

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

In the Matter of the Appeal)
And Petition for Hearing of:)
Croell Redi-Mix, DEQ AQD Permit) Docket No. 10-2803
Application No. AP-9645)
And DEQ AQD Permit No. MD-9645)
Dated March 17, 2010)

DEQ'S MOTION FOR SUMMARY JUDGMENT

EXHIBIT 23

Decision and Response to Comments

DEQ Bates Nos. 000145 - 000166

IN THE MATTER OF A PERMIT APPLICATION (AP-9645) FROM CROELL REDI-MIX,
INCORPORATED TO MODIFY THE ROGERS ROCK PIT, IN CROOK COUNTY, WYOMING.

DECISION

I. INTRODUCTION

The Air Quality Division received a permit application from Croell Redi-Mix, Incorporated, on July 6, 2009, to modify the Rogers Rock Pit, which will include limestone crushing, screening, blasting, exposed acreage, stockpiling, haul activity, a hot mix asphalt plant, a concrete batch plant and expanding the size to 600 acres, located in the NW¼NE¼ of Section 25, T52N, R62W, approximately five (5) miles northeast of Sundance, in Crook County, Wyoming. The applicant estimates an annual production rate of 500,000 tons. The Air Quality Division conducted an analysis of this application and on October 1, 2009, published in the Sundance Times in Sundance, Wyoming, a public notice of proposed intent to approve the application and placed a copy of the application and Division's analysis in the office of the Crook County Clerk in accordance with regulations. The public notice period ran from October 1, 2009 through November 2, 2009. A public hearing was requested and was held on December 14, 2009, at the Crook County Library, located at 414 Main Street, Sundance, Wyoming.

Public comments were received from Judith Bush, Levi Delp, Judith Hamm, Gary & Barb Johnson, Jack & Terri McGee, Dewey Turbibile, Les & Karen Turgeon, Douglas M. Watson, and Scott & Julie Wheeler. Due to the number of public comments with similar concerns, the Division grouped individual comments and developed summary responses.

II. ANALYSIS TO PUBLIC COMMENTS:

Emissions Impact

Comments

- No person shall cause, threaten or allow the discharge or emission of any air contaminant in any form so as to cause pollution which violates rules, regulations and standards adopted by the council.
- Air pollution
- Air quality concerns
- Do not want skies polluted with dangerous emissions
- Dust concerns
- The Rogers Pit limestone crushing operation, as it presently exists, blows dust over our hayland and grazing land.
- Numerous quarries in the area.
- Are the other pits all taken into consideration and incremental effects of each considered as part of the whole before permit is approved?
- This area has too many quarries and they are too close together.
- Concerned over health of children – breathing
- I also wonder about using average wind velocity to calculate truck loading and stockpiling emissions. One good wind can do a lot of damage and more than make up for any number of average or less than average wind velocities.

- What boggles my mind is that this is the basis on which the AQD has calculated not only the amount of airborne particles, including various toxic substances, which the operation will generate, but this same estimate, provided by the applicant is also used to determine the type of mining permit-which this operation should fall under.
- It is unclear if the emissions of any of the large machinery have been factored into the Air Quality emission estimates.

Response

Wyoming Air Quality Standards and Regulations (WASQR) requires consideration of Best Available Control Technology (BACT) in all permitting actions, which is more stringent than Federal regulations. [Also see BACT Response.] However, compliance with BACT does not mean there will be no air quality impact. Estimated emissions from activities at the quarry were calculated using approved emission factors and operational information from the applicant. [Also see Size of Quarry and Annual Production Responses.] Because the emission estimates are on annual basis, average conditions (e.g., wind velocity) are used in the emission calculations. Control efficiencies are applied to the emissions to reflect the application of BACT. This is the same methodology used to calculate emissions at large surface coal mines. The Division does not require applicants to estimate emissions from mobile equipment (e.g., haul trucks, loaders) at quarries of this size. Mobile equipment utilizes nonroad engines, which the Air Quality Division has no authority to regulate. Emissions from these sources are estimated for large surface coal mines and included in the modeling analysis discussed below.

The Division generally does not require modeling or monitoring for rock quarries or multiple quarries in an area. In previous permitting actions, the Division has modeled large surface coal mines with production rates in the millions of tons per year and the results have demonstrated compliance with particulate matter (PM₁₀) and nitrogen dioxide (NO₂) annual ambient standards, which are health based standards. Primary ambient air quality standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. When comparing the modeled results to actual monitoring, the results from the modeling are almost always higher. Some of the over prediction can be attributed to the inaccuracies of the model, but there is also the thought the emissions estimates are conservative. While there may be episodic events that may result in higher actual emissions and impacts than estimated, the Division considers the emission estimates for the quarries to be representative for permitting.

Emission estimates for quarries range from 50 tpy to 200 tpy particulate matter depending on the operational activity at the quarry. In comparison, a coal mine that produces 40 million tpy (MM tpy) of coal annually has estimate particulate emissions in the range of 1,500 tpy. While all the quarries in Crook County may total or exceed this level, the quarries are not contiguous or adjacent so their cumulative impact is going to be less than a single large coal mine. [Also see Major Source and Location Not Suitable for Mine Operations Responses.] The large surface coal mines in the Power River Basin (PRB) are adjacent and modeling analysis described earlier is a cumulative analysis. Meaning, the emissions from all mines in the modeling domain are considered in the modeling analysis, which can total 7,000 tpy particulate matter and 5,000 tpy NO_x. As discussed, large surface coal mines in the PRB have demonstrated compliance with Wyoming Air Quality Standards and Regulations health-based standards through modeling and/or monitoring. It should be noted that the large surface coal mines located in the PRB in Campbell County have an established monitoring network for particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂) and currently demonstrate compliance with all ambient standards.

