2.5}$ 24-hour standard, as well as sufficient monitoring, record keeping and reporting requirements. See Utah Admin. Code R307-415 (operating permits). Title V regulations at 40 CFR § 70.6 explicitly require all adjacent pollutant emitting activities under common control and belonging to a single major industrial grouping be considered as a single source for Title V permitting purposes.

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3 UDAQ addresses all the commenter’s Title V comments in this response.
**DAQ Response**: UDAQ disagrees with this comment. As discussed below, a Title V Permit is not required to be issued at this time for the BBP.

As noted by commenter, UDAQ’s preliminary determination was that the Crusher Plant would be subject to the Title V permit program. However, commenter’s assertion that the ITA must reflect the requirements of a Title V permit is incorrect. A source required to obtain an approval order to construct a new source or modify an existing source is required to file a complete Title V application within 12 months after commencing operation of the newly constructed or modified source. See UAC R307-415-5a.

This permit action is not being processed as an enhanced AO under R307-415-7.e(1)(e) (an enhanced AO serves as a Title V application which incorporates Title V equivalent requirements. The public comment period therefore meets the requirement for a Title V public comment period), so it does not contain the monitoring, record keeping, and reporting that is required under the Title V program. Kennecott must submit a Title V application within one year to address the associated monitoring, recordkeeping, and reporting requirements.

4. Ambient Air Quality Modeling is required for the emissions from the crusher plant. Initially, the Director forgets that the area of the plant is attainment for the annual PM2.5 standard. As a result, under Utah Admin. Code R307-410-4, Kennecott must conduct air quality modeling to estimate the impact of the source on air quality. In addition, the Director also fails to consider that under R307-401-8, he must ensure that the Crusher Plan will meet the requirements of the National Primary and Secondary Ambient Air Quality Standards and the Utah SIP. Utah Administrative Code R307-401-8(b)(vii) & (ix) requires new minor sources and minor modifications to all sources to apply best available control technology. R307-410 establishes modeling requirements to ensure that minor sources and modifications will not cause or contribute to a violation of the NAAQS. Finally, Utah rules “establish the procedures and requirements for evaluating the emissions impact of new or modified sources that require an approval order under R307-401 to ensure that the source will not interfere with the attainment or maintenance of any NAAQS.”

This comment contains three distinct issues, and DAQ addresses each in turn.

**Comment # 4A**: The commenter claims that “under Utah Admin. Code R307-410-4, Kennecott must conduct air quality modeling to estimate the impact of the source on air quality.”

**DAQ Response to Comment # 4A**: UDAQ disagrees. Utah Admin. Code R307-410-3 provides, in pertinent part, that:

Prior to receiving an approval order under R307-401, a new source in an attainment area with a total controlled emission rate per pollutant greater than or equal to amounts specified in Table 1, or a modification to an existing source located in an attainment area which increases the total controlled emission rate per pollutant of the source in an amount greater than or equal to those specified in Table 1, shall conduct air quality modeling ....

(Emphasis added). The commenter focuses on the status of the area as attainment (for PM2.5, annual) but neglects the second criterion, that is, that the new source/modification must result in emissions greater than those specified in Table 1. Although the project area is in an area designated as attainment for the annual PM2.5 standard, there is no applicable emission threshold specified for PM2.5. Accordingly, the
rule does not apply. In any event, UDAQ is in the process of developing a PM$_{2.5}$ SIP that will address various PM$_{2.5}$ implementation issues. As discussed below, there are a number of technical limitations associated with PM$_{2.5}$ air dispersion modeling. A final decision has not been made regarding what if any revisions will be made to R307-410-3 to address PM$_{2.5}$.

With regard to the annual PM$_{2.5}$ standard, the requirements in R307-410 (Emissions Impact Analysis) do not currently apply to PM$_{2.5}$. Since the BBP is a minor source, the federal regulations for conducting a Source Impact Analysis (40 CFR 52.21-k), also do not apply.

UAC R307-403-5 - Offsets for PM$_{10}$ Nonattainment Areas, requires Kennecott to offset their fugitive PM$_{10}$ emissions of 266.40 TPY. By definition, this is a minor source which therefore allows the PM$_{10}$ emissions to be offset with PM$_{10}$, SO$_2$ or NO$_x$. This is part of the EPA-approved 1994 PM$_{10}$ SIP. The BBP is a minor source, so no offsets are required for PM$_{2.5}$, in accordance with Appendix S of Title 40 CFR Part 51 that contains offsetting requirements for major sources.

Notwithstanding the foregoing, and as discussed below, there are other measures and backstops to ensure that issuance of the permit will not adversely impact the NAAQS.

Comment No. 4B: The commenter claims that “the Director also fails to consider that under R307-401-8, he must ensure that the Crusher Plan will meet the requirements of the National Primary and Secondary Ambient Air Quality Standards and the Utah SIP. Utah Admin. Code R307-401-8(b)(vii) & (ix). Initially, the Utah SIP states without ambiguity:

In addition to the PSD permitting program, Utah also requires new minor sources and minor modifications to all sources to apply best available control technology. R307-410 establishes modeling requirements to ensure that minor sources and modifications will not cause or contribute to a violation of the NAAQS.

