

LAND USE PERMIT AMENDMENT

State of Vermont Natural Resources Board District 1 Environmental Commission 440 Asa Bloomer State Office Building 88 Merchants Row, 4th Floor Rutland, Vermont 05701-5903 https://nrb.vermont.gov/

CASE NO. 1R0489-8

Casella Construction, Inc.
25 Industrial Lane
Mendon, Vermont 05701
And
Casella Group, LLC
25 Industrial Lane
Mendon, Vermont 05701

LAWS/REGULATIONS INVOLVED 10 V.S.A. §§ 6001 - 6111 (Act 250)

The District 5 Environmental Commission hereby issues Land Use Permit Amendment 1R0489-8, pursuant to the authority vested in it by 10 V.S.A. §§ 6001-6111. This permit amendment applies to the lands identified in Book 156, Pages 590-592, of the land records of the Town of Clarendon, Vermont and in Book 107, Pages 114-116, of the land records of the Town of West Rutland, Vermont, as the subject of a deed to Casella Group, LLC and a lease to Casella Construction, Inc. This permit authorizes the estasblishment of a new wash plant for sand and stone with associated wash settling ponds and related infrastructure; the expansion of the operational season to March 1 through December 31st; the increase of the permitted weekday crushing hours from 7:00 AM to 5:00 PM (limited to 8 hours a day); changes to the permitted blasting techniques and limits; removal of the permitted hourly truck haul limit; and an extension of the permit expiration date to April 1, 2056. The project is located on 1058 VT Route 133 in Clarendon, Vermont.

Jurisdiction attaches because the project constitutes a material change pursuant to Act 250 Rule 2(C)(6) and thus requires a permit amendment pursuant to Act 250 Rule 34.

The Permittee, and their assigns and successors in interest, are obligated by this permit to complete, operate, and maintain the project as approved by the District 5 Environmental Commission (the "Commission") in accordance with the following conditions.

1. The project shall be completed, operated, and maintained in accordance with the conditions of this permit and the permit application, plans, and exhibits on file with the Commission and other material representations. The approved plans are:

"Cover Plan Sheet" - dated 3/16/21, last revised 7/28/21 (Exhibit 11a)



Sheet C1.01 - "Existing Conditions Plan", dated 3/24/20, last revised 7/28/21 (Exhibit 12a)

Sheet C2.01 - "Overall Site Plan", dated 12/18/20, last revised 7/28/21 (Exhibit 13a)

Sheet C2.02 - "Site Plan", dated 12/18/20, last revised 7/28/21 (Exhibit 14a)

Sheet C2.03 - "Quarry Sections", dated 2/19/21, last revised 7/28/21 (Exhibit 15a)

Sheet C2.04 - "Reclamation Plan", dated 2/19/21, last revised 7/28/21 (Exhibit 16a)

Sheet C4.01 – "Pre-development Drainage Area", dated 12/18/20, last revised 7/28/21 (Exhibit 17a)

Sheet C4.02 – "Post Development Drainage Area", dated 12/18/20, last revised 7/28/21 (Exhibit 18a)

Sheet C5.01 – "EPSC Plan", dated 12/18/20, last revised 7/28/21 (Exhibit 19a)

Sheet C8.01 – "Details", dated 12/18/20, last revised 3/16/21 (Exhibit 20)

Sheet C8.02 – "Pond Sections", dated 12/18/20, last revised 3/5/21(Exhibit 21)

Sheet C8.03 – "Erosion and Pond Details", dated 12/18/20, last revised 3/5/21 (Exhibit 22)

Sheet C8.04 – "Erosion and Pond Details", dated 2/19/21, last revised 2/19/21 (Exhibit 23)

Sheet C8.05 – "Flow Schematic", dated 12/18/20, last revised 2/19/21 (Exhibit 24)

Sheet C8.06 – "EPSC Details", dated 12/18/20, last revised 2/19/21 (Exhibit 25)

Sheet C8.07 – "EPSC Details", dated 12/18/20, last revised 2/19/21 (Exhibit 26)

