

Utah Air Quality Board of Directors
Utah Department of Environmental Quality
195 North 1950 West, Salt Lake City, UT 84116

December 30, 2022

RE: Kilgore Companies Comments to Utah Division of Air Quality (UDAQ) on Proposed New Rule R307-313: VOC and Blue Smoke Controls for Hot Mix Asphalt Plants

Kilgore Companies offers the following comments based on the review of the Utah Division of Air Quality's (UDAQ) proposed rule R307-313.

- **R307-313-2 Applicability**

Attachment A, located at the end of this proposal, references the published boundaries (in blue) of the Northern Wasatch Front Nonattainment Area. Note that only the western half of Weber County and an eastern portion of Tooele County are within the area, not the entire counties. It is understood that the areas of non-attainment do not fall neatly within county lines.

Based on what is already recognized by both the EPA and UDEQ/UDAQ as defined and standing delineation between attainment and non-attainment areas, Kilgore Companies recommends that application of proposed rule R307-313 should only affect those areas within non-attainment status. All areas where attainment has been defined should not be included as part of this proposal. Until such time that data correctly expands and or applies the rule into these geographic areas, Kilgore Companies recommends UDAQ only apply this proposed rule to the original areas identified as being in non-attainment and not create an unreasonable need for overreach.

- **R307-313-4(3) Blue Smoke & VOC Emissions from Hot Mix Asphalt Plants**

The guidance language for the exception and use of warm mix asphalt (WMA) requires that production "...consists entirely" of WMA. As an alternative to the proposed language, Kilgore Companies recommends the word 'primarily' or the words 'in the normal course of operations' be used to account for the more realistic application associated with the regular operations of an asphalt plant. It is generally understood that WMA alternatives produce less VOC emissions due to being produced at lower temperatures. The collective HMA production experience of Kilgore Companies unequivocally demonstrates that during the production of asphalt there can be variable temperature spikes, both up and down that may occur. These can be due to a number of factors, including when a plant changes from one specified mix type to another.



Because production materials / ingredients change temperature, due to weather, natural climate factors, seasons, etc., or if the moisture content within the piles of aggregate change, there will be a change in temperature. Plant operators continually account for these changing conditions and adapt in real time as soon as they occur. That stated, there is a short period of time that it takes for any HMA plant to react and bring temperatures back to an acceptable level. The use of an absolute term such as, "...consists entirely", makes this exception unattainable and impossible and does not account for real world operational variables. This regular operational scenario is predominately experienced during a small period of startup each day at regular temperatures before the day's full production at warm mix temperatures. A change to the recommended language will help account for normal practices while affording plants the opportunity to produce most all of their production tons at recognized temperatures for WMA.

- **R307-313-5(1)**

With regard to systems to be installed on tank storage, the proposed language of the current proposal states, "...and control systems such as a condenser and a carbon-filled vessel which shall . . ." Kilgore Companies recommends the 'and' in this sentence be changed to an 'or' as these are two separate methods for capturing the VOCs from tanks and either option will accomplish what UDAQ seeks to achieve. The use of 'and' in this sentence could be interpreted to require a redundancy that is both unnecessary and cost-prohibitive to accomplish the same purpose.

- **R307-313-7 Compliance Schedule and Cost Analysis**

Kilgore companies has performed extensive research and analysis to appropriately review the potential affect this newly proposed rule would have on its operations, including economic, physical acquisition & implementation, maintenance, operational training, and much more. Our internal cost analysis shows a wide discrepancy associated with the ordering and acquisition of blue smoke controls, including equipment supply and production costs, transportation / delivery costs, implementation and associated construction costs. Based on individual quotes from the limited pool of suppliers / manufacturers, Kilgore Companies has found that costs are approximately 3 to 6 times greater than what BACT analysis performed by UDAQ has reported. Kilgore Companies is willing to review costs with UDAQ at there request.

Based on received costs and required service estimates, etc. from suppliers / manufactures of Blue Smoke equipment, Kilgore Companies' findings conclude upfront costs are essentially the same regardless of size of plant. Because of these findings, Kilgore Companies believes that these costs create an unequal effect on smaller HMA plants or HMA plants that produce lower volumes will have a greater cost per unit (ton) burden to bear than larger producing operations. Kilgore Companies believes that this places an undue burden and additional financial hardship on smaller producing locations, especially when considering competitive market challenges with existing larger HMA producing competitors. Kilgore Companies is appreciative that the



current proposal recognizes a 75,000 ton threshold for application of proposed conditions, but Kilgore Companies feels that this number is more arbitrary and does not account for all cost and implementation factors nor the unequal burden for smaller plants that produce less than 75,000 tons.

Kilgore Companies has found that there is an extremely limited amount of suppliers / manufactures of Blue Smoke equipment, coupled with the fact that within this limited amount of equipment suppliers, the greater majority only supply or cater to the specific manufacturing brand of equipment that they are associated with. Therefore, if any asphalt producer does not have that specific brand of equipment or has any type of hybrid facility with equipment from varying manufacturers, this leaves only one blue smoke manufacturer to rely on for the custom design/production & implementation for specific controls. Because of this, lead times for custom manufacturing are increased above and beyond what currently seems to be between 5 and 7 months plus lead times from all other received guidance and quotes received by Kilgore Companies. Either way, this would realistically put equipment production starts and delivery and installation time of said equipment well beyond the currently proposed compliance schedule of May 1, 2023. It is important to note that this does not include any potential impact that is more than likely to occur if multiple HMA producers are placing orders and obtaining control equipment from the same pool of limited suppliers at the same time. Kilgore Companies concludes that meeting the proposed compliance condition of a May 1, 2023 as both unfeasible and impossible, therefore situationally placing all of Utah's HMA producers, including Kilgore Companies, in a direct compliance conflict with the currently worded proposal from UDAQ.

