** UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 8**

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Ref: 8ARD-PM

Mr. Bryce Bird, Director

Division of Air Quality

P.O. Box 144820

Salt Lake City, Utah 84114-4820

Re: EPA Comments on Minor Modification to Approval Order DAQE-AN105550006-18 for Weir

Minerals

Dear Mr. **Bird:**

Thank you for sending the Intent to Approve (ITA or Draft Permit) for the minor modification to Approval Order[[1]](#footnote-2) DAQE-AN105550006-18 to add a coating process (Cerasmooth process) to the Weir Minerals, Incorporated facility (Wier Minerals, or the Source), an existing source, located at 3459 South 700 West, Salt Lake City, Utah 84119 for our review. The proposed permit action would authorize a minor modification to a major source of hazardous air pollutants (HAPs) under the New Source Review (NSR) program.

Our office received the draft permit package from the Utah Department of Environmental Quality’s Division of Air Quality (DAQ) that included the newspaper notice and the Intent to Approve. The EPA also reviewed the Project File available at <https://daqpermitting.utah.gov/AOsOutForCmt> and information for the area surrounding the facility available at <https://ejscreen.epa.gov/mapper/>.

The Weir Minerals facility is a major source of HAPs based on the potential emission of toluene exceeding ten tons per year and the potential emission of all HAPs at the facility exceeding 25 tons per year. Additional HAPs include 2,4-toluene diisocyanate, carbon tetrachloride, hydrochloric acid, hydrogen cyanide, hydrogen fluoride, lead, manganese, methyl isobutyl ketone, methylene chloride, methylene diphenyl diisocyanate, styrene, tetrachloroethylene, and xylenes (isomers and mixtures). The HAPs from existing operations are from the mixes and bonding solutions.

The Weir Minerals facility currently produces rubber products including linings and stand-alone rubber products and belts. Current production steps include mixing raw materials and forming rubber by heat and bonding, packaging, crating and shipping. Emissions controls at the facility currently include baghouses, dust collectors, and paint booths. In addition to being a major source of HAPs, the facility is subject to 40 CFR part 63, subpart A: General Provisions, subpart MMMM: National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, Title V Major Source Requirements, and Best Achievable Control Technology (BACT, Utah Administrative Code 307-401-8).

The ITA proposes to modify the existing Approval Order for a minor modification, adding a ceramic coating process (Cerasmooth). The Cerasmooth material is a chemical, abrasion and heat resistant coating for wearable internal pump parts used for mining and power generation industries. The Cerasmooth production process includes three different coatings (pre-coat, 1st coating-spray gun/hand, 2nd coating-spray gun/hand) to form a molded surface coating. The new coating applications will be conducted in the existing Handlay paint boot within the Pappas building as well as outside the Handlay paint booth within the Pappas building. The Handlay paint booth will be modified to include charcoal filters and the Pappas building has been modified to install a climate-controlled HVAC system. The ITA estimates an increase in emissions of volatile organic compounds (VOCs) to be 0.07 tons per year and no increase in HAPs due to installation of new air pollution controls as part of the construction of the new coating process.

The U.S. Environmental Protection Agency, Region 8 has reviewed the Intent to Approve, Project File, and the newspaper notice. We offer the enclosed comments and questions to assist Utah DAQ in ensuring consistency with the Utah State Implementation Plan (SIP), federal Clean Air Act (CAA) requirements, and applicable federal civil rights laws. For the reasons described below, the U.S. Environmental Protection Agency, Region 8 recommends that Utah DAQ revise the ITA and administrative record and republish the ITA with copies made available in both English and Spanish for an additional 30-day public comment period.

Thank you again for the opportunity to comment on this proposed permit action. If you have any

questions, please contact me at (303) 312-6936 or your staff may contact Daniel Fagnant, of my

staff, at (303) 312-6927 or at fagnant.daniel@epa.gov.

Sincerely,



Monica Morales

Acting Director

Air and Radiation Division

Enclosure

cc: Tad Anderson, [tdanderson@utah.gov](mailto:tdanderson@utah.gov), Utah Division of Air Quality

John Black, [jlblack@utah.gov](mailto:jlblack@utah.gov), Utah Division of Air Quality