"Forest Cover", dated 7/30/21 (Exhibit 46)

Sheet W-1 - "Well Location Map", dated 3/24/20 (Exhibit 51)

- 2. All conditions of Land Use Permit 1R0489 and amendments are in full force and effect except as further amended herein.
- 3. The Permittee shall comply with the conditions of the Authorization to Discharge Stormwater under Multi-Sector General Permit #9125-9003 authorized on November 17, 2020, by the ANR Watershed Management Division.
- 4. The Permittee shall comply with the conditions of Air Pollution Control Permit #AP-21-011, issued on April 2, 2021, by the ANR Air Pollution Control Division.
- 5. The Permittee shall comply with the conditions of Industrial Direct Discharge Permit IDP #3-1570 on November 17, 2021, by the ANR Watershed Management Division.
- 6. Any nonmaterial changes to the permits listed in preceding conditions 3-5 shall be automatically incorporated herein upon issuance by the Agency of Natural Resources.
- 7. Representatives of the State of Vermont shall have access to the property covered by this permit, at reasonable times, for the purpose of ascertaining compliance with Vermont environmental and health statutes and regulations and with this permit.

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- 8. A copy of this permit and plans shall be on the site at all times throughout the construction process.
- 9. No change shall be made to the design, operation or use of this project without a permit amendment issued by the Commission or a jurisdictional opinion from the District Coordinator that a permit is not required.
- 10. No further subdivision, alteration, and/or development on the tract of land approved herein shall be permitted without a permit amendment issued by the Commission or a jurisdictional opinion from the District Coordinator that a permit is not required.
- 11. Pursuant to 10 V.S.A. § 8005(c), the Commission or the Natural Resources Board may at any time require that the permit holder file an affidavit certifying that the project is in compliance with the terms of this permit.
- 12. The conditions of this permit and the land uses permitted herein shall run with the land and are binding upon and enforceable against the Permittee and its successors and assigns.
- 13. No changes to the permitted extraction rate of 325,000 raw tons per year and 260,000 processed tons per year is permitted.
- 14. Seasonal operations (drilling, blasting, and crushing) are permitted from March 1st. through December 31st. All other operations may occur year-round except on federal holidays.
- Daily operating hours are permitted from 6:30 AM to 5:30 PM Monday through Friday, and 9:00 AM to 12:00 PM on Saturdays. No crushing, blasting, or hammering is permitted on Saturdays. The quarry shall not operate on Sundays or federal holidays.
- 16. Crushing hours are permitted from 7:00 AM to 5:00 PM Monday through Friday. Crushing shall be limited to 8 hours daily. The Permittee shall record crushing hours in daily logs which shall be made available to the Commission upon request.
- 17. Crushing rates shall not exceed 650 tons per hour through the primary crusher and 422 tons per hour through the secondary crusher.
- 18. Hauling limits shall be limited to a maximum of 85 loads Monday through Friday. The Permittee shall not allow more than two loaded trucks to exit the site simultaneously to avoid a three-truck convoy.
- 19. The maximum 6,000 lbs. total explosives per blast is eliminated. Blasting shall be limited to no more than 975 pounds of explosive per delay with no limit on the total pounds of explosives. The blasting maximum of once per week, and no more than 15 such weekly blasts in any one year is eliminated. Blasting shall be permitted Monday through Friday, once per week. Blasting may be allowed twice per week 5 times per year. A maximum of 25 blasts per year is permitted. No blasting shall occur on federal holidays.
- 20. The Permittee shall employ the electronic blast initiation technology described in Exhibit 6, "Rock Extraction Blasting Plan, Clarendon Springs Quarry," for all blasts at the quarry consisting of 6,000 pounds total explosives or greater. Other forms of blast initiation may be used for blasts

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employing less than this amount of the total explosives which have minimal potential for significant off-site impacts.