Utah State Implementation Plan, Section VIII (PSD), attached as Exhibit ‘C.’”

UDAQ Response to Comment # 4B: The SIP’s reference to rule R307-410 recognizes that the rule is one component of Utah’s permitting program designed to protect air quality, but is applicable to some, but not all projects. As explained above, this rule does not mandate modeling for the instant project.

However, UDAQ agrees with the commenter that one important aspect of Utah’s air program is to ensure protection of the NAAQS, and the air quality regulations are designed to accomplish that purpose. Several are relevant to KUC’s proposed Crushing Plant. Following is a partial listing of requirements that are designed to protect the NAAQS:

- R307-401-8(1)(a) requires the Director to ensure that “[t]he degree of pollution control for emissions, to include fugitive emissions and fugitive dust, is at least best available control technology.” This ensures that emissions are minimized to the greatest degree that is technically and economically feasible. See R307-401-2 (defining Best Available Control Technology). A complete BACT analysis for all of the emission units and emission generating activities may be found in the SPR.

- R307-309 establishes work practices and emission standards for fugitive emissions and fugitive dust. This rule, which applies to this project, requires KUC to submit a fugitive dust control plan and receive approval from the director. Among other dust suppression and control measures, KUC will be required to apply water and chemical dust suppressants to control dust from haul roads. The fugitive dust control plan for this project has a complete listing of required dust
control measures. Importantly, R307-309 (and the AO) impose opacity limitations and monitoring, recordkeeping and reporting requirements to verify the efficacy of the required dust control measures.

- Federal New Source Performance Standards, Subpart OOO, will apply to the crushing operations and will, among other things, establish emission limits on the baghouse and will require KUC to conduct stack testing to verify compliance with the NSPS.

- R307-403-5 requires KUC to provide offsets greater than its total emission increase (at a ratio of 1.2:1). These offsets must be relinquished prior to KUC commencing operation of the project. KUC will be required to relinquish 320.35 tpy of offsets to account for 266.96 tpy of emissions from the project.

As explained, Utah’s air program includes a number of measures that are designed to ensure that air quality impacts associated with projects like the KUC crushing project will not have adverse impacts on air quality. Compliance with these measures is ensured by required monitoring and state inspections. Please see Bonneville Borrow Area Fugitive Dust Control Plan Measures for a detailed description of required monitoring.

Additionally, the efficacy of these measures will be verified by ambient air quality monitoring. UDAQ maintains an ambient air quality monitoring station in Magna, Utah, which provides actual measurement of all air quality impacts. Ambient monitoring is not subject to the limitations presented by air quality dispersion models and emission factors. Should monitoring demonstrate adverse impacts associated with the crushing plant, UDAQ has authority to take necessary measures to address the impacts. See, e.g., UCA § 19-2-107(2)(a)(viii).

Finally, as noted in Response to Comment 6A, Utah is currently developing a State Implementation Plan for PM$_{2.5}$. To the extent that plan includes additional measures that are applicable to KUC’s operations, including the Crusher Plant, KUC will be required to comply with such additional measures.

**Comment No. 4C:** Similarly, Utah rules “establish[] the procedures and requirements for evaluating the emissions impact of new or modified sources that require an approval order under R307-401 to ensure that the source will not interfere with the attainment or maintenance of any NAAQS.” Utah Admin. Code R307-401-1. Kennecott has not complied with this provision. To interpret this rule as not applying to sources in non-attainment areas is improper and belies the plain language of the regulation. EPA has always understood this rule as apply to all sources, including those in non-attainment areas and has repeatedly indicated that such analysis is required by the Clean Air Act. As you are aware, the Utah Supreme Court has determined that Utah rules that purport to implement the Clean Air Act must be interpreted in a manner that comports with the purposes and language of the Act.

**Response to Comment # 4C:** The quotation in the comment is actually excerpted from R307-410-1 and not R307-401-1. Furthermore, the complete regulatory text provides that, “[t]his rule [R307-410] establishes the procedures and requirements for evaluating the emissions impact of new or modified sources that require an approval order under R307-401 to ensure that the source will not interfere with the attainment or maintenance of any NAAQS.” R307-410-1. “This rule” refers to R307-410. And, as R307-410-4 makes clear, the modeling requirement for criteria air pollutants applies to sources locating in an attainment area with emissions in excess of specified thresholds. By its terms, this rule does not require or provide a basis for requiring modeling for the proposed project.
As explained above, this does not mean that Utah’s air program lacks appropriate measures for ensuring that new sources and modifications to existing sources do not adversely impact the NAAQS.

Moreover, Utah is a State Implementation Plan (SIP)-approved state. The Utah NSR program is defined and codified in its SIP. EPA established the basic requirements for an NSR program in its federal regulations (40 CFR 51.166). The state of Utah developed unique NSR requirements and procedures tailored for the air quality needs of Utah. The Utah Air Quality program is at least as stringent as EPA's requirements, and has been approved by EPA as such.

