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Utah Mining Association

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May 31, 2022

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**Subject: Comments from the Utah Petroleum Association and the Utah Mining Association on Amendment to R307-110 General Requirements: State Implementation Plan and R110-17 Section IX, Control Measures for Area and Point Sources, Part H, Emission Limits; Utah State Bulletin, Number 2022-09, pp. 78-81; May 01, 2022.**

Dear Ms. Cancino, Mr, Sowards, and Mr. Wood:

The Utah Petroleum Association (“UPA”) and the Utah Mining Association (“UMA”) thank you for the opportunity to provide these comments on the proposed changes to the Regional Haze (“RH”) State Implementation Plan (“SIP”) encompassed in Amendment to R307-110 General Requirements: State Implementation Plan and R110-17 Section IX, Control Measures for Area and Point Sources, Part H, Emission Limits; Utah State Bulletin, Number 2022-09, pp. 78-81; May 01, 2022, and to the additional questions posed for public comment posted on the Utah Division of Air Quality (“UDAQ”) public notice webpage for rule and plan changes.<sup>1</sup> UDAQ requested input on five specific questions on the webpage. This letter responds to two of the questions, namely questions about a cost threshold and about mass and rate-based limits.

UPA was founded in 1958 and its members comprise every segment of the petroleum industry in Utah. UPA’s members include five companies that own and operate petroleum refineries in the Salt Lake City area, companies engaged in oil and gas production in the Uinta Basin, and companies that support the operations of the refining and production industries. Thus, we have an interest in the air quality and pursuit of visibility goals in Utah.

UMA was founded in 1915 and represents hardrock, industrial mineral, and coal mine operators as well as service companies which support the mining industry. Numerous UMA member companies operate within Utah, the largest of which is Rio Tinto Kennecott, whose Bingham Canyon Mine is one of the largest copper mines in the world and one of the very few which

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<sup>1</sup> See “Regional Haze Second Implementation Period SIP” at <https://deg.utah.gov/public-notices-archive/air-quality-rule-plan-changes-open-public-comment> (accessed on May 26, 2022).

operates in a densely populated urban interface area. UMA has an interest in air quality and visibility goals in support of the communities in which our member companies operate.

In summary:

- UPA and UMA do not support adding a cost threshold or range to the RH SIP; UDAQ must be able to consider all four statutory factors as well as the anticipated improvement in visibility and adding a cost threshold would undermine the primary objectives.
- UPA and UMA do not support requiring limits to be either mass-based limits or rate-based limits; UDAQ should have the flexibility to determine the type of limit most appropriate for any individual source.

We discuss these conclusions in more detail below.

### **Comment Issue #1: The Need for a Cost Threshold**

***Nothing requires specifying a cost threshold or range and UDAQ should not set one because it would tend to negate other statutory factors and could work against choosing controls that will provide the greatest visibility protection.***

During the Air Quality Board (“AQB”) discussion to propose the RH SIP, Board members had a discussion about the merits of establishing a cost effectiveness threshold in dollars per ton (“\$/ton”). The AQB directed UDAQ to seek comment on whether to include a \$/ton threshold range in the RH SIP.<sup>2</sup>

***UPA and UMA do not support including a \$/ton cost threshold or range***, for several reasons.

The Clean Air Act (“CAA”) requires that controls selected for an RH SIP consider four factors:

1. The costs of compliance
2. The time necessary for compliance
3. The energy and non-air quality environmental impacts of compliance
4. The remaining useful life of any existing source subject to such requirements<sup>3</sup>

The CAA specifies no other details for how the cost of compliance should be determined or expressed. Cost of compliance typically has been expressed as \$/ton of emission reduced or \$/ton.

To consider only the cost of compliance or to set a bright line or specified range for reasonable cost of compliance in choosing controls would ignore or at least tend to negate the other three statutory factors.

EPA RH SIP regulations to implement the visibility protection provisions of the CAA require that the same four statutory factors be considered:

*The State must evaluate and determine the emission reduction measures that are necessary to make reasonable progress by considering the costs of compliance, the time*

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<sup>2</sup> AQB meeting; April 6, 2022; audio recording available at <https://www.utah.gov/pmn/files/832905.mp3>.

<sup>3</sup> CAA §169A(g)(1).

*necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected anthropogenic source of visibility impairment. . . . **The State must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy.***<sup>4</sup> [emphasis added]

In other words, UDAQ must discuss how it used each of the four of the factors in selecting control measures but is not required to set a bright line threshold or range for any of the factors and any attempt to do so would ignore or at least tend to negate the other factors. Like the CAA, the regulations provide no other specificity for how the cost of compliance should be determined or expressed.

In 2019, EPA published guidance on Regional Haze State Implementation Plans for the Second Implementation Period.<sup>5</sup> The Guidance states that “it is reasonable for a state to consider whether and by how much an emission control measure would help achieve” the **goal to improve visibility** (page 37). Thus, no matter what the \$/ton of emissions reduced, a control may be **required or not required depending on its effectiveness at improving visibility**. The guidance goes on to say, “we anticipate that **the balance between the cost of compliance and the visibility benefits** will be an important consideration in a state’s decisions” (page 37) [emphasis added]. The Guidance spends several pages discussing weighing the costs of compliance and visibility benefits<sup>6</sup> and describes a metric of cost per unit of visibility benefit as “one possible approach” but does not even require this.<sup>7</sup>

Furthermore, the Guidance states:

*EPA does not believe it is reasonable to solely use a threshold for the capital cost or annualized cost to determine that a measure is not necessary to make reasonable progress. Large capital costs considered in isolation may not provide complete information about the potential reasonableness of a measure; additionally decisions to exclude control measures from consideration should also take into account relevant information for other factors.*<sup>8</sup>

In other words, **EPA specifically cautions against setting a threshold.**

The Guidance goes on to say:

*[I]n location specific cases, the installation of a control measure may lead to adverse non-air quality environmental impacts. In these cases, **states may consider such impacts separately from the costs of compliance** when determining whether the measure is necessary to make reasonable progress.*<sup>9</sup> [emphasis added]

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<sup>4</sup> 40 CFR Part 51 Subpart P §51.308(f)(2)(i).

<sup>5</sup> Peter Tsirigotis, Director of Office of Air Quality Planning and Standards, to Regional Air Division Directors, Regions 1 – 10; “Regional Haze State Implementation Plans for the Second Implementation Period” memorandum; August 20, 2019 (“Guidance”).

<sup>6</sup> 2019 Guidance, pp. 37-41.

<sup>7</sup> 2019 Guidance, p. 38.

<sup>8</sup> 2019 Guidance, p. 39.

<sup>9</sup> 2019 Guidance, p. 42.

In 2021, EPA published a second guidance document, “Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period”.<sup>10</sup> The Clarification Guidance reiterates the principles of using visibility as an additional factor alongside the four statutory factors. The CAA is silent as to whether EPA may consider other factors in addition to the four statutory factors and therefore EPA contends that the visibility improvements from a control measure may be considered:

*[F]or a source with multiple cost-effective controls, a state may balance visibility with cost effectiveness and other statutory factors in selecting a reasonable control. Another potentially reasonable approach might be for a state that identifies cost-effective new controls at a multitude of sources to choose to require controls at only a subset of those sources that constitute the vast majority of the visibility benefit. In this case, the state could rely on visibility benefits to prioritize which sources would receive new controls.*<sup>11</sup>  
[emphasis added]

Thus, the original 2019 Guidance and the 2021 Clarification Guidance recognize that emission reductions alone considered in isolation of the other factors or in isolation of visibility improvements should not be the determining factor to select the control measures to support the visibility goals.

The purpose of the RH SIP is to improve and maintain visibility at Federal Class I areas including the national parks in Utah and in neighboring states. To consider \$/ton in isolation with a bright line would not be congruent with the ultimate goal to improve visibility. Some sources may have a lower \$/ton for emission reductions, but the reductions may not have the same benefit to visibility at Class I areas. Influencing factors on visibility improvement might include (but not be limited to) prevailing wind direction, buoyancy of the emissions, type of pollutant emitted, and the chemistry of haze formation at the Class I site (e.g., which pollutants are limiting in the chemical formation of haze). Neither the CAA nor the regulations nor either guidance document requires setting a bright line or range for cost effectiveness.

For all these reasons, UPA and UMA do not support establishing a value or a range of \$/ton for cost effectiveness.