- 21. All explosive blasts at the quarry shall be monitored by at least two seismographs one of which shall be located at the closest residence to the blast or comparable distance if the closest residence to the blast does not allow the same. The monitoring seismographs shall be capable of recording air concussion and ground vibration from blasts at the quarry against the U.S. Bureau of Mines' recommendations for air concussion and ground vibration. Air concussion at the quarry shall not exceed 133 dBL as measured at the closest residence. Ground vibration from blasts at the quarry shall not exceed the level depicted on the reference line in the U.S. Bureau of Mines' publication R.I.8507 Appendix B Graph as measured at the closest residence to the blast.
- 22. The Permittee shall provide the owners of all occupied residences located within 2,000 feet of any potential future blast site the opportunity to have a pre-blast survey done of their property before commencing blasting under the new blasting regime. In the event a property owner indicates that they wish to have such a survey done, the same shall be performed by an appropriate contractor and the results maintained on file by the Permittees.
- 23. The Permittee shall provide prior written notification of the blasting schedule to those with homes within 2000 feet of the quarry who so request.
- 24. The Permittee shall implement the following noise mitigation measures:

The height of the existing crusher area berm shall be increased by 6 feet for a top elevation of 645 feet.

A noise reducing rubber liner shall be installed on the primary jaw crusher hopper.

The use of the rock hammer shall be confined to the rock extraction area. Use of the rock drills and rock hammer simultaneously is prohibited if the rock hammer is to be operated at an elevation greater than 709 feet.

- 25. The requirement of a minimal bench horizontal separation of 15' is permitted, thereby superseding the previously permitted minimum of 25' in horizontal separation.
- 26. The Permittee shall take reasonable precautions at all times to prevent fugitive particulate matter (dust) from becoming airborne from the project and its operations. Reasonable precautions to be taken shall include, but not be limited to, the following measures or other equally effective measures for project operations and activities under the Permittee's control or supervision:
 - a. The unpaved traffic and parking areas at the project shall be periodically maintained by the application of water and/or generally accepted chemical treatments, such as calcium chloride unless otherwise restricted, which are applied at a rate and frequency to effectively limit visible dust emissions;
 - b. Any paved traffic and parking areas at the project shall be periodically maintained as necessary to prevent buildup of material that may generate fugitive dust emissions.

Sweeping shall be performed in a manner to minimize fugitive dust air emissions, and may include lightly wetting the paved surface immediately before sweeping, or preferably by the use of a vacuum, regenerative, or high efficiency sweeper;

- c. All trucks owned, operated or under the control of the Permitees shall be securely covered when operated on public roadways when loaded;
- d. All rock drills operated at the project shall be equipped and operated with either an effective wet or dry dust control system;
- e. All unenclosed crushing and dry screening operations shall be equipped with a wet dust control (suppression) system with spray nozzles at appropriate locations and shall be operated as necessary to effectively limit visible dust emissions;
- f. Active storage piles shall be periodically maintained by application of water and/or generally accepted chemical treatments, such as calcium chloride unless otherwise restricted, which are applied at a rate and frequency to effectively limit visible dust emissions. Inactive storage piles and exposed surfaces shall be revegetated as soon as reasonably practicable; and
- g. The Permittee shall ensure that any dust control measures taken in accordance with the conditions listed above are in compliance with all other state and federal requirements.
- 27. The Permittee shall not allow the operation of a gravel or stone crushing plant on the premises with a maximum rated capacity (based on the crusher's largest possible setting and maximum throughput, not actual operating rate) of greater than 150 tons per hour, unless said crushing plant has a permit to operate from the District Commission and the Vermont Air Pollution Control Division.
- 28. The Permittee shall implement the Vermont Department of Environmental Conservation's <u>Best Management Practices for Blasting Activities to Avoid Environmental Contamination (2016)</u>^a.
- 29. Prior to construction of the approved work, the Permitee shall: a) clearly delineate the construction limits with flagging or snow fencing; b) place diversion ditches on the uphill limits of the construction area; and c) place temporary siltation controls on the downhill limits of construction.
- 30. The Permittee shall install silt fence on the downhill side of topsoil stockpiles and all construction activities. Diversion ditches shall be installed as necessary.
- 31. A copy of the approved erosion prevention and sediment control plan shall be on the site at all times during construction.
- 32. In addition to conformance with all erosion prevention and sediment control conditions, the Permitees shall not cause, permit, or allow the discharge of waste material into any surface