5. The proposed permit violates the EPA-Approved SIP. The federally-enforceable PM_{10} SIP applicable to Kennecott specifically, and sources of fugitive dust from unpaved roadways, was approved by EPA in 1994. That SIP constitutes the law applicable to the Crusher Plant. The SIP states that road ways with “an average daily traffic volume of 150 vehicle trips per day or greater, averaged over a consecutive 5 day period, control techniques must be used which are equal to or better than 2” bituminous surface (Utah Admin. Code R307-1-4.05(4.5.3).5). Because Kennecott must comply with the SIP and the Director must ensure that the proposed AO complies with the SIP, the failure to include this requirement — a control technique equal to or better than 2” bituminous surface, the ITA must be rejected. Moreover, the NOI lacks any analysis comparing the control measures selected for use on unpaved roads to a bituminous surface. For this further reason, the ITA fails to establish compliance with the EPA-approved SIP.

DAQ Response: The DAQ disagrees with the commenter. R307-1-4.05 explicitly provides that it “shall not apply to any sources for which limitations for fugitive dust or fugitive emissions are assigned pursuant to [an AO].” R307-1-4.05(4.5). In accordance with the AO process, a thorough BACT analysis was performed for this project, including for fugitive emissions. Since the fugitive dust provisions that the commenter takes issue with are being assigned pursuant to an AO, R307-1-4.05, by its terms, does not apply to the proposed project. Accordingly, the 2” bituminous-surface-equivalency requirement is inapplicable to the subject permitting action.

In any event, the reference made by the commenter was actually a part of the UAC rules that were in place when the 1994 PM_{10} SIP was written. This rule was subsequently amended and renumbered as R307-12-4, Road ways. This new citation was a subsection of R307-12 Fugitive Emissions and Fugitive Dust, and then later was amended and renumbered as R307-309. R307-12-5 Mining Activities, Section 5.A and the current R307-309-10 both state that fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-309-10 and not by R307-309-7, 8, 9, and 11. Therefore, the commenter’s reference does not apply to the BBP. Kennecott is subject to the provisions of R307-309-10 and pursuant to that rule will operate under a fugitive dust control plan for the BBP.

6. The Underlying Fugitive Emissions Rule is Insufficient. The EPA comments on R307-309 (attached as Exhibit "E") are incorporated by reference. The EPA comments show that R307-309 fails to lead to compliance with Utah Admin. Code R307-401-8(b)(vii) & (ix) and the other air quality regulations. Moreover, to the extent that R307-309 is inadequate to meet Utah Admin. Code R307-401-8, the requirements of that rule must be supplemented by conditions in the Crusher Plant AO.
DAQ Response: UDAQ disagrees with this comment. Despite claiming that the comment is “not an attack on R307-309,” the commenter states that “the requirements of that rule must be supplemented by conditions in the Crusher Plant AO.” Therefore, the comment clearly challenges the adequacy of the rule. The Utah Air Quality Board adopted revisions to R307-309 on November 7, 2012 pursuant to the Utah Administrative Rulemaking Act, which includes procedures governing public comment. If commenters had substantive concerns with the adequacy of the revisions to R307-309, that was the time and proceeding for commenters to raise those issues. The action pending before the agency is a permitting action and is not a rulemaking action on either R307-309 or Utah’s SIP. As such, this is not the appropriate forum to raise substantive concerns about the sufficiency of a duly adopted regulation. R307-309 therefore applies to the instant permitting action and the AO must comply with its requirements.

Moreover, the commenter has sought to incorporate by reference EPA comments made on a draft rule and failed to recognize that UDAQ made several revisions to the final rule as UDAQ specifically addressed EPA’s comments and revised the rule as a result. For instance, regarding EPA questioning the enforceability of R307-309, UDAQ responded to EPA’s comments as follows:

1. **EPA Comment:** the rule does not include enforceable conditions where sections of the rule states that controls “may include.”

**UDAQ Response:** The words “may include” in Section 10 and 11 have been changed to “must” and the associated control measures have been reworded so that sources understand that they must make a selection where options are provided.

2. **EPA Comment:** the rule does not state that sources must comply with all sections of the rules at all times.

**UDAQ Response:** This is a fundamental requirement of any regulation. It is not necessary to state the obvious unless there are specific conditions that warrant detailed discussion; therefore, we have determined that no change is necessary.

UDAQ revised the draft version of R307-309 to address EPA’s concerns, and therefore the final rule that the Air Quality Board approved is not the same as the version that UDAQ published for public comment. As such, EPA’s comments are not germane, even assuming that this permitting action provided an appropriate forum for commenting on the adequacy of R307-309. Commenters should have based any objections on the rule as it was adopted, not as it was proposed.

In addition, the comment is vague and does not put the agency on notice of the basis for the commenter’s objection. The commenter claims that EPA submitted negative comments on the proposed revisions to R307-309 and seeks to “incorporate[] all comments” made by EPA at that time. EPA’s comments on the proposed revisions to R307-309 were broad, identifying 14 separate points, many of which were unrelated to commenter’s concerns with the rule’s connection to the NAAQS. Rather than vaguely referencing the comments of an agency, a commenter has the obligation to apprise UDAQ of the basis for its objection to the draft AO, which would put the agency on reasonable notice of its objection in order to give the agency an opportunity to revise the AO due to the comment or respond directly to the comment. The comment related to R307-309 does not meet this standard.