Based on this experience, the Division concludes the cumulative impact from properly controlled quarries, as required through the application of BACT, will not result in an exceedance of air quality standards. However, to confirm the Division's assessment based on other permitting actions, the Division is evaluating locating a PM₁₀ monitor and/or camera in the Sundance area for a designated period of time. A site analysis will be conducted in the April/May timeframe of this year.

Best Available Control Technology (BACT)

Comments

- Their Best Available Control Technology is limited in their explanation and only recites the requirements. They do not elaborate on their operating procedures. They say they will use a wet suppression to control fugitive emissions from crushing and screening. The crusher equipment listed for the land quality permit did not say if the crushers were equipped with operating water suppression equipment and what percentage of the time it would be used.
- The Croell Pit has caused pollution in this area. Based on this type of operation, I feel that this operator needs to better address their plan on how they will control the dust.
- What is economic reasonableness? Is their profit margin more important than air pollution?
- In the winter months of operation when water freezes how are they going to use this type of suppression for dust control? Are they going to operate in the winter months?
- What are they going to do when the wind speed is more than 20 mph? How are they going to attempt to control the emissions from blasting?

Response

Croell Redi-Mix, Inc. will be subject to the terms of the permit, which includes controlling fugitive dust. Chapter 6, Section 2 of the Wyoming Air Quality Standards and Regulations requires consideration of "best available control technology" with consideration of the technical practicability and economic reasonableness of reducing or eliminating the emissions resulting from the facility. The term economic reasonableness is a measure of how much a proposed control technology costs and the associated emissions reduction. This term is expressed as annualized cost per ton of pollutant controlled. Profit margin is not a consideration in the BACT process.

The Division has considerable experience in permitting these types of operations throughout the State and has determined that application of water and/or dust suppressant is an effective means of controlling emissions from crushing, screening, exposed acreage and haul roads, and as such represents BACT for this type of operation. Any equipment located at a quarry will be required to have a separate, valid air quality permit for which BACT will have been applied. Proposed permit conditions will require Croell Redi-Mix, Inc. to control fugitive emissions at the mine, which are as follows:

- i. That the crushing/screening equipment shall be equipped with a wet suppression system to control fugitive emissions from the crushing/screening equipment. The wet suppression system shall be operated to the extent necessary to limit visible emissions to twenty percent (20%) opacity or applicable limits set forth by Wyoming Air Quality Standards and Regulations, Chapter 5, Section 2, Subpart 000, as determined by 40 CFR part 60, Appendix A, Method 9.

- ii. That all work areas, disturbed areas, and stockpiles shall be treated with water and/or chemical dust suppressants on a schedule sufficient to control fugitive dust.
- iii. All unpaved haul roads shall be treated with water and/or chemical dust suppressants on a schedule sufficient to control fugitive dust from vehicular traffic and wind erosion. At a minimum, two (2) applications of chemical dust suppressant shall be applied annually in accordance with the manufacturer's recommendations. The chemical dust suppressant shall be maintained continuously to the extent that it remains a viable control measure, which may require additional applications. All unpaved portions of haul roads shall receive an initial treatment of chemical dust suppressant prior to any hauling activities at the beginning of each construction season.
- iv. Croell Redi-Mix, Inc. shall maintain a log book listing the dates, amount of dust suppressant applied, areas treated, water usage and operating hours of the water truck. The log shall be maintained on site for a period of at least five (5) years and shall be made available to the Division upon request.

The Division continues to evaluate BACT for all sources in the State. Since this application was proposed, additional BACT requirements for quarry operations were developed which address expanding the application of dust suppressant to the work areas and a more specific condition addressing dust control from exposed acreages. The new conditions, which will be included in the final permit, are as follows:

- i. That all work areas, disturbed areas, and stockpiles shall be treated with water and/or chemical dust suppressants on a schedule sufficient to control fugitive dust. At a minimum, two (2) applications of chemical dust suppressant shall be applied annually to all work areas in accordance with the manufacturer's recommendations. The chemical dust suppressant shall be maintained continuously to the extent that it remains a viable control measure, which may require additional applications. All work areas shall receive an initial treatment of chemical dust suppressant prior to any activities at the beginning of each construction season.
- ii. Croell Redi-Mix, Inc. shall stabilize against wind erosion the exposed areas at the quarry. Newly disturbed areas shall be treated within sixty (60) days of completion of stripping unless otherwise approved by the Division. Reclamation areas shall be stabilized against wind erosion within sixty (60) days of reaching the approved post mining topography, unless otherwise approved by the Division. Stabilization practices may consist of ripping or chiseling to create a roughened surface, seeding with a temporary vegetative cover, or other practices which effectively stabilized against wind erosion. Localized areas identified for equipment storage/staging, work areas, and required buffers for haul roads and reclamation are not required to be stabilized.

The final conditions of this permit represent BACT for quarry operations and are required to be complied with during all operating conditions, which include winter time operations. [See also Facility Inspections and Blasting Responses.]

Facility Inspections

Comments

- They say they will have provisions for measuring the emissions of significant air contaminants as determined by the Administrator of the Division of Air Quality. What exactly is the requirement? Will there be someone trained in opacity testing? What hours will this person be on site? Since this is done in daylight, how are they going to do this at night or when it is dark or cloudy? How often or how is this person going to perform this test? How is this person going to decide when to do this test? Is this a subjective test?
- Unannounced checks on quarries would be appropriate and very helpful
- Rules and regulations should be enforced and at the time don't believe they are
- Croell Redi-Mix does not have a terrific record when it comes to staying within the conditions of mining permits which have been granted to the company by the DEQ. About a year ago, Croell Redi-Mix, apparently after Breuning Rock was issued a permit from DEQ Air Quality for a crusher with a capacity to crush 1,500,000 tons/year which was moved to Rogers Pit, was cited by the DEQ for operating in an area more than double the size of their permit. Several other citations relating to other rock operations have also been made against Croell Redi-Mix in the past three years.