^a Best Management Practices for Blasting Activities to Avoid Environmental Contamination (2016), http://anr.vermont.gov/sites/anr/files/co/planning/documents/guidance/Best%20Management%20Practices%20for%20Blasting%20to%20Avoid%20Environmental%20Contamination%20%28Dec%202016%29.pdf

- waters. Compliance with the requirements of this condition does not absolve the Permitees from compliance with 10 V.S.A. (§§ 1250-1284) Chapter 47, Vermont's Water Pollution Control Law.
- 33. The Permittee shall maintain an undisturbed, naturally vegetated riparian buffer zone on the Clarendon River which shall begin at the water's edge at base flow conditions, and shall further extend 100 feet measured inland from, and perpendicular to, and horizontally from the top of bank as depicted on Exhibits 12a through 19a. The term "undisturbed" means that there shall be no activities that may cause or contribute to ground or vegetation disturbance or soil compaction, including but not limited to construction, earth-moving activities, storage of materials, tree trimming or canopy removal, tree, shrub, or groundcover removal, plowing or disposal of snow, grazing or mowing.
- 34. The Permittee shall maintain an undisturbed, naturally vegetated buffer zone on the project Tract within 50 feet of any wetlands as depicted on Exhibits 12a through 19a. The term "undisturbed" means that there shall be no activities that may cause or contribute to ground or vegetation disturbance or soil compaction, including but not limited to construction, earth-moving activities, storage of materials, tree trimming or canopy removal, tree, shrub, or groundcover removal, plowing or disposal of snow, grazing or mowing.
- 35. The Permittee shall install flagging around Class II wetlands D and E where the project activities occur within 100′ of the wetlands.
- 36. The Permittee shall contact the Department of Fish and Wildlife District Wildlife Biologist should the Peregrine Falcon reestablish a nest on the quarry face. Activities involving the quarry face and area directly above an active Peregrine Falcon nest shall cease during the nesting period of March 1-July 31 (date inclusive).
- 37. In order to protect Northern Long Eared Bat habitat, the Permittees shall restrict tree clearing to November 1 through April 14 (dates inclusive). The Permitte shall clear less than 1% of the forested area within a mile of the project.
- 38. Any extracted stumps shall be disposed of on-site above the seasonal high-water table and not in any wetland, or at a state-certified stump and inert waste disposal facility, so as to prevent groundwater pollution.
- 39. The permit condition requiring an annual open house with the Town of West Rutland is eliminated. However, the Permittee shall continue to abide by the toll arrangement (which includes the annual tonnage of stone hauled from the quarry) with the Town of West Rutland established in the 1R0489– 4 EB (Revised) Permit. The Permittee may cease this payment at such time as the Town of West Rutland consents or upon obtaining an amendment to this permit.
- 40. Trucks under the Permittee's ownership shall not use engine braking within West Rutland Town limits.
- 41. Reclamation shall comply with Findings of Fact and Conclusions herein under Criteria 9(D) and 9(E) and Exhibit 16a, the revised reclamation plan.
- 42. This permit amendment shall expire on April 1, 2056.

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- 43. Act 250 jurisdiction over the project tract shall not be lifted until the following requirements have been met:
 - a. The Permittee shall submit a report from a professional engineer specifically documenting precisely how the required reclamation work has been completed in accordance with the conditions of this permit, and the permit application, plans, and exhibits.
 - b. The District Environmental Commission shall issue a memorandum of decision determining that all reclamation has been successfully completed in accordance with the conditions of this permit, and the permit application, plans, and exhibits.
 - c. The District Coordinator shall issue a written opinion, determining that all required reclamation has been successfully completed, and formally lifting jurisdiction over the project tract.
- 44. Within five (5) years of the completion of final reclamation (April 1, 2056), the Permittee shall submit to the District Commission a report by a professional engineer describing the stability of the site and whether any additional measures are required to ensure the ongoing stability of the site.
- 45. The Permittee shall provide each prospective purchaser of any interest in this project a copy of the Land Use Permit Amendment and the Findings of Fact before entering into any written contract of sale.
- 46. Failure to comply with any condition herein may be grounds for permit revocation pursuant to 10 V.S.A. sec. 6027(g).