Another significant concern from Kilgore Companies builds on the direction and information related to the control equipment installation and construction schedules provided by the equipment suppliers that Kilgore Companies has been working with. Current guidance states a need for an approximate 3-to-4-week installation period for blue smoke controls on the silo and loadout portions of the plant. Kilgore Companies concludes that a shutdown period for any HMA plant lasting approximately 3 to 4 weeks to make way for construction and installation of blue smoke equipment, during such a critical portion of an already limited seasonal production period would be detrimental to the contractual production obligations held with our customers and clients, both private and primarily governmental, based on awarded bids from the previous year. From potential delayed construction projects, likely delay penalties and back charges, loss of company reputation and potential future project opportunities, and financial losses, are likely to occur. A shutdown under this scenario would indefinitely lead to unreasonable and significant hardships and challenges.

Building off of this likely shutdown scenario, Kilgore Companies believes that it would be just as detrimental and short sided to believe that other Kilgore HMA plants could make up the lost production for any HMA Plant under shutdown. Between product integrity and required mix design specification impacts resulting from operational delivery time challenges and operational constraints that would potentially put these HMA Plants in direct odds with current



permitted air quality permit conditions related to production, and current scheduled production, this scenario would not be sufficient nor sustainable to resolve the problem. Rather, Kilgore Companies believes this would simply lead to the same potential impacts and challenges as previously stated.

Kilgore Companies may disagree with cost & implementation costs, but also recognizes that numbers may not ultimately be persuasive alone. It is the hope of Kilgore Companies that the board recognizes the culmination of all associated costs related to these facility changes will be at a significant cost to our business, especially given the many facilities for which this has application.

Due to discrepancies in the costs associated with blue smoke control systems, reasonable budgeting and forecasting practices for businesses, project bids for construction projects, the potential for major disruptions to operations next Spring and Summer that have previously been pointed out, and the limited number of supplier / manufacturers for the required blue smoke control systems, Kilgore Companies recommends to work with the UDAQ and partnering industry trade associations, like UAPA, and all other stake holders and HMA plants subject to this rule to develop a reasonable and gradual approach to implementation. Kilgore Companies recommends a phased approach as outlined by the Utah Asphalt Pavement Association (UAPA) proposal.

Kilgore Companies supports the UAPA recommendations, especially related to explanation of common business practices within this industry which detail that budgets for 2023 have already been submitted. Kilgore Companies has not forecasted for the potential of these systems due to the rule not being absolute nor approved. the lack of approval would present this as a difficult objective for any business, including ours.

Kilgore Companies agrees with the UAPA proposal that states, “A two-to-three-month window from February to May for full implementation is impossible to appropriately plan and budget for, let alone order, receive, and install these systems. This is only accentuated by the fact that many of the jobs and projects that will happen next year have already gone out to bid and have been awarded without accounting for the additional costs of these systems that, unfortunately, must be passed on to public agencies and private owners of projects in the future. Coupled with the potential for major disruptions, if not closure for a period of time to install the systems on the plants, the proposed rule and its timing has the potential to delay construction schedules and timeframes that producers of asphalt mix may have already committed to in their winning bids for next Spring and Summer.”

Kilgore Companies supports the UAPA proposal that is built on developing a phased approach to address scheduling, cost, and operational concerns by using the current 2022 – 2023 winter offseason for planning and budgeting to take place while also achieving the goals of UDAQ. This approach will also account for preexisting work, current bids, and jobs set to take place in the summer of 2023 without major disruptions or other challenges that may arise under these



commitments. With the potential passage of the rule in February 2023, Kilgore Companies and other producers of HMA in the non-attainment areas will then reasonably know what to expect and when to expect it, as opposed to a deadline in May of 2023 that will be, as previously stated throughout our comments, an impossible situation.

Kilgore Companies supports the following schedule, originally proposed by UAPA to be put in place for implementation of the systems. The UAPA schedule will allow for the modifications to take place during the construction offseason in Utah and allow for the proper time to budget, plan, and retrofit existing plants under the unique and challenging circumstances outlined above without sacrificing the long-term goals UDAQ is ultimately after for the plants located in the non-attainment areas:

- For all new plants that may be in the non-attainment area, Kilgore Companies supports the UAPA proposal stating that they should come built with the required systems as outlined in the rule.
- For existing plants, Kilgore Companies supports the UAPA proposal stating the following schedule, concentrating on the areas of highest impact to VOC capture first and then working for complete system buildouts from there:
 - Year One – Ready for Spring 2024 – Drag slat (tail pulley to head pulley) full controls in place. This is where the mix is hottest at its first transfer point and where producers believe up to 70% of VOCs may be captured or reduced.
 - Year Two – Ready for Spring 2025 – Top of silo and loadout controls. These are the next two areas of impact where producers believe up to 20% - 25% of VOCs may be captured or reduced.
 - Year Three – Ready for Spring 2026 – Tank controls. Controls of VOCs at the tanks is less critical as most systems are already self-contained, but industry does believe up to 5% - 10% of the VOCs may be captured here.
- Kilgore Companies also supports the UAPA proposal that each plant in the non-attainment areas would be required to submit a good-faith plan and documentation of scheduling the retrofits to officials at UDAQ. By addressing the most impactful areas first, industry believes there will be significant reduction of VOCs within the first year of the plan while allowing for time and appropriate planning to address the additional areas the rule seeks to address. This plan would also not preclude any one plant from implementing controls in advance of reasonable and expected deadlines from UDAQ.



Kilgore Companies looks forward to working with UDAQ and other stake holders to address these matters together. We are appreciative for the opportunity to provide public comment and for our voices and proposals to be heard.

Regards,



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Attachment A:

