STATE OF VERMONT

ENVIRONMENTAL COURT

Appeal of LiCausi, et al.	}	Docket No. 91-6-04 Vtec
(Crushed Rock, Inc. Air Permit)	}	

Decision and Order

Appellants[1][1] Gale M. Licausi, Andrea McCormack, Wanda Crossman, Eric Jensen, Lisa Chapman, Kerry Posselt, and Mark Harding appealed from a decision of the State of Vermont Agency of Natural Resources (ANR) dated May 11, 2004, issuing Air Pollution Control Permit No. AOP-98-001c to Appellee-Applicant Crushed Rock, Inc. for the construction and operation of an asphalt hot-mix batch plant in addition to the rock crushing equipment at Appellee-Applicant's existing stone and gravel quarry with access from Vermont Route 133 in Clarendon, Vermont. The present application is the successor to an air pollution control permit issued in 1998 to John A. Russell Corporation for a proposed asphalt plant and rock crushing equipment at the quarry, as that permit expired in August of 2003. The property has also been involved in litigation under the state land

[1][1] Three other Appellants: Frank LiCausi, Mark Reardon and Jackie Fenner, withdrew during the pendency of the appeal.

use statute (Act 250) and the local zoning ordinance.

Appellants appeared and represented themselves; Appellee-Applicant Crushed Rock, Inc. is represented by Edward V. Schwiebert and David L. Cleary, Esq.; and the Agency of Natural Resources is represented by Conrad W. Smith, Esq. An evidentiary hearing was held in this matter before Merideth Wright, Environmental Judge, at the same time as a hearing in the remanded proceedings on a related zoning case: Environmental Court Docket No. 203-11-98. The parties were given the opportunity to submit written memoranda and requests for findings. Upon consideration of the evidence and of the written memoranda and requests for findings filed by the parties, the Court finds and concludes as follows.

10 V.S.A. § 562(d) provides that persons aggrieved by the issuance of an air pollution control "permit pursuant to this chapter" may appeal that decision to this Court. The Court is directed to hold a "de novo hearing and [to] issue an order affirming, revising or reversing the decision of the secretary." Accordingly, the application before the Court must be reviewed to determine whether it meets the requirements of Vermont's Air Pollution Control statute (10 V.S.A. Chapter 23) and Air Pollution Control Regulations (Regulations) to qualify for a permit.

Appellee-Applicant argues that Appellants are not persons aggrieved under the statute, and lack standing to maintain this appeal. When this appeal was filed in June of

2004, the statutory standing requirements for an air permit appeal only required the appellants to be "aggrieved" by the issuance of the permit. The statute did not then require any particularized showing as is now required by 10 V.S.A. §8501(7). All the Appellants live close enough to the site to be potentially affected by it and close enough to maintain their standing for the purposes of this proceeding.

Appellee-Applicant proposes to install an asphalt hot-mix batch plant at its quarry, to continue its rock quarrying and rock crushing operations, and to install a stationary internal combustion diesel engine generator to power the asphalt plant and the rock crushing equipment. The proposed asphalt hot-mix plant mixes crushed rock produced at the quarry with heated liquid asphalt. The mixture is loaded into trucks to be transported away from the site. Appellee-Applicant proposes to install fencing at the site and to install a 400-foot-long berm and plant three staggered rows of conifer trees, 10 to 12 feet in height at planting, to screen the view of the site from the valley.

A batch plant is designed to mix the rocks with the liquid asphalt in an enclosed part of the system; it therefore produces a lower rate of emissions than a former style of plant which exposed the mixture to contact with the heat source. Descriptions of the facility and the specific makes and models of the proposed asphalt hot-mix plant equipment, storage tanks, diesel generator and fuel tanks are found in State's Exhibit B, the current permit as issued by the ANR (the 2004 ANR Permit), and State's Exhibit C,

the technical support document for that permit prepared as part of Appellee-Applicant's application. These documents detail the changes since the 1998 ANR Permit was issued, but also incorporate by reference those portions of Appellee-Applicant's Exhibit AR-2, the application for the 1998 permit, which contain descriptions of the proposal and analyses that have not changed between the two applications.