Dated this 19th day of November 2021.

By /s/ Mattheew Krauss

Matthew Krauss, Chair

District 5 Environmental Commission

Commissioners participating in this decision: John H. Fitzhugh Norma Malone

Any party may file a motion to alter with the District Commission within 15 days from the date of this decision, pursuant to Act 250 Rule 31(A).

Any appeal of this decision must be filed with the Superior Court, Environmental Division within 30 days of the date the decision was issued, pursuant to 10 V.S.A. Chapter 220. The Notice of Appeal must comply with the Vermont Rules for Environmental Court Proceedings. The appellant must file with the Notice of Appeal the relevant entry fee required by 32 V.S.A. § 1431. The appellant must also serve a copy of the Notice of Appeal on the Natural Resources Board, 10 Baldwin Street, Montpelier, VT 05633-3201, and on other parties in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. Decisions on minor applications may be appealed only if a hearing was held by the district commission. Please note that there are certain limitations on the right to appeal, including appeals from Administrative Amendments and interlocutory appeals. See 10 V.S.A. § 8504(k), 3 V.S.A. § 815, and Vermont Rule of Appellate Procedure 5. For additional information on filing appeals, see the Court's website at: http://www.vermontjudiciary.org/GTC/environmental/default.aspx or call (802) 951-1740. The Court's mailing address is: Vermont Superior Court, Environmental Division, 32 Cherry Street, 2nd Floor, Suite 303, Burlington, VT 05401.

E-Notification CERTIFICATE OF SERVICE #1R0489-8

I hereby certify that I, the undersigned, sent a copy of the foregoing Land Use Permit and Findings of Fact, Conclusions of Law and Order on November 19, 2021 by electronic mail to the following addresses. All email replies should be sent to NRB.Act250barre@vermont.gov. Note: Any recipient may change its preferred method of receiving notices and other documents by contacting the NRB District Office staff at the mailing address or email below. If you have elected to receive notices and other documents by email, it is your responsibility to notify the District Office of any email address changes.

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FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

State of Vermont Natural Resources Board
District 5 Environmental Commission
10 Baldwin Street, Montpelier, Vermont 05633-3201
https://nrb.vermont.gov/

CASE NO. 1R0489-8

Casella Construction, Inc 25 Industrial Lane Mendon, Vermont 05701 and Casella Group, LLC 25 Industrial Lane Mendon, Vermont 05701 LAWS/REGULATIONS INVOLVED 10 V.S.A. §§ 6001 - 6111 (Act 250)

Phone: 802-476-0185

I. INTRODUCTION

On March 26, 2021, Casella Construction, Inc filed Act 250 permit application 1R0489-8 proposing operational modifications to the continued use of the existing permitted dolomite rock quarry. The tract of land consists of 297 acres located off Route 133 in the Towns of Clarendon and West Rutland. The Applicant's legal interest is ownership in fee simple described in deeds to Casella Group, LLC recorded in Book 156, Page 590 in the land records of Clarendon, Vermont and in Book 107, Pages 114-116 in the land records of the Town of West Rutland, Vermont. All operational areas of the project are located in the Town of Clarendon.

As the principal Applicant is also the Chair of the District 1 Environmental Commission , the Chair of the NRB assigned consideration of this matter to the District 5 Environmental Commission. Following filing of the application, the same was determined to be complete. A site visit and pre-hearing conference notice was properly sent to the Parties, warning of a site visit scheduled on June 16, 2021 and a pre-hearing conference scheduled on June 30, 2021. The sole attendees at the site visit were the Commission, the Coordinator, and the Applicants representatives and consultants. A pre-hearing conference was convened virtually consistent with the Board's COVID pandemic protocol. (The protocol is detailed in the May 25, 2021 site visit and pre-hearing notice) No adjoining landowners filed timely requests for party status before or during the pre-hearing conference.