Response

The conditions of this permit do not require Croell Redi-Mix, Inc. to have personnel certified to read opacity. In general, companies have personnel certified to read opacity or at least qualified to read opacity to gauge compliance with permit conditions. The Division does expect Croell Redi-Mix, Inc. to have adequate trained personnel and have an internal dust mitigation plan or equivalent to ensure compliance with the conditions of the permit during all operating conditions.

Division personnel are certified to read opacity and conduct announced inspections to ensure compliance with the permit conditions and unannounced inspections in response to public complaints as Division resources allow. Questions regarding compliance with the permit conditions should be directed to the District Engineer at 1866 S. Sheridan Avenue, Sheridan, WY 82801, or by phone at (307) 673-9337.

Compliance history is not a consideration under the Wyoming Air Quality Standards and Regulations in issuing an air quality permit.

Blasting

Comments

- The blasting emissions were based on a total numbers of blasts. I had contacted LQ with concerns about my well and blasting and I was also told by DEQ that there are no regulations presently regarding blasting. A question I would like answered is how can they arrive at these emissions when there are no requirements and how can they be enforced if there are no requirements?
- Concerned over explosives being used at pit

Response

The Division required the applicant to identify whether blasting will occur at the quarry and the number of blasts per year. In the Division's analysis, emissions from blasts were quantified. There are currently no methods to control emissions from blasting. As discussed in the Emissions Impact Response, there are NO_x and PM (PM₁₀ and PM_{2.5}) networks established for large surface coal mines, where blasting is part of the operations, that demonstrates compliance with ambient air quality standards. Blasting is part of the operations at a coal mine. In the Land Quality application, Croell Redi-Mix, Inc. reported that on days of blasting, signs will be placed on all access roads to the blasting area.

Location Not Suitable for Mine Operations

Comment

- Numerous quarries in the area.
- How many gravel pits do you need and why can't they put them where they are not placed in a place where dust comes over peoples' houses?
- This area has too many quarries and they are too close together.

Response

There are no distance restrictions contained in the Wyoming Air Quality Standards and Regulations nor does it regulate the number of gravel quarries in a certain county. By statute, the Division is required to issue a permit if the facility complies with all applicable rules and regulations. The WAQSR does require that quarries must be located in accordance with proper land use planning as determined by the appropriate State or local agency charged with such responsibility. If counties have restrictions on quarry locations, the applicants will be required to meet the requirement as part of the air quality permitting process. Location of quarries with respect to residential areas is an issue that needs to be addressed at the county level.

As part of this permitting action, Croell Redi-Mix, Inc. provided a letter from the Crook County Commissioners stating Crook County does not have zoning regulations in effect. Croell Redi-Mix, Inc. has complied with the siting requirements of Chapter 6, Section 2 of the Wyoming Air Quality Standards and Regulations.

Air Quality Monitoring

Comments

- Effective monitoring concerns
- Is the air quality being monitored in Crook County? If so, what are the standards being monitored?
- NO_x contributes to greenhouse gases, to what level is this considered? Is this monitored in any way?
- Did the applicant conduct a continuing Ambient Air Quality monitoring analysis for one year preceding this application to determine existing levels of all affected pollutants? If so, where would this information be found? If not why was this not required? If it was only required for the initial permit, where can this information be obtained?

- WAQSR Section 1. Introduction to permitting requirements states. "Section 2 covers general air quality permitting requirements for construction and modification as well as minor source permits to operate" Section 2. (b) (i) The applicant shall conduct such continuous Ambient Air Quality monitoring analyses as may be determined by the Administrator to be necessary in order to assure that adequate data are available for purposes of establishing existing concentration levels of all affected pollutants. As a guideline, such data should be gathered continuously over a period of one calendar year preceding the date of application. Upon petition of the applicant, the Administrator will review the proposed monitoring programs and advise the applicant if such is approvable or modifications are required." Why is this the only statement in the paragraph that does not apply to limestone quarries?
- Won't it be more appropriate for this quarry to have an air monitor?
- In Chapter 2 Ambient Standards there is a listing of standards for particulate matter 10 (PM₁₀), particulate matter 2.5 (PM_{2.5}), nitrogen oxides, carbon monoxide, plus others. These measurements are based on micrograms per cubic meter.
- How can opacity testing which your department tells me is used to monitor emissions from this industry be related to micrograms per cubic meter?
- How can the estimates of 50% of the emissions be related to micrograms per cubic meter?

Response

There is currently no air quality monitors located in Crook County. See Emissions Impact Response for more information on monitoring quarries.

WAQSR Chapter 6, Section 2 (b)(i) states that the applicant shall conduct such continuous ambient air quality monitoring analyses as may be determined by the Administrator to be necessary in order to assure that adequate data are available for purposes of establishing existing concentration levels of all affected pollutants. The Administrator does not require applicants for quarries of this type to perform preconstruction monitoring. As discussed in the Emissions Impact Response, the Division has experience with much larger surface coal mines and the associated ambient impacts and has determined for quarries of this size no preconstruction monitoring is required.

The Division is not requiring Croell Redi-Mix, Inc. to install monitors based on experience with large surface coal mines with much larger production rates and emissions. As discussed in the Emissions Impact Response, the Division is evaluating locating a PM₁₀ monitor and/or camera in the Sundance area for a designated period of time.

Opacity is used to determine whether the emissions from a source, such as a crusher, are acceptable. While there is no direct correlation between opacity and impact (i.e., micrograms per cubic meter), lower opacity readings means less emissions are being emitted and, therefore, less impact. Opacity is one of the tools in the BACT tool box used to evaluate the effectiveness of the controls and to ensure the source is complying with all applicable requirements in the WAQSR.