The present application proposes the same equipment and operating parameters as the 1998 permit, except that Appellee-Applicant proposes to use a diesel generator that meets current and more stringent standards than were required in the 1998 permit, and proposes a lower limit of asphalt hot-mix production. Appellee-Applicant proposes to limit its fuel oil use for the proposed asphalt hot-mix plant and oil tank heaters to 500,000 gallons per year and its asphalt hot-mix production to 245,000 tons per year. Appellee-Applicant proposes to limit the fuel oil use of the diesel generator to 55,700 gallons per year. The facility is limited to a maximum of 85 truck trips (170 one-way trips or turning movements) per day. An annual production figure for crushed stone of 432,300 tons was used in the air permit calculations, although the amount shipped from the site may be further limited by the truck-trip limitation. The present application would not affect the number of truck trips or amount of material removed from the site in a year.

Appellee-Applicant proposes to accept and comply with the conditions imposed in the air permit as issued by the ANR (State's Exhibit B), which itself incorporates the

application materials and sets operational and emission limitations. There was some discrepancy in Appellee-Applicant's evidence regarding the proposed hours of operation and the proposed operating season; however, as Appellee-Applicant did not cross-appeal and as Appellee-Applicant proposes the terms of the permit as issued, we will use the proposed hours and operating season found in that permit and application materials, but will note the discrepancies in footnotes for the parties' information.

Appellee-Applicant proposes to operate the proposed asphalt hot-mix plant and diesel generator from 6:30 a.m. to 5:30 p.m.[2[2]] on weekdays and from 9:30 a.m. to noon on Saturdays, for six months of the year from May 1 through November 1.[3[3]] Appellee-Applicant operates the rock crushing machinery on a more limited basis: for six hours a day[4[4]] on weekdays, also from May 1 through November 1.

As issued by the ANR (Exhibit B), the permit's operation limitations restrict the proposed asphalt hot-mix plant fuel to 0.3% sulfur by weight, and restrict the diesel generator fuel to 0.5% sulfur by weight, unless Appellee-Applicant obtains prior written

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[2[2]] If Appellee-Applicants now propose to limit the hours of the asphalt hot-mix plant to 7:00 a.m. to 5:00 p.m., those restrictions are not found in any of the application materials.

[3[3]] The Act 250 permit allows operation through November 30.

[4[4]] As stated in the "Proposed Operating Limits" section C.4 on page 6 of Exhibit AR-2. That section does not specify during which six hour period it operates; resolution of that issue is not material to the air permit appeal.

approval from the ANR for a different fuel composition. These limitations will result in lower emissions of sulfur-containing compounds. Appellee-Applicant proposes not to use cutback asphalts or emulsified asphalts containing greater than 5% by weight of volatile organic compounds (VOCs), so that the project is not subject to §5-253.15 of the Regulations and so that odors generated by the emission of VOCs would be reduced.

The permit conditions limit the plant's emissions to specified levels. To achieve these levels, Appellee-Applicant proposes to equip the proposed asphalt hot-mix plant with a cyclone system to remove large particulate matter, from which emissions will go through a fabric filter system (baghouse) to remove almost all of the remaining particulate. The remaining emissions are proposed to be vented through a 65.5 foot stack and to be ejected at velocity of 55 feet per second to avoid downwash and to disperse the emissions. Emissions from the plant are required to be tested within the first half-year of operation for conformance of the systems to the required standards. In addition, permit conditions restrict the production of visible emissions, objectionable odors, and the causation of nuisance or other public welfare effects.[5[5]] All of the permit conditions are

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[5[5]] We note that permit condition 23, and the regulations on which it is based, relating to nuisance and odor, refers to effects experienced by "any considerable number of people or the public." Nothing in that condition addresses private nuisance claims not encompassed in that definition, but nor does it prohibit any individuals from asserting such claims in an appropriate civil action.

enforceable by the ANR.

To avoid the production of odors off-site, Appellee-Applicant proposes to use a citrus-based, rather than a petroleum-based, release agent to coat the truck beds (to facilitate the later removal of the asphalt product from the trucks at the delivery location). In addition, the asphalt tank vents are designed to be small, to minimize fugitive emission of odiferous compounds. To minimize fugitive dust emissions, the on-site haul roads and storage areas are required to be sprayed with water as needed, and all conveyor transfer points will either be covered or also sprayed with water. Further, all trucks leaving the facility will be covered to minimize fugitive dust and odor emissions.