Finally, the commenter cites no authority granting it the right to incorporate another’s comments, even if they were germane to the instant permitting action. Utah Code Ann. § 19-1-305.5(4)(a) states that “. . . a person who challenges a permit order . . . may only raise an issue . . . that the person raised during the
public comment period . . . .” (emphasis added). This statutory provision states that a commenter may later raise issues that it had previously identified during the public comment period with enough specificity and support to allow meaningful consideration by the agency. Conversely, UDAQ is aware of no provision of law (and the comment identifies none) permitting one commenter to avoid the statutory responsibility of identifying issues itself by simply blindly incorporating by reference the comments of another. This is especially true when the comments sought to be incorporated are not even on the permitting action at issue.

7. The commenter states that segmentation of this project is improper. Specifically, the commenter claims that it is plain that the Crusher Plant project is part of a larger plan to expand Kennecott's operations and particularly the Tailings Impoundment. It is incorrect to segment this project from the tailing expansion and from the mine expansion, as well as changes to the alterations to the concentrator. At a minimum, because the Crusher Plant project is substantially related to the mine expansion, the tailings expansion and the alterations to the concentrator, the emission increases from this project must be aggregated with these other expansion undertakings for the purposes of determining whether the Crusher Plant proposal is a major modification for the purposes of PSD and NSR (non-attainment) review. The Director's approach fails to address and notify the public of the true extent of the emission increases from the proposed expansion. As a result, the agency has not adequately dealt with emission increases that in isolation may not be significant, but add up to a major increase in air emissions that will further prevent Salt Lake County from complying with the PM_{10} and PM_{2.5} NAAQS and will further jeopardize the public health and welfare.

DAQ Response: The DAQ disagrees. First, see response to comment 1 regarding source determination. All modifications related to the cornerstone project are processed in accordance with NSR regulations. Second, UAC R307-401-7, Public Notice, contains the process for making the public aware of any project. UDAQ followed that process. In fact, this project underwent two public comment periods.

Although not required, in an effort to provide information on the air quality permit activity that relates to KUC’s expansion, UDAQ established a website that provides information on the primary air quality permitting actions that it is being asked to take on the Cornerstone project. See [http://www.deq.utah.gov/businesses/kennecott/cornerstone/index.htm](http://www.deq.utah.gov/businesses/kennecott/cornerstone/index.htm). This is separate and apart from the regulatory notice and comment procedures that UDAQ follows when evaluating and issuing an approval order.

While UDAQ has made efforts to inform the public on the scope of Kennecott’s permitting requests, the applicable permitting rules do not require Kennecott to permit all of its projects in a single permitting action. See UAC R307-401-3. KUC has submitted NOIs for each of it projects and these projects have been, or are in the process of being, reviewed in accordance with applicable regulations. Please see previous responses addressing major NSR (including PSD) review. In summary, and as discussed more fully above, the Crushing Plant project does not trigger major NSR based on the definition of stationary source and the nature of the emissions.

8. There is Insufficient Information in the Record to Establish whether Kennecott's Proposed Offsets Fail to Secure Compliance with NAAQS. Initially, as established in the PM_{10} SIP, offsets are required to maintain compliance with the NAAQS, “stabilize” the emissions inventory and ensure that "industrial growth will not increase the cap on industrial emissions[,]" Utah State Implementation Plan, Section IX, Part A, attached as Exhibit “D.” Without any reference in the
record as to the character and location of these bank credits, the Director cannot know if the offsets function to ensure compliance with NAAQS and the SIP. Utah Admin. Code R307-401-8(b)(vii) & (ix). Second, while Kennecott proposes to offset its emissions with banked emissions, even with these banked emissions “removed” as inputs into the airshed, Salt Lake County is not meeting the NAAQS for PM$_{10}$ and PM$_{2.5}$. This means that the addition of the pollutants from the Crusher Plant will cause and contribute to a violation of NAAQS regardless of any proposed offsets. In addition, the Director has recently submitted to EPA modeling that suggests that the only way to meet air quality standards is to allow the release of banked emissions from a 1200-foot stack, rather than at ground level. However, the Crusher Plant will emit pollutants at ground level. Therefore, the proposed project will add emissions to the non-attainment airshed in a way that violates the law. At the same time, Kennecott has not undertaken the modeling required by law when emissions impact a non-attainment area — in this case a non-attainment area for PM$_{2.5}$ and PM$_{10}$, as well as SO$_2$.

The other problem with Kennecott’s proposed offsets is that the plan ignores that direct sources of PM$_{2.5}$ and PM$_{10}$ have substantially more impact on the PM$_{2.5}$ and PM$_{10}$ NAAQS than emissions of SO$_2$ and NO$_x$. Therefore, the company’s reliance on banked SO$_2$ and NO$_x$ will not serve to ensure compliance with the applicable health-based NAAQS.