On June 30, 2021, an in-person hearing was convened at the West Rutland Town Office following proper notice to the parties pursuant to Act 250 Rule 16(A) and 10 V.S.A. §6084, consistent with Board's COVID protocol.

The Commission recessed the hearing and issued a Hearing Recess Order on August 17, 2021. All requested submittals were filed by October 15, 2021. The Commission adjourned the hearing on November 19, 2021 after an opportunity for parties to respond to that information, and the completion of Commission deliberations.

II. JURISDICTION

Jurisdiction attaches because the project constitutes a material change pursuant to Act 250 Rule 2(C)(6) and thus requires a permit amendment pursuant to Act 250 Rule 34.

III. PARTY STATUS

- A. Parties by right to this application pursuant to 10 V.S.A § 6085(c)(1)(A)-(D) who attended the hearing are:
 - 1. The Applicant, by John Casella II, James Goss, Esq., Kyle Cornell, Jeremy Matosky, Colen Johnson, John Hinckley, Eddie Duncan, Kenneth Smith, Dale Boisvert.
 - 2. The Agency of Natural Resources through Entries of Appearance dated June 28, 2021 and July 30, 2021 by Jen Mojo, Senior Planner.
 - 3. Town of Clarendon Planning Commission, by Gale Licausi, Clerk
 - 4. Town of West Rutland, by Jeff Biasuzzi, Zoning Administrator.

IV. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The Applicant has met the burden of proving compliance with the following criteria through submittal of the application:

1 - Water Pollution

1(A) - Headwaters

1(C) - Water Conservation

1(D) - Floodways

1(F) - Shorelines

2 - Water Supply

3 - Impact on Existing Water Supplies

4 - Soil Erosion

6 - Educational Services

7 - Municipal Services

8 - Natural Areas

8 - Historic Sites

9(A) - Impact of Growth

9(B) – Primary Agricultural Soils

9(C) - Productive Forest Soils

9(F) - Energy Conservation

9(G) - Private Utility Services

9(H) - Costs of Scattered Development

9(J) - Public Utility Services

9(K) - Effects on Public Investments

9(L) – Settlement Patterns

Therefore, the application shall serve as the Findings of Fact on these criteria.

The Findings of Fact are based on Exhibits 1-60. Findings made in this decision are not limited to the specific criterion in which they appear and may apply to other sections of the decision. To the extent that any proposed findings of fact are included in this decision, they are granted; otherwise, they are denied.

Under Act 250, projects are reviewed for compliance with the ten criteria of Act 250, 10 V.S.A § 6086(a)(1)-(10). Before granting a permit, the District Commission must find that the Project complies with these criteria and, therefore, is not detrimental to the public health, safety, or general welfare. The burden of proof under Criteria 1 through 4 and 9 and 10 is on the applicant, and the burden is on the opponent under Criteria 5 through 8, and 9A if the municipality does not have a duly adopted capital improvement program.

General Findings:

- 1. The Casella Clarendon Quarry is a dolomite rock quarry that was originally permitted in 1984. The 297 acres tract is located at 1058 Vermont Route 133 in the Towns of Clarendon and West Rutland, Vermont. All operational areas of the project are located in the Town of Clarendon, including the project access road. (Exhibit 1)
- 2. The quarry occupies approximately 60 acres of the tract and has been operational for 37 years under several previous owners. The current property owner is Casella Group, LLC, which has operated the project pursuant to a lease by its affiliate, Casella Construction, Inc., since 2015. (Exhibit 1a)
- 3. This current application proposes operational modifications for the continued excavation of the quarry. These modifications are proposed as significant sources of high-quality stone remain in the ground within the original quarry footprint. (The Applicant proposes no change to the originally permitted quarry footprint) Following is a chart depicting the current permit conditions and the proposed changes (Exhibit 1a):