Like opacity, there is not direct correlation between the application of water to control dust and impact. However, water is used to control emissions and less emissions means less impact. The 50 percent control efficiency is a common control factor applied to an emission factor using water as a control method.

EPA's Proposed Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule list a group of six greenhouse gases (GHGs) that may be covered by an EPA rule controlling or limiting their emissions:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF₆)

NO_x is not this list and, therefore, is not considered a greenhouse gas.

Airshed Levels of Crook County

Comment

- What air shed level does Crook County fall under?

Response

Area classifications limit the maximum allowable increase in concentration (i.e., amount of emissions growth) that is allowed to occur above a baseline concentration for an air pollutant. With the exception of eight Class I areas, all of the State of Wyoming is classified as a Class II area. Class II areas are designated to accommodate normal well-managed industrial growth. Class I areas are allowed the smallest increases and thus only allow a small degree of air quality deterioration. Class I areas are defined by Wyoming Air Quality Standards and Regulation Chapter 9, Section 2 (c)(iii) as "all mandatory Class I Federal areas established in the Clean Air Act Amendments of 1977 and include the following for the State of Wyoming: Yellowstone National Park, Teton National Park, North Absaroka Wilderness, Washakie Wilderness, Teton Wilderness, Bridger Wilderness, and Fitzpatrick Wilderness. Such term also includes the Savage Run Wilderness which is not a mandatory Class I Federal area and any future Class I area redesignated in accordance with Chapter 6, Section 4(d) of these regulations."

Asphalt and Concrete Plants

Comments

- Opposed to asphalt plant.
- If the applicant is serious about moving a hot-mix asphalt plant onto the site, pollution from this use has also not been calculated into the total estimated emissions for this expanded operation. Emissions from such plants are both toxic and odorous.

Response

During the Public Hearing, Roger Croell indicated that he has no current plans to locate an asphalt plant or concrete plant at this quarry. Although Roger Croell made these comments at the public hearing, Croell Redi-Mix, Inc. does not wish to remove the ability of having an asphalt plant and/or concrete plant from the requested permitting action.

Asphalt plants have individual air quality permits, as this equipment is portable. Emissions of nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), volatile organic compounds (VOC), and particulate matter (PM) from the asphalt plant stack, baghouse, transfer and discharge points, diesel generator, and raw material storage bins associated with the plant are addressed through the permitting process and BACT review. BACT thresholds, emission testing, monitoring, and record keeping requirements, as necessary, are placed on the owners and operators of the portable equipment as those permits are issued.

The Division acknowledges that any crushing/screening equipment, asphalt plant and/or concrete batch plant, which may in the future be located at the quarry, is a source of emissions. However, this permitting action is to expand the size of the quarry, not to authorize or permit individual portable sources which may be operated at the quarry. Operation of an asphalt plant and/or concrete batch plant at the Rogers Rock Pit is currently authorized under Air Quality Permit CT-4526 issued February 13, 2007. Condition 6 of this permit states:

Any crushing/screening, hot mix plant or concrete batch plant equipment shall have separate valid air quality permit(s) prior to locating/operating at this site.

Proposed conditions for the quarry will supersede Air Quality Permit CT-4526. Any applicable requirements from permit CT-4526 have been incorporated into the proposed permit, which includes the condition addressing operation of an asphalt plant.

Major Source

Comment

- Rogers Pit should be considered a major source because all emissions including haul road emissions is over 100 tons per year of any pollutant. 35-11-203.
- While the Croell Pit is not a "major stationary source" It appears that they do have the potential to emit 100 tons per year. This is especially true when you add in the other large quarries within a five mile radius. They do project that they will emit they will emit 29.4 tons of PM₁₀ that is a hazardous pollutant. This is more than twice the allowed standard for major air sources.
- When looking at the total emissions between the three quarries, could they not be considered a major source? Surely their emissions would put them in this category, certainly Rogers Pit.
- The conclusion that this application for a 600 + acre limestone mining operation does not constitute a major source or a major emitting facility is also questionable.

Response

Under Chapter 6, Section 3 of the WAQSR, a "Major Source" means any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person or persons under common control) belonging to a single major industrial grouping and this is described in paragraphs (A), (B), or (C) of this definition. For the purpose of defining "major source", a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

- (A) A major source under section 112 of the Act, which is defined as:
- (I) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the EPA may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or
 - (II) For radionuclides, "major source" shall have the meaning specified by the EPA by rule.
- (B) A major stationary source of air pollutants, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant, as determined by rule by the EPA). Emissions of air pollutants regulated solely due to section 112(r) of the Act shall not be considered in determining whether a source is a "major source" for purposes of Chapter 6, Section 3 applicability. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source unless the source belongs to one of the following categories of stationary sources:
- (I) Stationary sources listed in Chapter 6, Section 4(a)(i)(a) of the WAQSR; or
 - (II) Any other stationary source category, which as of August 7, 1980 is being regulated under section 111 or 112 of the Act.
- (C) A major stationary source as defined in part D of Title I of the Act (in reference to sources located in non-attainment areas).

A written comment was received questioning the methods used for calculating haul road emissions and why they are not considered when determining whether a facility is considered a major or minor source. The Division uses widely accepted methods when determining emission calculations for sources like the Rogers Rock Pit. Also, the Division performs necessary analysis on the emissions generated from the haul roads, but does not consider these emissions when determining whether a facility is a major or minor source.

Emissions from a haul road are considered to be fugitive emissions. Fugitive emissions means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. In determining whether fugitive emissions must be considered in the major source applicability, the source must belong to one of the source categories listed under (B)(I) or (II) listed above. (B)(I) applies to named sources under Chapter 6, Section 4, which does not include

quarries. (B)(II) applies to sources that are subject to New Source Performance Standards (NSPS – Section 111) or National Emission Standards Hazardous Air Pollutants (NESHAPS – Section 112) promulgated as of August 7, 1980. The quarry is not subject to any NSPS or NESHAP standards promulgated as of this date. Therefore, fugitive emissions from the haul road or due to quarry operations are not included in determining if the quarry is a major source.

