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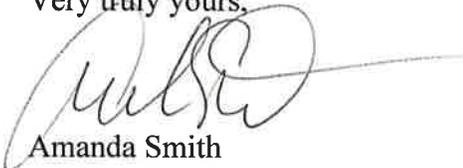
August 15, 2018

**VIA E-MAIL**

Dear Air Quality Board Members:

The attached comments are submitted for your consideration as the Board reviews the Proposed Revision to Section IX, Control Measures for Area and Point Sources, Part H: Emission Limits and Operating Practices of the Utah State Implementation Plan.

Very truly yours,



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AS:bwf  
Enclosure

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COMMENT BY COMPASS MINERALS OGDEN ON THE PROPOSED REVISION TO SECTION IX,  
CONTROL MEASURES FOR AREA AND POINT SOURCES, PART H: EMISSION LIMITS AND OPERATING  
PRACTICES OF THE UTAH STATE IMPLEMENTATION PLAN

AUGUST 15, 2018

Compass Minerals Ogden, Inc. ("Compass Minerals") submits these comments to the Utah Air Quality Board (the "Board") for consideration as the Board reviews the June 13, 2018 proposed Revision to the Section IX, Control Measures for Area and Point Sources, Part H: Emission Limits and Operating Practices of the Utah State Implementation Plan ("Proposed Revision"). Compass Minerals requests that the Board adopt the following changes to H.12(e) for Compass Minerals in the Proposed Revision:

- Amend the emission rate for the BH-001 from 0.27 lb/hr to 0.42 lb/hr to correct a calculation error in the BACT analysis report.
- Remove the 9.27 lb/hr emission limitation for Magnesium Chloride Evaporators does not reflect Best Achievable Control Technology ("BACT"). The Utah Division of Air Quality ("UDAQ") determined that no controls were technically feasible for Magnesium Chloride Evaporators and imposing an emission limitation without the availability of BACT is arbitrary and capricious.
- Adopt the provided naming conventions for listed equipment
- Adopt the provided clarifications to IX.H.12.e.ii and IX.H.12.e.iii of the PM<sub>2.5</sub> Serious SIP Evaluation Report for Compass Minerals.

**A. The Emission Rate for BH-001 Should Be Amended from 0.27 lb/hr to 0.42 lb/hr to Correct a Calculation Error in the BACT Analysis Report.**

The emission rate for BH-001 should be 0.42 lb/hr, and not 0.27 lb/hr. A conversion error was made in Table 7.1 of the BACT analysis report for BH-001 when converting from tons per year to pounds per hour. The sources controlled by BH-001 include Compass Minerals' Sulfate of Potash ("SOP") trucks and rail loading equipment, which are limited to 5,600 hours of operation per year and not, as incorrectly reflected in the report, 8,760 hours per year. As a result, the PM<sub>2.5</sub>-Fil limit proposed in Table 7.1 is incorrect. When calculated correctly, the rate for BH-001 should have been 0.42 lb/hr.

This information was communicated between Mr. John Jenks at UDAQ and Compass Minerals on May 17, 2018. However, the Board packet had already been prepared and dispersed by the time Compass Minerals had communicated the error to UDAQ, and the public comment period became the appropriate time to raise this issue. Accordingly, Compass Minerals hereby

requests that the Board amend the emission rate for BH-001 from 0.27 lb/hr to 0.42 lb/hr in Section H.12(e)(iii) of the Proposed Revision to correct the calculation error made in the original submission.

## **B. Naming Conventions Should Be Updated For Consistency**

At this time, we request that UDAQ update the naming conventions in Section IX, Control Measures for Area and Point Sources, Part H. e. to reflect the following: The “SOP Plant Compaction Building Baghouse” should be changed to “BH-1516” and “BH-1545” should be changed to “BH-008”. Making these changes in the documents will assure consistency and avoid future confusion.

## **C. The Emissions Limitation for Magnesium Chloride Evaporators Should Be Removed Because It Is Not Adequately Supported.**

The emission limitation for Magnesium Chloride Evaporators is arbitrary and should be removed. In the PM<sub>2.5</sub> Serious SIP Evaluation Report for Compass Minerals, UDAQ determined that no controls are technically feasible for Magnesium Chloride Evaporators and made no selection of BACT. *See* Utah Div. Air Quality, *PM<sub>2.5</sub> Serious SIP Evaluation Report: Compass Minerals – Compass Minerals Ogden*, at 13.3–.5 (July 1, 2018). Despite this conclusion, UDAQ recommended a VOC emission limitation of 9.27 lb/hr for Magnesium Chloride Evaporators. Because there are no viable control options for these sources, this emission limitation does not represent BACT and should be removed from the Proposed Revision of the SIP.

The Clean Air Act (“CAA”) defines BACT as an emission limitation that, on a case-by-case-basis, is determined to be “*achievable* for a facility through application of production processes and available methods, systems, and techniques . . . .” 42 U.S.C. § 169(3) (emphasis added). To fulfill this statutory requirement, the NSR Manual provides a step-by-step BACT analysis for permitting authorities to use when issuing an emission limitation for a particular source. *See generally* U.S. EPA, Office of Air Quality Planning & Standards, *New Source Review Workshop Manual* (draft Oct. 1990) (“NSR Manual”). These steps include “(1) identifying all available control options for a targeted pollutant; (2) analyzing the control options’ technical feasibility; (3) ranking feasible options in order of effectiveness; (4) evaluating their energy, environmental, and economic impacts; and (5) selecting as BACT a pollutant emission limit achievable by the most effective control option not eliminated in a preceding step.” *In re Newmont*, at 435; NSR Manual, B.5-.9. An adequate BACT analysis ensures that emission limitations are not only defensible but appropriately imposed. *See In re Knauf Fiber Glass, GMBH*, 8 E.A.D. 121, 129 n.14 (1999).