DAQ Response: UDAQ disagrees with this comment. 40 CFR Part 51 Appendix S requires offsets for major sources of PM$_{2.5}$ when the nonfugitive emissions are above 10 TPY. This project is a minor source and the non-fugitive PM$_{2.5}$ emissions are below that threshold; therefore, offsets are not required for PM$_{2.5}$.

Response to comment # 4 addresses protection of the NAAQS. As explained in that response, the offset requirement is one of several measures that protect the NAAQS. The commenter’s complaint appears to have more to do with the adequacy of the various rules and SIP measures that have been implemented over the years by both Utah and EPA. However, attainment strategies and the rules enacted to implement those strategies are not appropriately addressed in the context of an individual permit determination. Moreover, UDAQ is currently in the process of revisiting the PM$_{10}$ SIP strategy and establishing a PM$_{2.5}$ SIP strategy and there will be opportunity for WRA and other stakeholders to participate in those processes. With respect to the offsets identified in the NOI by KUC, the commenter has not identified any issue with the validity of the offsets with respect to the legally-applicable requirements set forth in R307-403-5; in fact, the offsets have been provided in compliance with those requirements which specifically allow for the use of interpollutant emission offsetting in the manner followed in this permitting action.

Finally, with respect to the purpose of the offset rule to “stabilize” the emissions inventory and ensure that “industrial growth will not increase the cap on industrial emissions,” the offsets relinquished for this project comport with that objective. The quoted statement addresses the overall industrial cap or inventory of combined PM$_{10}$, NO$_x$, and SO$_2$ for the overall airshed as is evident from the entirety of the portion of the SIP from which commenter’s quoted excerpt is taken:

As the population of the valley grows, there are many small sources of NO$_x$ and other PM10 matter which will grow without control (i.e., home space heating, space heating of offices, very small boilers, etc.) As a method of verifying that the emissions inventory stabilizes, any new or modified source located in or impacting the nonattainment areas which emits 25 tons/year or more but less than 50 tons/year of any combination of PM$_{10}$, SO$_2$, or NO$_x$ will be required to obtain a 1:1 emission offset credit as a condition
of the approval order from the UACC. New or modified sources located in or impacting the nonattainment area which emit 50 tons/year or more of any combination of these pollutants will be required to obtain a 1.2:1 emission offset credit prior to the issuance of an approval order. The result of the offset requirement is that industrial growth will not increase the cap on industrial emissions and a net reduction occurs when larger industries locate in or near the nonattainment areas.

Emphasis added.

This statement refers to an overall cap on the combination of PM$_{10}$, SO$_2$, or NO$_x$. This is consistent with the rule’s allowance for the use of interpollutant offsetting. R307-4-3-5(2) (“For the offset determinations, PM10, sulfur dioxide, and oxides of nitrogen shall be considered on an equal basis.”).

Finally, the commenter suggests that use of banked emissions should be disallowed because Salt Lake County is not meeting the NAAQS for PM$_{10}$ and PM$_{2.5}$. UDAQ disagrees with this comment. In particular, the Salt Lake County area has met the PM$_{10}$ NAAQS for some time. The only exceedances of that standard have occurred as a result of exceptional events which UDAQ has documented in reports to EPA. Furthermore, the most recent data (e.g., EPA’s design value) shows that Salt Lake County attained the PM$_{10}$ NAAQS for the 2009-2011 period. As to PM$_{2.5}$, UDAQ is in the process of developing a SIP that will bring Salt Lake County and the surrounding area into compliance with that NAAQS. That process will evaluate and determine if additional control measures and/or reductions in allowable emissions may be necessary to show attainment of the PM$_{2.5}$ NAAQS.

9. Kennecott’s determination of BACT for the unpaved haul roads and the Director’s adoption of this analysis lacks rigor and therefore is unlawful. Moreover, the selected control measures are not BACT. Initially, the BACT analysis fails to consider the control technologies addressed in the NOI in combination with other measures, such as reduction of speed limits (15 miles per hour or less), reduction of aggregate material produced, reduction of truck trips or truck mileage, the cessation of activities on windy days, an increase of the application of dust suppressant on windy days and applying gravel or recycled aggregate material to the unpaved surface area. E.g. NOI at 5-3. As a result, the BACT analysis is inadequate.

Second, even assuming that the application of chemical suppressants is BACT for the unpaved haul roads, there is no evidence in the record that the emission limit associated with this control measure is 20% opacity. For example, there is no support in the record to suggest that a lower emission limit is not an appropriate limit associated with this available control technology.

Third, Kennecott states with regard to haul roads that “due to rapid deterioration and other permitting issues, paving the haul roads is not technically feasible.” NOI at 5-3. Again, this statement is without foundation or support. In any case, the whole point of paving roads is to prevent the deterioration of the road. In addition, the contention that “other permitting issues” prevent the feasibility of paving roads is so vague as to undermine the credibility of this purported BACT analysis. As this is the core of adequate BACT analysis, it must be based on evidence.

Fourth, proper BACT analysis should consider compliance with stabilized surface requirements independent of a visible dust emission limit. A stabilized surface is a treated surface that is resistant to wind effects. This requirement should apply to unpaved roads and
traffic areas, and outdoor bulk storage piles. Any such requirement must be subject to reporting requirements as well as enforcement.