In order for quarries in the area to be considered one stationary source they must be located on one or more contiguous or adjacent properties, under common control of the same person or persons under common control and belonging to a single major industrial grouping. The quarries in the area are not contiguous or adjacent (i.e., must be touching or have a common end point) nor all under the same common control. All three criteria must be met before the quarries would be considered one source. Therefore, the emissions from the quarries are not aggregated to determine major source applicability.

PM₁₀ is a regulated NSR pollutant, which is defined in Chapter 6, Section 4 of the WAQSR as meaning the following:

- (i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the EPA Administrator (e.g., volatile organic compounds are precursors for ozone);
- (ii) Any pollutant that is subject to any standard promulgated under section 111 of the Federal Clean Air Act;
- (iii) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Federal Clean Air Act; or
- (iv) Any pollutant that otherwise is subject to regulation under the Federal Clean Air Act; except that any or all hazardous air pollutants either listed in section 112 of the Federal Clean Air Act or added to the list pursuant to section 112(b)(2) of the Federal Clean Air Act, which have not been delisted pursuant to section 112(b)(3) of the Federal Clean Air Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Federal Clean Air Act.

Item (iv) excludes all hazardous air pollutants listed under Section 112. PM₁₀ is not a hazardous air pollutant listed in Section 112 or Chapter 5, Section 3 (d)(ii) of the WAQSR.

Hours of Operation

Comments

- Hours of operation are stated in the permit but not enforced or mandated by the DEQ. When responding to a public notice, the public has the right to know what to expect when a 600.07 acre quarry is permitted with 2 miles of another saying they are producing 400,000 tons which is within another quarry producing 200,000 tons. Residences have the right to know if this operator plans to operate through the night. Night operation affects our quality of life in that the noise disrupts our sleep. Hours of operation should be limited. I would suggest no work between 10pm and 5 am so we can have at least 7 hours of quiet especially in the summer when our windows are open, another reason to control the dust.
- The application form filled out by Croell Redi-Mix states that the operation will run five days per week for ten hours per day and for 20 weeks per year. I am not certain that crushing has been limited to 20 weeks per year in the past. My ranch manager has told me that hauling operations continue pretty much year round. A person who reads this application and does not know any better would reasonably assume that they would only have to endure the dust from the trucks on the road for twenty weeks out of the year, which is bad enough.

Response

The Division is satisfied that the control requirements established through the BACT process will ensure the quarry complies with all applicable requirements of the Wyoming Air Quality Standards and Regulations. Therefore, the Division does not have the authority to limit hours of operation.

Croell Redi-Mix, Inc. responded to the question on hours of operation and during normal operations activity at the quarry will typically be as represented in the application. It also was explained that there may be jobs that require additional operations to meet the timeframe established in the contract.

Water Source and Usage

Comments

- Croell Redi-Mix's application states that initially they will truck in the water used to keep the dust down. However, the application also states that in the future an on site well may supply ground water for this purpose. How much water may be needed for this purpose is an unknown? No one at the various discrete divisions of the DEQ or the State Water Engineers are looking at how much water might be required and whether the quantity of water has a potential to affect local wells.
- I do not know of any estimate regarding how much water might be required to keep the dust down to 50% of what it would otherwise be. I have not seen where either the applicant or anyone at the DEQ has ventured an estimate on this. It is not being investigated because the applicant has stated that he will not be using ground water for this purpose (at least until after the application is approved).
- No attention seems to have been given to how much water from an on-site well may be necessary to keep the dust down, and what impact this may have on nearby wells on our property. Water is the limiting factor for growth in Wyoming. It should not be ignored and/or squandered.

Response

The conditions of the permit require water to be used to control fugitive emissions during all operating periods. The amount of water that needs to be applied to satisfy the conditions of the permit is not calculated because there are a number of variables that would go into this determination, such as precipitation, type of material being mined and/or processed, and wind conditions. The source of the water or potential impact on nearby wells is not a consideration in issuing an air quality permit under the WAQSR.

In response to comments, Croell Redi-Mix, Inc. indicated during the public hearing that they would use a combination of on-site well water and water from an off-site reservoir to meet their water usage needs.

Public Notice Process

Comments

- Also in regards to this permitting process I would recommend that the Air Quality Control require at least three consecutive weeks of public notice in the newspaper. Even though we knew this notice was going to be published, we did not realize there would be two (AQD and LQD) and at different times.
- It seems to me that both meetings (AQD and LQD) are being set up in ways which will tend to discourage rather than encourage attendance.
- In general, I think that the public would be better served and better informed in meetings attended by representatives from all involved departments of the DEQ, as well as by representatives from any other involved government agencies (of whatever level of government).
- Various divisions of the DEQ bring their separate expertise to various aspects of any proposed mining operation. I have no problem with this. However, when it comes to presenting a particular proposed mining operation to the public, it makes no sense to me that it is presented in a piecemeal fashion, when, in fact all of these various aspects are interrelated and should be introduced to the public as a package.
- Landowners in the area were not notified of the proposed application.

Response

Chapter 6, Section 2(m) of the Wyoming Air Quality Standards states that after the Administrator has reached a proposed decision based upon the information presented in the permit application to construct or modify, the Division of Air Quality will advertise such proposed decision in a newspaper of general circulation in the county in which the source is proposed. This advertisement will indicate the general nature of the proposed facility, the proposed approval/disapproval of the permit, and a location in the region where the public might inspect the information submitted in support of the requested permit and the Air Quality Division's analysis of the effect on air quality. The public will be afforded a 30-day period in which to make comments and recommendations to the Division of Air Quality. A public hearing may be called if sufficient interest is generated or if any aggrieved party so requests in writing within the 30-day comment period. After considering all comments, including those presented at any hearings held, the Administrator will reach a decision and notify the appropriate parties.