Vermont's air quality statute and regulations do not regulate noise.

The closest sensitive area to be used for evaluation of air quality effects is Herrick Mountain in the town of Ira, Vermont, 5.5 kilometers to the west of the proposed asphalt hot-mix plant. The emissions from the proposed plant will not affect the air quality in that location.

The proposed asphalt hot-mix plant with diesel generator requires an air pollution control operating and construction permit under Air Pollution Control Regulations §5-401 and 10 V.S.A. Chapter 23, as it is a listed source category and is expected to emit more than ten tons of pollutants per year of all types of emissions combined.

An Air Quality Impact Evaluation was performed for the 1998 permit application and was presented with minor revisions for the present application. For a source that is not yet built, such as this one, the regulations require that the applicant first determine the "estimated allowable emissions" by applying the factors listed in the regulations for the types of proposed use. See State's Exhibit B, Table on page 4. For this project, the total of the estimated allowable emissions of criteria air contaminants has the potential to exceed 10 tons per year, and therefore needed more refined modeling. As no estimated emission of any single contaminant is predicted to exceed 50 tons per year, however, it is classified as a non-major stationary source, and therefore is not subject to §5-502 of the Regulations. It also does not trigger the threshold for federal regulation. For the listed hazardous air contaminants or pollutants, the estimated allowable emission of each one is less than 10 tons per year, and the total of the estimated allowable emissions for all hazardous air pollutants taken together is less than 25 tons per year. These numbers are used to determine what level of analysis is required in the permitting process.

Appellee-Applicant was required to perform computer modeling to predict whether the operation of the plant would be predicted to cause or contribute to violations of National Ambient Air Quality Standards (NAAQS) or to exceed the Prevention of Significant Deterioration (PSD) increment for the specified pollutant. That is, a proposed source, taken together with the existing background air pollution in an area, must not

exceed the NAAQS, but if the air is already cleaner than those standards, as it is in the Rutland area, the proposed source is not free to cause deterioration down to the NAAQS limits. Rather, the source is limited to the PSD increment for that pollutant. After screening for particulate matter (PM_{10}), sulphur dioxide (SO_2), nitrogen oxides (NO_x) and carbon monoxide (CO), Appellant-Applicant ran the required refined modeling for particulate matter, sulphur dioxide and nitrogen oxides.

The computer modeling was performed using the topographical data for the actual project area, taken from the United States Geological Survey mapping data. The meteorological data used for the model was taken from the official weather stations in Burlington, Vermont (for the lower air), and in Albany, New York (for the upper air, which is quite stable over the whole region). The use of data from these weather stations is consistent with the guidelines (State's Exhibit D, §7.2) for performing this analysis. The model is run assuming emissions at night as well as during the work day, and assuming that temperature inversions occur 25% of the time, which are both conservative modeling assumptions.

Appellants presented evidence that the Clarendon Valley in which the facility is located is relatively narrow and steep and that clouds form in the valley and remain well into the early afternoon, spreading out throughout the bottom of the valley. Due to the possibility that the localized weather behaves differently from that used for the modeling,

we will consider requiring Appellee-Applicant to collect the local equivalent surface meteorological data for the first May 1 through November 1 period of operation. This data may be necessary to determine whether the Burlington data is "representative" for this valley, as contemplated by Exhibit D, §7.2's use of the term "representative weather station or on-site data collection."

The modeling was conducted following the required guidelines and showed that the operation of the facility will not result in the violation of any air standard. Additional modeling was done to include the contribution of nearby unrelated sources, with the same result. Based on the analysis, if the project is constructed and operated as proposed, in accordance with all the conditions imposed in the ANR 2004 permit, it will not cause or contribute to violation of any National Ambient Air Quality Standard, will comply with the Secondary Ambient Air Pollution Standards including the restriction of objectionable odors and other fugitive emissions emanating from the site, and will not cause a significant deterioration of the air quality in the vicinity.