**ENCLOSURE**

EPA Region 8’s Comments on the Intent to Approve for Weir Minerals

1. The summary of emissions within the ITA states that VOCs will increase by 0.07 tons per year, due in part to the 95% control efficiency of carbon filters installed at the Handlay paint booth. A review of the conditions in the ITA did not indicate any specific requirements exist that limit the proposed Cerasmooth production line to operate within the Handlay paint booth for the portion of the process that is controlled by the Handlay paint booth. Additionally, the ITA did not indicate any requirements for maintenance, monitoring, recordkeeping or reporting to ensure the new carbon filter air pollution controls achieve 95% control efficiency. The EPA recommends that Utah DAQ consider specific requirements for the replacement and maintenance of carbon filters as per the manufacturer’s recommendation or other sound engineering judgement as to the lifetime and performance of the carbon filters. Furthermore, Utah DAQ should evaluate whether any other activities, and those activities’ emissions, within the Handlay paint booth reduce the lifetime or effectiveness of the carbon filters.
2. The EPA reviewed the emission estimates in Appendix C of the Notice of Intent (NOI) within the Project File (page 33). The emission estimates state, “Based on information provided by the Weir chemist who developed the Cerasmooth process, virtually all of the VOCs in the precursor chemicals are reacted during the mixing and application of the chemicals and virtually no VOC emissions will result from the process. However, to be conservative, the emission estimates in the table assume that 1% of the VOCs in each of the precursor chemicals are unreacted and emitted to the atmosphere.”
   1. The EPA recommends that Utah DAQ evaluate whether there is the potential for greater than one percent of all VOCs in each of the precursor chemicals emitted to the atmosphere and include its analysis in the administrative record for this permit. Coating processes can have significant losses depending upon the method of application (e.g., spray guns). Evaporative losses may also differ from bench scale if the geometry and size of the material to be coated are significantly different. Of particular concern are the emission estimates provided. The NOI indicates 54,240 pounds of Derakane 8084 Resin will be used per year. Derakane 8084 Resin consists of forty percent styrene by weight according to a material safety data sheet published by Ashland Chemical. Styrene is a highly volatile VOC and HAP that readily evaporates. Utah DAQ should evaluate whether more than 216 pounds out of the approximately 21,000 pounds of styrene should be included as uncontrolled emissions within the emissions estimates in the NOI.
   2. The EPA recommends that Utah DAQ amend the summary of HAPs emissions in the ITA to include an estimate for styrene emissions since the facility emits styrene and styrene is a regulated HAP. Styrene is listed as a precursor chemical in the Cerasmooth process information included in the NOI.
3. The ITA includes a source-wide condition (II.B.1.b) limiting VOC emissions from paint booths, degreasers, rubber cement manufacturing and associated operations to 59.53 tons per 12-month period (minus combustion emissions). It is unclear how the VOC emissions from the proposed Cerasmooth are consistent with the source-wide limitation. While the Cerasmooth process has a 95% control efficiency and a 1% percent volatilization assumption, the source-wide limit does not appear to consider control efficiencies or other emissions estimate assumptions in the monitoring, recordkeeping, and reporting requirements. The administrative record does not indicate whether other processes at the facility limited by the source-wide VOC limit similarly consider control efficiencies or assumptions for maximum volatilization of potential VOCs. Utah DAQ should consider supplementing the administrative record with this information to better clarify the potentially applicable requirements for the facility. Additionally, the ITA does not describe other processes that may occur in the Handlay paint booth and the potential control of HAPs or VOCs from those processes by the addition of carbon filters, or whether any other production throughputs relied on for the source-wide emission estimates have changed.
4. The EPA notes that the existing AO, DAQE-AN105550006-18, and the existing title V permit for the source, permit number 3500210005 indicate that three paint booths are currently installed at the Source. The ITA, which will supersede the existing AO if finalized, only indicates two paint booths will operate at the Source. Utah DAQ should correct the ITA to include the Packer paint booth or explain these changes to the AO being superseded in this permit action.
5. The ITA states the facility is subject to 40 CFR part 63 subpart MMMM: National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products (40 CFR 63.3880). The Cerasmooth production process is described as involving multiple surface coating operations for equipment used by the mining and power generation industries. This surface coating operation appears to include the use of styrene, a HAP, to coat industrial machinery or other industrial products, which results in subpart MMMM applicability. Utah DAQ should either revise the permit record to determine subpart MMMM is not applicable or revise the ITA to demonstrate compliance with one of the several compliance options listed in subpart MMMM, which include emission limits, initial and continuous compliance demonstrations, workplace standards, recordkeeping, notification, and reporting requirements.