The Air Quality Division conducted an analysis of this application and on October 1, 2009, published in the Sundance Times a public notice of the Division's proposed intent to approve the permit application and placed a copy of the application and Division's analysis in the office of the Crook County Clerk. During the public comment period, comments were received requesting a public hearing. A public hearing was held on December 14, 2009, at the Crook County Library, 414 Main Street in Sundance, Wyoming. The Division has met the public notice requirements for this application.

The Division conducts all public hearings as administrative hearings as provided under Chapter III of DEQ's Rules of Practice and Procedure. As such, they are not question and answer hearings. The purpose of the hearing is to receive comments on the Division's advertised proposed decision to grant a permit to the applicant. The public hearings are not conducted in an informal manner because the Division must carefully consider all comments before a final decision is rendered.

It should be noted that representatives from the Land Quality Division were present at the December 14, 2009 Air Quality Division public hearing. After the public hearing was conducted, representatives from both Divisions were available to discuss the application.

The Air Quality and Land Quality Divisions have been working together to coordinate the permitting processes. However, the permitting processes for both Divisions are significantly different and coordinating the processes is extremely difficult.

Public Notice and Hearing Notice Did Not Mention Pit Expansion

Comment

- Please note that there was nothing in the notice which was placed in the Sundance Times on June 4 and 11, 2009 to indicate the extent of expansion being sought by Croell Redi-Mix.

Response

The Air Quality Division on October 1, 2009, published in the Sundance Times in Sundance, Wyoming, a public notice of proposed intent to approve the application. On December 1, 2009, the Air Quality Division published in the Sundance Times in Sundance, Wyoming, a notice of public hearing.

The public notice listing and the notice for a public hearing posted in the Sundance Times on October 1, 2009 and December 1, 2009, respectively, described the proposed modification to Rogers Rock Pit but did not specifically state the quarry was being expanded to 600 acres. The notices did include the increase in production rate to 500,000 tons per year. The Division acknowledges this oversight. However, Croell Redi-Mix, Incorporated's application and the Division's analysis were based on the expansion to 600 acres and a production rate of 500,000 tpy.

Annual Production

Comment

- Is it correct that the Air Quality Division does not request information regarding annual production of operators to whom it has issued air quality permits?
- In its applications for Land Quality and Air Quality permits, Croell Redi-Mix estimated its yearly production at 100,000 tons per year.
- Bruening Rock Products has an AQD permit to operate a crusher initially in the Rogers Pit with the capacity of 1,050,000 tons per year.
- Emissions estimates for the Bruening Rock Products crusher was based on 1,050,000 tons per year.

Response

Maximum production rate for this quarry is reported at 500,000 tpy and was the basis for the Division's analysis. A condition has been added to the final permit as follows:

The amount of limestone crushed or hauled from the quarry shall not exceed 500,000 tpy. Records shall be kept for a period of five (5) years to demonstrate compliance with this condition and made available upon request by the Division.

Therefore, any crushing/screening equipment operating at this quarry will be limited to 500,000 tpy. If multiple crushers/screens operate at this quarry during a calendar year, the total amount of limestone crushed/screened shall not exceed this limit.

Exposed Acreage

Comment

- The DEQ Air Quality has estimated emissions due to exposed acreages on the basis of 5 acres per year. Unless the DEQ has an obscure technical definition of what constitutes exposed acreage, this strikes me as impossibly low.

Response

The Division has confirmed with Croell Redi-Mix, Inc. that the 5 exposed acres is correct. During inspection, Division personnel will be evaluating the amount of exposed acreage and compliance with the conditions of the permit addressing exposed acreage.

Operation in Proposed Area

Comment

- In the permitting process it appears that operations are allowed before the public hearings are completed. Why is this allowed?

Response

Air Quality Permit CT-4526 for the Rogers Rock Pit is a valid permit. Conditions of the proposed permit will supersede this permit. Until the modification permit is issued, Croell Redi-Mix, Inc. is authorized to operate under CT-4526.

Regulation Updates

Comment

- I understand that the Air Quality Division of the DEQ has just completed holding meetings to upgrade their air quality standards in order to bring them in line with Federal regulations, which are more stringent. I do not know if by approving this permit at this time the Roger's Pit would be grandfathered and not have to comply with the more stringent Wyoming regulations when they come on-line.

Response

On October 26-27, 2009, the Division presented to the Air Quality Advisory Board Meeting proposed changes to the WAQSR. Most of the changes are to update the regulations to make consistent with Federal regulations. None of the proposed changes will affect the Rogers Rock Pit. It should be noted that this quarry is being permitted under Wyoming's minor source permitting program (i.e., Chapter 6, Section 2). There is no minor source permitting program at the Federal level. If this facility was under the jurisdiction of EPA, no permit would be required. Any Federal standards (i.e., NSPS or NESHAP) that apply to this quarry are required to be complied with whether in the permit or not.

Size of Quarry

Comment

- It would make more sense to issue a permit to Croell Redi-Mix for a much smaller area; and to include additional land within the permitted area only at the same time as mined and reclaimed acreage is removed from the permitted area. This would leave a more level playing field for more modest operations to acquire contracts. It could be permitted in such a way as to ensure that any new criteria governing cleaner mining operations would be applicable to lands newly included in the mining permit.

Response

As discussed in this decision document, the application as proposed to increase the size to 600 acres and a production rate of 500,000 tpy complies with all applicable requirements of the WAQSR. Therefore, the Division does not have the authority to require Croell Redi-Mix, Inc. to reduce the size for the quarry.