No objectionable odors are likely to be generated off-site from the operation of the proposed asphalt hot-mix plant. Appellee-Applicant performed additional modeling of the emissions of the major odiferous compounds potentially to be generated by the proposed asphalt hot-mix plant, taking into account odors from the diesel generator, the proposed asphalt hot-mix plant stack, the tank heater, and from idling trucks and the dropping of

asphalt product into the trucks. The modeling results showed that the odor detection threshold for these compounds was not exceeded off-site under a variety of weather conditions. Condition 23 prohibits the discharge of objectionable odors off-site.

The proposed asphalt hot-mix plant will emit water vapor from its stack. During cold days or suitable conditions that vapor could condense, creating a visible plume of water vapor not of concern as a contaminant. On the other hand, emissions of visible air contaminants are restricted by Condition 18.

With regard to potential emissions of hazardous air contaminants, under §5-261 of the Regulations, if the emission rate of any of the listed hazardous air contaminants exceeds the action level shown in Appendix C of the Regulations, then the source is required to achieve the so-called Most Stringent Emission Rate (MSER) for that contaminant.

The fuel-burning equipment associated with the proposed asphalt hot-mix plant consists of a tank heater and a rotary dryer, as well as the diesel generator. This equipment will burn virgin fuel. Under §5-261(1)(b)(ii), the combustion of virgin fuel is exempt from analysis in calculating the emission rates of Hazardous Air Contaminants expected to be produced by the proposed asphalt hot-mix plant. Nevertheless the emission of formaldehyde was calculated, and will be more than two orders of magnitude below any action level at the nearest residence to the plant. See Appendix C of the

Regulations. The analysis of the regulated hazardous air contaminants shows that no such contaminant will reach any associated action level in any eight-hour[6][6] period of operation, if the proposed asphalt hot-mix plant is operated in accordance with the ANR permit conditions. The Secretary of the ANR has authority to enforce the conditions and limitations of any ANR permit, and to require additional monitoring[7][7] or testing of any contaminant of concern.

Accordingly, Appellee-Applicant has met all the required criteria for issuance of an Air Pollution Permit to Construct and Operate,[8][8] on the terms as issued by the ANR in its 2004 permit, with the additional condition as required below.

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[6][6] To the extent that Appellee-Applicant's Technical Support Document (State's Exhibit C) also presents annualized numbers, they are of limited use in determining the actual level of emissions experienced in the area, as the facility will not be operating for half the year.

[7][7] In response to the concerns of the residents, we recommend but do not require the ANR to develop a monitoring plan for this facility that includes some monitoring for VOCs at or near neighboring residences during each operating season, rather than only when required by air pollution officials due to complaints or inspections.

[8][8] This air permit application was analyzed on the basis of the hours of operation proposed; other permit programs may further restrict the hours of operations, but may not expand them without an amendment to this permit..

In addition to the merits of this appeal, Appellee-Applicant moved for sanctions. Appellee-Applicant filed certain discovery requests and requests to admit that either were objected to or were not responded to, or were admitted at the hearing. Appellee-Applicant now seeks sanctions in the form of its costs of proving these ultimately uncontested facts. If there had been time prior to the hearing for the Court to clearly lay out in a scheduling order the time frames for responding to the requests to admit, and the possible consequences of a failure to respond to the requests, and to rule on any opposition to the requested discovery, the Court would have considered imposing such costs, as unrepresented litigants are subject to the same rules of procedure as are represented litigants. However, under the circumstances of this appeal, Appellee-Applicant's motion for sanctions is DENIED, with each party to bear its own costs.

Based on the foregoing, it is hereby ORDERED and ADJUDGED that Air Pollution Control Permit No. AOP-98-001c is hereby affirmed, except that it is revised to add the following condition which is hereby imposed:

> Appellee-Applicant shall collect the local surface meteorological data for the same parameters as used from the Burlington data, during the first May 1 through November 1 period of operation, to be used to determine whether the Burlington data is "representative" for this valley or whether any conditions should be adjusted

to conform to the local conditions.

Dated at Berlin, Vermont, this 1st day of November, 2005.

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Merideth Wright

Environmental Judge

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