## **Comment Issue #2: Whether a Mass-Based Limit or a Rate-Based Limit Would Be More Appropriate**

***Neither mass-based nor rate-based limits are required and the decision to select the type of limit should be jointly made on a case-by-case basis between UDAQ and the source.***

During the Air Quality Board (“AQB”) discussion to propose the RH SIP, Board members discussed mass-based limits compared to limits that might be expressed as a function of rate, e.g., for electricity generation rate at a power plant. The AQB directed UDAQ to seek comment on whether a mass-based limit or a rate-based limit would be more appropriate for NO<sub>x</sub> at Hunter and Huntington.<sup>12</sup> In seeking the public comment, UDAQ posted the question on its public notice website as “Whether a mass-based limit or a rate-based limit would be more appropriate” without

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<sup>10</sup> Peter Tsigotis, Director of Office of Air Quality Planning and Standards, to Regional Air Division Directors, Regions 1 – 10; “Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period” memorandum; July 8, 2021 (“Clarification Guidance”).

<sup>11</sup> 2021 Clarification Guidance, pp. 12-13.

<sup>12</sup> AQB meeting; April 6, 2022; audio recording available at <https://www.utah.gov/pmn/files/832905.mp3>.

reference to the specific sources or pollutant.<sup>13</sup> We respond to the more generic question posted on the website, and request that our generic response be applied to the specific question posed by the AQB.

The CAA requires the EPA regulations for RH to “contain such emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting” the visibility goals at Class I areas.<sup>14</sup> In other words, the CAA does not specify whether limits should be mass or rate-based or expressed in some entirely different way.

EPA regulations for RH SIPs require that the strategy to meet the visibility goal “must include the enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress.”<sup>15</sup> The regulations reiterate the requirements of the CAA without imposing any other restrictions on emissions limitations.

The Guidance identifies examples of emission control measures that a state may consider including work practices; fuel mixes with inherently lower emissions; restrictions on hours, fuel input, or product output; energy efficiency applied elsewhere to reduce emissions from EGU, and smoke management practices for agricultural and wildland prescribed fires.<sup>16</sup> None of these would be mass-based limits. Furthermore, the Clarification guidance reinforces some of this same information.<sup>17</sup>

The Guidance has a section on establishing emission limits.<sup>18</sup> RH SIPs must include enforceable emission limitations including averaging times, monitoring, recordkeeping, and reporting.<sup>19</sup> It goes on to say that, “The limit itself may take different forms,” and generally recommends “that a state that has determined that a technology-based measure is necessary for reasonable progress initially consider emissions limits expressed in terms of pounds per throughput (i.e., input or output) based on the capability of that measure.” In other words, it allows limits to be expressed in various ways.

The Guidance goes on to say that “in addition to considering technology-based emission control measures, a state may consider restrictions on hours of operation, fuel input, or product output. Such restrictions could be implemented directly or by a time-based limit on mass emissions.”<sup>20</sup>

In other words, ***limits may be rate based, mass based, or expressed in some other appropriate way for the source*** and are not required to be expressed in any specific way.

The Clarification Guidance reinforces the flexibility in the form of emission limits, stating that, “in addition to considering technology-based emission control measures, a state may consider restrictions on hours of operation, fuel input, or product output. Such restrictions could be implemented directly or by a time-based limit on mass emissions.”<sup>21</sup>

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<sup>13</sup> UDAQ public notice website at <https://deq.utah.gov/public-notice-archive/air-quality-rule-plan-changes-open-public-comment> (accessed on May 26, 2022).

<sup>14</sup> CAA §169A(b)(2).

<sup>15</sup> 40 CFR §51.308(f)(2).

<sup>16</sup> Guidance, pp. 29-30.

<sup>17</sup> Clarification Guidance, p. 7.

<sup>18</sup> Guidance, pp. 42-45.

<sup>19</sup> Guidance, pp. 42-43.

<sup>20</sup> Guidance, p. 45.

<sup>21</sup> Clarification Guidance, pp. 11-12.

In conclusion, nothing in the CAA, regulations, or guidance restricts limits to being mass- or rate-based, but states have the flexibility to make a case-by-case determination regarding the most appropriate form of limits for each source. Limits may be work practices, production limits or limits on hours of operation, or something else entirely.

For all of these reasons, UPA and UMA support that UDAQ maintain the flexibility to determine the most appropriate form of enforceable limits for each individual source.

In conclusion, UPA and UMA support allowing UDAQ to consider cost-effectiveness and the form of emission limits in conjunction with other applicable factors as is currently prescribed under RH SIP guidance. The agency must maintain the flexibility to evaluate \$/ton vis-à-vis the other statutory factors and vis-à-vis expected visibility improvements. Furthermore, the agency should maintain the flexibility to work with each individual source to determine the most appropriate way to express the emission limitations for that source.

Sincerely,



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cc:

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