Increasing Regional Haze

Comment

- The Regional Haze in this area has been increasing every year. I have consulted an "official weatherman" and they have confirmed from my pictures that were sent that it is dust from the surrounding quarries. When reviewing the Regional Haze Proposal the "Bad Days" of these class 1 areas are Sundance's "Good Days".

Response

The Division is not required to address Class I [See also Airshed Levels of Crook County Response] impacts as part of a WAQSR Chapter 6, Section 2 permitting action nor are there any standards for visibility (regional haze).

Issues which cannot be considered in the issuance of an air quality permit

i. Noise

Comment

- Noise concerns

Response

A written comment was received expressing concern about the noise generated by the mining operation, including haul equipment. The Division has no authority to regulate noise pollution.

ii. Haul Road Safety Issues

Comments

- Unsafe road conditions
- There is a blind spot due to a curve in the road. There have been numerous close calls with loaded gravel trucks turning out from our property onto the Rifle Pit Road.
- We were concerned with the dangers posed by loaded gravel trucks turning onto the Rifle Pit Road. (Line of sight was obscured due to a curve in the Rifle Pit Road at that point).
- The road which Mr. Croell is presently constructing involves a steep descent which ends near where the Rifle Pit Road tunnels underneath I-90 to access Hwy 14. There is limited visibility and a different curve resulting in a different blind spot. There will be run-off which may freeze. There will be no place to put the snow shoveled onto the Rifle Pit Road. Our ranch manager and our neighbors agree that it is an accident waiting to happen.
- Loaded trucks coming out of the Rogers Pit and turning onto the Rifle Pit Road pose a hazard for traffic along the Rifle Pit Road. Our ranch manager's wife nearly wound up under one of the loaded gravel trucks. The sight line is not clear due to a curve in the road.
- The new road which is having the finishing touches put on it as we speak poses an even greater danger to cars traveling along the Rifle Pit Road.
- The haul road is sometimes so dusty you can't see if someone's coming after a gravel truck has went out or came in. And there's been a lot of close accidents of the gravel trucks hauling gravel out of that road cause they were not stopping.
- The traffic problem is a problem on the haul road, even with the new road.

Response

The issue of safety due to increased truck traffic and haul road use was raised in the public comment period and during the public hearing. The Air Quality Division has no authority to consider safety issues related to the use of public roads; in determining whether an air quality permit should be granted or denied.

iii. Haul Road Infrastructure

Comments

- The Rifle Pit Road is in poor repair.
- The Rifle Pit Road is in generally poor repair due to the limerock laden trucks. Truck traffic to and from the Rogers Pit has been far in excess of anything which can easily be explained by the operation of a 10 acre LMO with an estimated yearly production of 100,000 tons.
- I would recommend while Roger is rebuilding the road, that I don't know if it's county or state project that works on that but we need to get some drainage. We got a drainage problem that needs to be addressed.

Response

The issue of road maintenance due to increased truck traffic was raised. Also, concerns were raised over potential drainage issues for the haul road. The Air Quality Division has no authority to regulate or to consider these two issues, in determining whether an air quality permit should be granted or denied.

iv. Aesthetic Impacts

Comments

- Our timber is mature - some of it original growth over 200 years old. This is the Wyoming that the state's tourism branch likes to brag about. It is a truly beautiful property.
- We have consistently chosen to forego forgoing quick profits from timber, over hunting and limerock crushing operations in order to preserve the natural scenic beauty mature trees, and abundant wildlife our ranch affords. The value, both in terms of pristine beauty and in terms of financial worth will be eroded by this project going ahead.

Response

Comments were received expressing concern with the impact to the surrounding area. The Wyoming Air Quality Standards and Regulations do not allow the Division to consider aesthetics in determining whether an air quality permit can be issued. The Division is required to address the ambient air quality impact of the proposed limestone operation and is satisfied that if the limestone operation is operated within the confines of the permit conditions, ambient air quality standards will not be violated.

v. Property Values

Comment

- Pits have the capacity to impact the value of the property of those living nearby.

Response

A written comment was received regarding negative effects on property values of surrounding residential or agricultural properties due to the Rogers Rock Pit. The effects on property values caused by operations at the Rogers Rock Pit is not an issue which the Division can consider in determining compliance with standards and regulations and in issuing or denying permits. These are local issues properly resolved by local planning and zoning commissions.

vi. Land Quality Concerns

Comments

- Many comments were received regarding the Land Quality Application.

Response

These comments are addressed in the Land Quality Division permitting process as the authority to regulate or consider those issues.

vii. Wildlife & Cattle

Comments

- The 600 acres which Croell Redi-Mix wishes to include within its regular mining permit are, I am sure, also home to abundant deer and antelope. Emissions from asphalt plants are not good for deer and antelope and elk to breathe.
- Emissions from asphalt plants are not good for cattle.
- Cattle eat the grass, if dust is as bad as it was last summer I am afraid they are going to be getting grass tetany.

Response

Comments were received regarding the impact on wildlife and cattle. The Air Quality Division does not have authority in this area.

viii. Livelihood of Crook County Pit Owners

Comment

- There are many ranchers in Crook County who have small (10 acre) gravel pits on their property, whose livelihood may be impacted by such a large operation, and who respect and abide by the guidelines of the permits issued to them by the DEQ. The income from these generally small and well-run pits help ranchers to stay in the business of ranching.

Response

A comment was received stating that the expansion of the Rogers Rock Pit would negatively affect the livelihood of other gravel quarry owners in Crook County. The Air Quality Division does not have authority in this area.

ix. Haul Road Through Private Land.