Finally, Kennecott's determination of BACT is not BACT. Reference to the relevant EPA database is only a beginning of proper BACT analysis and does not constitute a sufficient effort. This is particularly true because there is no adequate, enforceable and sufficiently monitored fugitive emissions and fugitive dust control plan in the record. Even if, as Kennecott contends, the various control measures are BACT, the ITA does not sufficiently impose these BACT conditions on the facility or the company based on the lack of an enforceable plan and adequate monitoring and reporting.

**DAQ Response:** The DAQ disagrees. The standard procedure for the control of fugitive dust for haul roads is water sprays with an opacity limit of 20%. The Intent to Approve (ITA) for the Bonneville Borrow Area Plant was based on both the NOI submitted in 2011 and other technical information provided in 2012. In 2012, KUC submitted a revised BACT analysis that included the addition of baghouses for the crushers and screens among other things.

The revised BACT analysis was performed using the EPA’s five-step top-down approach. The control strategies evaluated included watering, use of chemical dust suppressants, and paving the haul roads. The application of chemical dust suppressants and watering were determined to constitute BACT. Paving was determined to be technically infeasible.

As noted on page 5 of the SPR, “[s]uch high traffic volume and the size of the haul trucks traveling on the roads can result in deterioration of a paved road surface. Dust from deteriorated paved roads is difficult to control and emissions from paved roads in disrepair are higher than properly treated unpaved roads.” EPA’s AP-42 explains that, “[a]lthough paving is highly effective, its high initial cost is often prohibitive. Furthermore, paving is not feasible for industrial roads subject to very heavy vehicles and/or spillage of material in transport.” AP-42 at 13.2.2-8. The WRAP Handbook (a source the commenter cites in its comments) makes the same point. WRAP Handbook at 6-8.

As to economic feasibility, despite the foregoing, a cost effectiveness analysis was performed based on conservatively assuming that the combination of chemical dust suppressants and water would achieve 85% control and that a paved road could achieve 95% control.

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4 This is conservatively low. AP-42 shows that watering alone can approach 95 percent control. AP-42, Section 13.2.2 (EPA, 2006) (5th ed.). (BACT will include the application of both chemical dust suppressants and watering.) Additionally, the use of chemical suppressants and watering has been shown to be as effective as paving. The discussion in AP-42 regarding unpaved road dust emissions states that, “[a]fter several applications, a treated road often resembles a paved road except that the surface is not uniformly flat ....”

5 In view of the fact that the application of chemical dust suppressants and watering have an essentially identical control efficiency to that of paving, either control could be deemed BACT without further analysis: “[A]n applicant proposing the top control alternative need not provide cost and other detailed information in regard to other control options.” EPA Workshop Manual at B.8 (Oct. 1990 draft).
Emissions for an unpaved haul road with 85% control efficiency from the combination of chemical dust suppressants and water are estimated to be 187.7 tpy of PM$_{10}$ and 18.8 tpy of PM$_{2.5}$. Emissions for a paved haul road using paved road emission factors with 95% control efficiency from the combination of vacuum sweeping and watering are estimated to be 125.1 tpy of PM$_{10}$ (the SPR dated March 6, 2013 incorrectly lists this reduction as 182.4 tpy) and 12.5 tpy of PM$_{2.5}$ (the SPR dated March 6, 2013 incorrectly lists this reduction as 17.5 tpy). Based on the capital and operating costs for paving the haul road from conceptual design, the annualized cost of the additional control per ton of PM$_{10}$ removed would be $19,889 (the SPR dated March 6, 2013 incorrectly lists this cost as $13,641). The cost of the additional control per ton of PM$_{2.5}$ removed would be $199,000 (the SPR dated March 6, 2013 incorrectly lists this cost as $142,177).

Nonetheless, this BACT analysis concludes that the option of paving is neither technically nor economically feasible.

UDAQ has reviewed the project as presented in the NOI, and the BACT analysis focuses on appropriate emission and control limitations for that project. Measures such as reduction in production, truck trips or truck mileage, and cessation of activities on windy days would substantially change the scope of the project.

Utah Rule R307-309 establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust. Additionally, it requires the implementation of dust control contingencies during wind speeds exceeding 25 mph. The contingencies include pre-event watering, additional watering and stabilization with chemical dust suppressants and other applicable contingency measures. KUC will be required to comply with all applicable requirements of UAC R307-309.

Emissions have been estimated based on factors established in AP-42. Support documentation of AP-42 section on unpaved roads shows that there is limited direct correlation between emissions and vehicle speed. Nonetheless, KUC will be required to minimize vehicle speed where necessary. Dust generated from material generated by the haul trucks will be minimized through regular water application on the haul roads.

UAC R307-309 outlines the fugitive dust control requirements applicable to sources in Salt Lake County. KUC will be required to meet all the fugitive dust control requirements listed in the ITA and R307-309 at all times during the operation of the Bonneville Borrow Area Plant. The ITA requires that KUC post speed limits along the haul road. Fugitive dust control measures implemented by KUC will be monitored, recorded and reported in accordance with the requirements of the AO and UAC R307-309. These records will be made available for inspection as requested by UDAQ.