The emission limitation for Magnesium Chloride Evaporators has been determined without a supporting BACT analysis. UDAQ conducted Steps 1 through 4 of the BACT analysis pursuant to the NSR Manual. *See* Utah Div. Air Quality, *PM<sub>2.5</sub> Serious SIP Evaluation Report: Compass Minerals*, at 13.1–.4. However, upon finding that no control options were technically feasible, UDAQ arbitrarily imposed an emission limit despite the inability to select BACT pursuant to Step 5 of the BACT analysis. Further, UDAQ has not made the required demonstration that the emission limitation is achievable pursuant to the CAA. *See In re Knauf*,

at 129 n.14 (“We would not reject a BACT determination simply because the permitting authority deviated from the NSR Manual, but we would scrutinize such a determination carefully to ensure that all regulatory criteria were considered and applied appropriately.”). Because this determination is not adequately supported as BACT, the 9.27 lb/hr emission limitation for Magnesium Chloride Evaporators is arbitrary and should be removed from the Proposed Revision.

Additionally, inclusion of specific emission limitations for this small source is counterproductive and inconsistent. Compass Minerals understands the importance of including enforceable emission limitations in the plan to assure attainment. However, the Magnesium Chloride Evaporators at the Ogden facility are a small source component of a larger regulated source, and attainment is not dependent on limiting these emissions. As articulated in the PM<sub>2.5</sub> Serious SIP Evaluation Report for Compass Minerals, there are no other sources with similar processes located in the United States, and, therefore, “VOC mitigation and investigations are ongoing.” Utah Div. Air Quality, *PM<sub>2.5</sub> Serious SIP Evaluation Report: Compass Minerals*, at 13.5. Imposing an emission limit in the SIP for this source where the Evaluation Report clearly shows that control options are still being evaluated may hinder UDAQ’s ability to adequately investigate appropriate control options for this source in future permitting actions.

Compass Minerals is proposing to incorporate the Magnesium Chloride Evaporators into its Approval Order (“AO”) currently under review at UDAQ. In past SIP processes, UDAQ has taken the position that it would “not put requirements in the SIP that become antiquated as new federal limits are implemented or has new monitoring methods become available.” See Utah Div. Air Quality, *PM<sub>2.5</sub> Sections IX.A.21, IX.A.22, IX.A.23 and SIP Sections IX.H.11, 12 and 12: Comments and Responses to Comments Made During the October 2014 Public Comment Period*, at 15 (Nov. 19, 2014). We believe that including a VOC emission limit on the Magnesium Chloride Evaporators in the SIP is unnecessary, creates a potential future burden for both UDAQ and Compass Minerals, and is inconsistent with UDAQ’s stated policy in the development of previous SIPs.

**D. Comments Specific to the PM<sub>2.5</sub> Serious SIP Evaluation Report: Compass Minerals – Compass Minerals Ogden Inc.**

Compass Minerals would like to clarify information for the record regarding the BACT evaluation in the PM<sub>2.5</sub> Serious SIP Evaluation Report for Compass Minerals for the following sources:

15.3.3 Step 3 Demonstration of Feasibility - Table 15-2 Feasibility Determination on page 26 of the Evaluation Report

For Boilers #1 and #2 VOC control: Table 15-2 and the narrative under the table are not consistent and the table should be amended to correctly reflect the analysis. As the narrative explains, the installation of oxidation catalysts was determined to be “infeasible” for boilers of this size and emission rate. The price per ton, \$200,000/ton of VOC removed was well outside of standard BACT economic feasibility. It was concluded that the BACT evaluation should also

serve as MSM. However, the Table 15-2 incorrectly has “Yes” in the column for whether the method is feasible. This mistake should be noted for the record.

IX.H.12.e.ii on page 27 of the Evaluation Report

For sources with a filterable plus CPM limit, these sources exhibit exhaust moisture concentrations that prevent the use of EPA Method 201A, which allows for particulate size partitioning to quantify PM<sub>10</sub> and PM<sub>2.5</sub> emissions separately. In such cases, EPA Method 5 must be utilized for filterable PM measurement and size partitioning can either be achieved using AP-42 size fraction references or another measurement method approved by the Administrator.

Additionally, the recent addition of CPM to the definition of PM<sub>2.5</sub> has not allowed Compass Minerals adequate opportunity to gather CPM emission data for all sources of this type. And, for the same reason, reliable CPM emission factors are often not available from reference sources. During stack testing, it is not technically possible to prevent a portion of filterable PM emissions collected from the stack from interacting with exhaust moisture to create artifact CPM in the sampling train. As a result, the total filterable PM and CPM collected during testing will often remain consistent, but their proportions may vary.

For these reasons, Compass Minerals requests a total PM<sub>2.5</sub> limit which is the sum of post-stack-test-fractionated filterable PM measured using EPA Method 5 and CPM measured using EPA Method 202.

IX.H.12.e.iii on page 27 of the Evaluation Report

Sources for which a filter PM<sub>2.5</sub>-only limit was requested by Compass Minerals include those sources from which only filterable PM emissions are anticipated, and exhaust moisture is low enough to allow the use of EPA Method 201A. Using this method, Compass Minerals can reliably partition filterable PM stack test samples to measure compliance with a filterable PM<sub>2.5</sub>-only limit.