Comments

- Trucks from the Rogers Pit are crossing our land without our permission in order to access the Rifle Pit Road. This has been occurring since the initial permit was granted. We have recently had a title search carried out on our property, and there was no record found of a deeded ROW. Mr. Croell has referenced his property, but has left a gap in a boundary fence between our properties and his trucks continue to access the Rifle Pit Road by driving across our land.
- Last summer we offered Mr. Croell a reasonable land swap - the 20 acres he required to have legal access to his 10 acre gravel pit for 40 acres of nearby land which would have sheltered our ranch to some extent from his operation. Mr. Croell refused and told our agent that he would build his own road. (Given the expanded scope of the present application this offer is now off the table.)

Response

During the public hearing, Roger Croell did inform the Air Quality Division that Croell Redi-Mix, Inc. built a new haul road which does not cross any private land. The Division does not have authority in this area.

x. Depth of Limestone Deposits

Comment

- Depth of the limerock deposits, which I strongly suspect increase dramatically as the land rises up before it drops off into Red Canyon (which is lined with limestone - hence the name).

Response

The Division does not require information of this type as part of the Air Quality permitting process.

xii. Water Quality Concerns

Comment

- Installing a concrete plant or asphalt plant could create pollution for the Sundance Creek. If you look on the west side of the interstate right there the water flows out through Roger's place on the other side it goes underground. Where does all this pollution go?

Response

The Air Quality Division does not have authority over Water Quality concerns. Croell Redi-Mix, Inc. is required to obtain all appropriate permits, which may include a water quality permit.

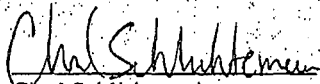
III. DECISION

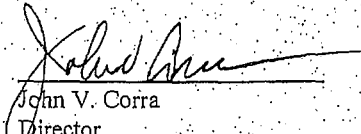
On the basis of comments received during the public notice period and at the public hearing, an analysis of those comments, and representations made by the applicant in the application, the Department of Environmental Quality has determined that the permit application filed by Croell Redi-Mix, Inc. complies with all applicable Wyoming Air Quality Standards and Regulations and that a permit will be issued to Croell Redi-Mix, Inc. to modify the Rogers Rock Pit as described in the application with the following conditions:

1. That authorized representatives of the Division of Air Quality be given permission to enter and inspect any property, premise or place on or at which an air pollution source is located or is being constructed or installed for the purpose of investigating actual or potential sources of air pollution and for determining compliance or non-compliance with any rules, standards, permits or orders.
2. That all substantive commitments and descriptions set forth in the application for this permit, unless superseded by a specific condition of this permit, are incorporated herein by this reference and are enforceable as conditions of this permit.
3. That all notifications, reports and correspondences associated with this permit shall be submitted to the Stationary Source Compliance Program Manager, Air Quality Division, 122 West 25th Street, Cheyenne, WY 82002 and a copy shall be submitted to the District Engineer, Air Quality Division, 1866 S. Sheridan Avenue, Sheridan, WY 82801.
4. The owner or operator shall furnish the Administrator written notification of: (i) the anticipated date of initial startup not more than sixty (60) days or less than thirty (30) days prior to such date; and; (ii) the actual date of initial start-up within fifteen (15) days after such date in accordance with Chapter 6, Section 2(i) of the WAQSR.
5. The date of commencement of construction shall be reported to the Administrator within thirty (30) days of such date. The permit shall become invalid if construction or modification is not commenced within twenty-four (24) months of the date of permit issuance or if construction is discontinued for a period of twenty-four (24) months or more in accordance with Chapter 6, Section 2(h) of the WAQSR. The Administrator may extend such time period(s) upon a satisfactory showing that an extension is justified.
6. Any crushing/screening equipment, hot mix asphalt plant and concrete batch plant shall have separate valid air quality permit(s) prior to locating/operating at this site.
7. That all work areas, disturbed areas and stockpiles shall be treated with water and/or chemical dust suppressants on a schedule sufficient to control fugitive dust. At a minimum, two (2) applications of chemical dust suppressant shall be applied annually to all work areas in accordance with the manufacturer's recommendations. The chemical dust suppressant shall be maintained continuously to the extent that it remains a viable control measure, which may require additional applications. All work areas shall receive an initial treatment of chemical dust suppressant prior to any activities at the beginning of each construction season.

8. Croell Redi-Mix, Inc. shall stabilize the exposed areas against wind erosion at the quarry. Newly disturbed areas shall be treated within sixty (60) days of completion of stripping unless otherwise approved by the Division. Reclamation areas shall be stabilized against wind erosion within sixty (60) days of reaching the approved post mining topography, unless otherwise approved by the Division. Stabilization practices may consist of ripping or chiseling to create a roughened surface, seeding with a temporary vegetative cover or other practices which effectively stabilize against wind erosion. Localized areas identified for equipment storage/staging, work areas and required buffers for haul roads and reclamation are not required to be stabilized.
9. All unpaved haul roads shall be treated with water and/or chemical dust suppressants on a schedule sufficient to control fugitive dust from vehicular traffic and wind erosion. At a minimum, two (2) applications of chemical dust suppressant shall be applied annually in accordance with the manufacturer's recommendations. The chemical dust suppressant shall be maintained continuously to the extent that it remains a viable control measure, which may require additional applications. All unpaved portions of haul roads shall receive an initial treatment of chemical dust suppressant prior to any hauling activities at the beginning of each construction season.
10. Croell Redi-Mix, Inc. shall maintain a log book listing the dates, amount of dust suppressant applied, areas treated, water usage and operating hours of the water truck. The log shall be maintained on site for a period of at least five (5) years and shall be made available to the Division upon request.
11. The amount of limestone crushed or hauled from the quarry shall not exceed 500,000 tpy. Records shall be kept for a period of five (5) years to demonstrate compliance with this condition and shall be made available to the Division upon request.
12. This permit shall supersede Air Quality Permit CT-4526 for the Rogers Rock Pit.

Dated this 17th day of March, 2010.


Chad Schlichtemeier
Acting Administrator
Air Quality Division


John V. Corra
Director
Wyoming Department of Environmental Quality