Regarding the assertion that there is no evidence in the record that the emission limit associated with the application of chemical suppressants should be 20% opacity and not something lower, the definition of BACT provides, in pertinent part, that “[i]f the director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology.” (R307-401-2) In this case, identifying a more precise opacity limitation than the 20% opacity limitation that is required by R307-309-5 is not technically feasible. Instead, the work practice requirement of applying chemical dust suppressant and water has been imposed along with a 20% opacity limitation.
Accordingly, BACT supports the use of water sprays and chemical dust suppressants, and requires that control of fugitive dust generated from haul roads to use water sprays (see Engineer Review N105720028, RACT review paragraph 3). KUC is required to monitor this section of 19 miles of haul road and will be required to use water sprays and chemical dust suppression to control fugitive emissions and maintain the opacity below 20% as required by UAC R307-309-5. Therefore, Kennecott is meeting the BACT requirement for unpaved haul roads. Vehicle speed was not a factor in calculating the emissions from the haul trucks (see AP-42 Section 13.2.2 Unpaved Roads). In the previous versions of AP-42, speed was used to determine the emissions, but EPA has revised the factors in determining the emissions from haul roads, and speed is not a factor in the new equations.

Condition II.B.4.c of the ITA requires KUC to control surfaces subject to wind erosion, and the Tailings Impoundment AO requires KUC to monitor wind events. KUC has an opacity limit of 20% and is required to do what is necessary to prevent an exceedance of this limit. These requirements are more restrictive than the general requirements for the aggregate industry. See response to comment # 10 for the record keeping and reporting requirements.

10. The Proposed AO Lacks Sufficient Record Keeping, Site Inspection, Reporting and Monitoring Requirements for the crusher baghouse, screens, conveyers, haul roads. It is unclear whether the proposed AO requires dust suppression activities on unpaved roads during times that the roads are not being used, such as weekends and holidays. Id. The proposed AO fails to address how roads and other disturbed areas will be reclaimed.

Recordkeeping must include log sheets for daily emission and dust control, and schedules for compliance activities and submittal of progress reports. The purpose of a compliance plan is to provide a consistent, reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Further, the AO should specify that records are to be kept for a minimum of one year following termination of dust generating activities. Title V stationary sources are required to keep the records for a minimum of five years. Records must be made available to both the agency and the public upon request. The AO must require site inspection.

The AO must require regular monitoring. While the AO indicates the method for monitoring, it in no way mandates a monitoring schedule. Moreover, the AO should not depend solely on an emission limits to secure compliance. Additional monitoring should include, for example, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

It is important to note that your agency may not avoid including such requirements — record keeping, site inspections, reporting and monitoring — by claiming that these specifics will be included in, for example, a fugitive dust control plan. This is because, if the details of recording keeping, site inspections, reporting and monitoring mandates are missing from the AO and are, instead, to be part of a fugitive dust control plan that can be adopted or modified without EPA oversight and meaningful public participation, neither EPA nor the public is able to verify that the control are adequate to ensure attainment NAAQS or meet other Clean Air Act requirements.

DAQ Response: The DAQ disagrees. This permit action is not being processed as an enhanced AO (see response to comment #3) and does not contain the monitoring, record keeping, and reporting that is
required under the Title V program. As explained in Response to Comment 3, KUC must submit a Title V application within 12 months of starting operations, and the modified Title V permit will have the necessary monitoring, recordkeeping, and reporting requirements.

As an initial matter, the comment includes a list of assertions and conclusions about what the ITA should include. However, other than providing page numbers, the comment does not identify a single condition of the ITA, or cite any authority to explain what the commenter believes would be sufficient. Moreover, the comment provides neither authority nor analysis for its claim that “the proposed AO lacks monitoring, recordkeeping or reporting requirements,” and therefore “fails to further the goals of the Clean Air Act and fails to meet the standard of a federally enforceable emission limit.” Consequently, the commenter has not explained its concern adequately enough to put the UDAQ on notice of any specific deficiencies with the ITA.

In any event, the commenter is incorrect that the ITA contains no monitoring, recordkeeping, or reporting requirements. Under the NSR program, approval orders require the owner/operator to keep records of monitoring, record keeping, and reporting, and make them available to the Director or Director’s representative upon request. Those records shall include the two-year period prior to the date of the request (ITA Condition I.3). KUC is required to maintain records for a minimum of five years. KUC is also required to keep records to determine if production limits are being met (II.B.1.b), and must also comply with 40 CFR 60.676, required recordkeeping for emissions from processing equipment (II.B.2.d), records for other fugitive dust sources are required to be maintained in accordance with R307-309 (II.B.4.d). The ITA also requires KUC to submit a fugitive dust control plan. The fugitive dust control plan will include requirements that provide for compliance with R307-309.