6. The ITA includes a BACT analysis for the selection of air pollution controls for the Cerasmooth process. The BACT review considered control of 0.13 tons of VOC emissions per year for the Cerasmooth process. It is unclear, based on review of the permit record, whether the existing activities at the Source are affected by the installation of new air pollution controls and the Cerasmooth process. The administrative record should clarify whether the existing processes are subject to the newly proposed controls. Any decreases in existing process emissions due to the new air pollution controls should be considered in the BACT analysis. Specifically, the BACT analysis should re-evaluate the economic feasibility of flares, thermal vapor incineration, and carbon vapor incineration if the 0.13 tons per year of VOCs considered for control does not reflect the total potential of control of VOCs and HAPs. The administrative record should also clarify whether estimated emissions of HAPs and VOCs remain substantially similar in the ITA due to changes in throughput of existing processes.
7. EPA recommends that the State analyze and address as appropriate, environmental justice (EJ) and civil rights concerns during this permit application process. EPA reviewed the EJ Indexes for the area within a one-mile radius of the Source using EJScreen.[[2]](#footnote-3) Eleven of the twelve EJScreen EJ Indexes are at or above the 80th percentile for the area within one mile of the Source when compared to the rest of the State and nine are above the 90th percentile. Notably, the EJ Index results include the 95th percentile for PM2.5, 96th percentile for Ozone, 94th percentile for Diesel Particulate Matter, 94th percentile for Air Toxics Cancer Risk, 93rd percentile for Air Toxics Respiratory HI, 95th percentile for Superfund Proximity, 93rd percentile for Risk Management Program facility proximity, 95th percentile for Hazardous Waste Proximity, and 93rd percentile for Wastewater Discharge. Also, when compared to the rest of the nation, the EJ Indexes for the area around the Source are at the 91st percentile for Ozone and 90th percentile for Wastewater Discharge. Finally, according to EJScreen, the area near the Source includes people of color and low-income communities (52% and 41%, respectively). Utah DAQ may want to consider supplementing the administrative record with an EJ analysis of air impacts in the affected area to improve public participation in the permitting process and to consider opportunities to reduce HAPs and other air pollutant emissions at permitted facilities.
   1. Given the Source’s proximity to communities with potential environmental justice concerns, the EPA recommends that Utah DAQ consider its discretion to complete a more thorough BACT analysis for the proposed permit action. Specifically, Utah DAQ should consider the total potential for the proposed air pollution equipment to reduce VOCs for new and existing processes and the inclusion of corresponding changes in emissions to existing permit limits. The EPA also recommends that Utah DAQ consider the potential to reduce air toxics when selecting air pollution controls for the activities within the Handlay paint booth and the inclusion of corresponding permit limits. The EPA recommends Utah DAQ consider re-publishing the public notice to include an expanded explanation of the emissions and controls for new and existing HAPs at the Source.
   2. The EPA’s review of EJScreen also indicated that 13% of households in the area near the Source are Limited English-Speaking Households, of which 82% speak Spanish. The State should consult the EPA’s recent “Interim Environmental Justice and Civil Rights in Permitting Frequently Asked Questions” issued in August 2022 and available at <https://www.epa.gov/system/files/documents/2022-08/EJ%20and%20CR%20in%20PERMITTING%20FAQs%20508%20compliant.pdf> and the EPA’s guidance to assist recipients in preventing national origin discrimination (including Limited English Proficiency) and ensuring Limited English Proficient persons meaningful access to their programs and activities available at <https://www.epa.gov/sites/default/files/2020-02/documents/title_vi_lep_guidance_for_epa_recipients_2004.06.25.pdf>. Because of the environmental conditions facing this community, it is important that Utah DAQ consider assessing whether this permit will cause or contribute to disparate impacts based on race, color, national origin, age, disability or sex, in order to ensure compliance with Title VI of the Civil Rights Act and other federal civil rights laws. These civil rights laws may also require providing meaningful access to persons with Limited English Proficiency. Considering the ongoing impacts to this overburdened community and the high percentage of the population that may not be proficient in English, EPA recommends that Utah DAQ re-notice the draft permit with the recommended technical changes and additional information described herein, in both English and Spanish (the second most predominate language spoken within households in a one-mile radius of the Source) and invite opportunity to comment in people’s native languages.
   3. While the ITA stated that “criteria and HAP emission modeling is not required as per State rule R307-410-4 and R307-410-5,” modeling of the emissions from the Source and the impact of those emission may assist Utah DAQ in determining whether the Source has an impact on nearby communities. Modeling of air emissions may assist Utah DAQ in determining the effectiveness of additional actions such as community monitoring. Modeling may also assist Utah DAQ in further evaluating the air impacts in the potentially affected community. Utah DAQ should also consider the potential benefits of the public availability of emissions data and/or modeling results to assist the public in understanding potential or ongoing impacts.
   4. Additionally, Utah DAQ should consider other information it may have regarding the source and nearby communities. Enhanced outreach efforts with the public can assist Utah DAQ in better understanding potential impacts to local communities. The EPA recommends Utah DAQ consider re-publishing the public notice to include additional information Utah DAQ may already have or that may be obtained from outreach with local communities.

1. Utah refers to its New Source Review Permits as New Source Review Approval Orders or Approval Orders. [↑](#footnote-ref-2)
2. EJScreen is EPA’s EJ screening and mapping tool and can be found at https://www.epa.gov/ejscreen. [↑](#footnote-ref-3)