AO Conditions II.B.4.a and II.B.4.d limit the opacity of the haul roads and operational areas to 20%. AO Condition II.B.4.d requires the use of control treatments for fugitive dust from haul roads, and also requires that records be kept of the treatment. The control of fugitive dust from haul roads is also required in R307-309-10 by watering, chemical stabilizers and limiting the speed of vehicles. Condition II.B.4.e requires that storage piles be watered to minimize the generation of fugitive dust. R307-309-10 also requires that the dust from storage piles be controlled. Condition II.B.4.g requires the control of disturbed or stripped areas at all times (24 hours per day every day) until the area has been reclaimed. R307-309-10 requires that the area of disturbed land be minimized and revegetated. The dust from the crushers and screens are controlled by water sprays as required by Conditions II.B.2.a and II.B.2.b. Condition II.B.3.c requires fugitive dust from conveyor transfer points to be controlled by water sprays or chemical dust suppression sprays or enclosed or controlled by a baghouse.

Based on the foregoing, the ITA clearly addresses the applicable NSR requirements for monitoring, recordkeeping, and reporting.

11. The Calculation of Emissions from the Unpaved Roads Is Not Supported by the Record. According to the Western Regional Air Partnership (WRAP), Kennecott's use of 3.9 percent silt content is wrong (NOI at Table A-1). Rather, WRAP indicates that the silt content can vary wildly. WRAP Fugitive Dust Handbook at 6-2, attached as Exhibit "F." Moreover, given the importance of getting this number right, Kennecott must be required to test the roads and area in which it plans to operate. See id at 6-1 ("Since the silt content of a rural dirt road will vary with geographic location, it should be measured for use in projecting emissions."). Finally, as WRAP also states relative to silt from roads treated with chemical dust suppressants:
Because the improved surface results in more grinding of small particles, the silt content of loose material on a highly controlled surface may be substantially higher than when the surface was uncontrolled. For this reason, the models presented as Equations la and lb cannot be used to estimate emissions from chemically stabilized roads.

*Id* at 6-12. As Kennecott did not account for this eventuality, its calculation of emissions from its unpaved haul roads is invalid. Likewise, WRAP puts the control efficiency of chemical suppressants at 80 percent rather than the 85 percent assumed by Kennecott. *Id* at 6-13.

UDAQ Response: UDAQ disagrees. The WRAP documents referenced are not regulatory; rather they are for informational purposes. A UDAQ NSR Guideline dated March 10, 2008: “Emission Factors for Paved and Unpaved Haul Roads” outlines the procedures that UDAQ accepts for calculating haul road emissions and their respective control efficiencies. It states that 70% control is used for basic watering and up to 85% control for chemical suppressants usage with watering. The potential haul road emissions and efficiencies are determined by using the approved AP-42 emission factor equation found in AP-42 Section 13.2.2 Unpaved Roads. This approved control efficiency was developed through EPA field testing and on-site monitoring and testing of haul road emissions, and approaches 95 percent, similar to 95 percent attributed to paving. The rating of the equation is “B” in AP-42, which incorporates data collected from the latest studies and continuous samplers.

Kennecott’s emission discounts as mentioned are reductions in emissions credited through the implementation of control efficiency’s due to watering and treatment with chemical dust suppressants. Therefore, the DAQ has calculated haul road emissions in concurrence with current AP-42 haul road equations and associated control efficiencies, and is supported and enforceable through the AO.

In addition, the commenter has provided a selective and incomplete quote from The WRAP Fugitive Dust Handbook. A more complete recitation from the Handbook is as follows:

> Since the silt content of a rural dirt road will vary with geographic location, it should be measured for use in projecting emissions. As a conservative approximation, the silt content of the parent soil in the area can be used. Tests, however, show that road silt content is normally lower than in the surrounding parent soil, because the fines are continually removed by the vehicle traffic, leaving a higher percentage of coarse particles.

The use of the silt content for the geographic area, in this case Utah, will result in a conservative (high) estimate of emissions since it is based on the higher silt content of the parent soil as opposed to the expected lower silt content that will exist on a road. The application of dust suppressants will be required at least twice a year to minimize fugitive dust from the haul roads. Water trucks will be used to water the roads as condition warrant based on visual emissions observations (see previous response). Material dropped from the haul trucks will be cleaned up to minimize dust.

The EPA default value of 3.9% silt content is used for the calculation of emissions from their haul roads. The 3.9% value is a conservative approach according to the WRAP Fugitive Dust Handbook:

> As a conservative approximation, the silt content of the parent soil in the area can be used. Tests, however, show that road silt content is normally lower than in the surrounding parent soil, because the fines are continually removed by the vehicle traffic, leaving a higher percentage of coarse particles. Other variables are important in addition to the silt content of the road surface material. For example, at industrial sites, where haul
trucks and other heavy equipment are common, emissions are highly correlated with vehicle weight.

Based on these factors, the use of 3.9% for silt content at the BBP site is a conservative approach.

The 80% control efficiency referenced above for the use of chemical dust suppressants was developed for the Western States Region. The control efficiency of 85% by using chemical dust suppressant spray for the control of haul roads was developed by UDAQ (UDAQ NSR Guideline dated March 10, 2008: “Emission Factors for Paved and Unpaved Haul Roads”) for sites located within the State of Utah. This is used in conjunction with a Fugitive Dust Control Plan that is required by KUC’s AO.