Condition	Current	Desired Change
Operating Season	Stripping, Drilling, Blasting,	Drilling and blasting, crushing limited to
	Crushing limited to May 1 to	March 1 - Dec 31 st -All other operations
	November 30	year round except federal holidays
	Sales & Hauling Year-Round	
General Operating	6:30 AM – 5:30 PM Monday Thru	No change to general operational hours-
Hours	Friday	No crushing, blasting, or hammering
	9:00 AM – 12:00 PM Saturday	allowed on Saturdays.
Crushing Hours	8:00 AM – 3:00 PM, Monday Thru	7:00 AM – 5:00 PM Monday thru Friday,
	Friday, not to exceed 6 Hours Per	no daily hour limitation - crushing to
	Day-crushing operations not to	only occur March 1 – Dec. 31 - remove
	exceed 720 hours per year	720 hours per year limitation.

Crushing Rates	Rates shall not exceed 650 tons per hour through primary crusher and 422 tons per hour through secondary crusher	No Change
Hauling Limits	Max 85 loads Monday Thru Friday. 20 Loads Saturday-no more than 10 loaded trucks per hour	Remove hourly loaded truck limit – no truck convoys allowed
Noise	Stone Crushers shall be equipped w/ sound deadening equipment	Specific noise mitigation measures to now be implemented: 1. Increase the height of the existing Crushing Area Berm by 6 feet for a top
		elevation of 196.6 meters (645 feet). 2. Install a noise reducing liner on the primary jaw crusher hopper.
		3. Limit the use of the rock hammer to within the extraction area, and if hammering at an elevation greater than 216 meters (709 feet) do not operate the rock hammer and drill simultaneously.
Blasting Technique and Loading Specifications	No more than 6,000 LBS total explosives per blast, no more than 975 LBS of explosive per delay	Use of modern electronic detonation system. All blasts to satisfy USBM recommendations for air concussion and ground vibration as measured at the closest house to the blast. All houses within 2000 feet of the quarry to be given the opportunity to have pre-blast structural surveys performed. VT ANR DEC Best Practices for Blasting to be implemented. Maximum charge weight per blast to be eliminated.
Blasting Limits	Once per week, and not more than 15 such weekly blasts within any one-year period.	Monday thru Friday, once per week, up to 25 per year. Blasting allowed twice per week, five times per year. No blasting on federal holidays. Written prior notification of blasting schedule to those with homes within 2000 feet of the quarry who request it.
Miscellaneous	-Permit to expire Nov 1, 2022 -Annual open house required -quarry wall faces not to exceed	-Permit extended 35 years to April 1 2056 -eliminate annual open house -allow 15 ft. minimum bench horizontal

50 ft in height and 25 feet in	separation
horizontal separation	
-maximum quarry slopes not to	-eliminate maximum quarry slope
exceed 1:2.5	requirement

- 4. In addition to the foregoing proposed operational changes, the Applicant also proposes to install a stone wash plant and related settlement pond infrastructure to provide washed stone products to potential customers. The wash plant will use recycled stormwater supplemented by an on-site artesian well. (Exhibit 1)
- 5. No change to the annual extraction rate at the quarry, which was established in the -4 Permit Amendment, is proposed. That rate is 325,000 raw tons of stone per year extracted and 260,000 finished tons per year of stone removed from the site. (Exhibits 1and 32)

Criterion 1 - Air Pollution:

- 6. The Casella Clarendon Facility is classified as a source of air contaminants pursuant to Title 10 of the Vermont Statutes Annotated ("10 VSA") §555 and §5-401 (5) [Mineral product industries, including mining, quarrying. and crushing operations] of the Vermont Air Pollution Control Regulations (hereinafter "Regulations"). In addition, §5-101 of the Regulations defines a stationary source as any structure(s), equipment, installation(s), or operation(s), or combination thereof, which emit or may emit any air contaminant, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person or persons under common control. Based on this definition, all of the equipment, operations, and structures at the Facility are grouped together by the Agency of Natural Resources, Department of Environmental Conservation, Air Quality & Climate Division (hereinafter "Agency") as one stationary air contaminant source for purposes of review under the Regulations. (Exhibit 31)
- 7. The Applicant applied for and received Air Pollution Control Permit #AP-21-011, issued on April 2, 2021 by the Agency of Natural Resources for the on-site operation of three crushers, two screeners, and conveyors. (Exhibit 31)
- 8. The Air Pollution Control Permit for the project contains significant conditions intended to protect the public from undue air pollution. Among those conditions are (a) the use of water suppression at all transfer points or locations in the crushers, conveyors and screeners that could emit dust and; (b) strict emission limitations for particulate matter ("PM") which includes silica dust, carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), visible emissions, volatile organic compounds ("VOCs"), federally regulated Hazardous Air Pollutants (HAP) and Vermont Hazardous Air Contaminants (HAC). (Exhibit 31)

- 9. With respect to fugitive emissions, the Applicant is required to periodically water down the operational areas of the quarry and maintains a water truck on site for that purpose. (Exhibit 31 and Testimony of Hinckley).
- 10. Wet suppression eliminates 90% of dust from the crusher, screener and conveyor emissions and quantities of such dust escaping the immediate area of the machines are minimal. (Testimony of Hinckley)
- 11. ANR's cover memo accompanying the Air Control permit highlighted Conditions 17 and 20 regarding the requirement to inventory equipment subject to emissions testing; Condition 5 limiting aggregate production to 26,000 tons per year; and Condition 6, which restricts the fuel used in non-road equipment at the facility to ultra-low sulfur diesel, which is diesel fuel with a sulfur content not to exceed 0.0015% ppm by weight. (Exhibit 31).
- 12. In addition to the above conditions and operational limitations, the Air Permit requires testing and monitoring of the wet suppression spray nozzles in the wet suppression system, crusher, screener, and conveyor emissions, including visible emissions testing intended to detect excess particulate matter, as well as record keeping and reporting requirements with respect to production, and notification of operational issues or violations at the site. Any proposed equipment substitutions for that approved in the air Permit shall be filed with ANR prior to replacement, and visible emissions testing requirements may be required. (Exhibit 31 and Testimony of Hinckley).
- 13. ANR requested the following permit condition (Exhibit 27), to which the Applicant stipulated:

The project shall comply with all of the conditions of the following Agency of Natural Resources Permit: Air Pollution Control Permit to Construct #AP-21-011 issued by the Agency of Natural Resources Air Pollution Control Division and dated November 17, 2020 (Exhibit 31). Non-material amendments to the Air Pollution Control Permit shall be deemed automatically incorporated herein.

The Permittee shall take reasonable precautions at all times to prevent fugitive particulate matter (dust) from becoming airborne from the project and its operations. Reasonable precautions to be taken shall include, but not be limited to, the following measures or other equally effective measures for project operations and activities under the Permittee's control or supervision:

a. The unpaved traffic and parking areas at the project shall be periodically maintained by the application of water and/or generally accepted chemical treatments, such as calcium chloride unless otherwise restricted, which are applied at a rate and frequency to effectively limit visible dust emissions;

- b. Any paved traffic and parking areas at the project shall be periodically maintained as necessary to prevent buildup of material that may generate fugitive dust emissions. Sweeping shall be performed in a manner to minimize fugitive dust air emissions, and may include lightly wetting the paved surface immediately before sweeping, or preferably by the use of a vacuum, regenerative, or high-efficiency sweeper
- c. All trucks owned, operated or under the control of the Permittee shall be securely covered when operated on public roadways and when loaded with materials that may generate fugitive dust;
- d. All unenclosed crushing and dry screening operations shall be equipped with a wet dust control (suppression) system with spray nozzles at appropriate locations and shall be operated as necessary to effectively limit visible dust emissions;
- e. Active storage piles shall be periodically maintained by application of water and/or generally accepted chemical treatments, such as calcium chloride unless otherwise restricted, which are applied at a rate and frequency to effectively limit visible dust emissions. Inactive storage piles and exposed surfaces shall be revegetated as soon as reasonably practicable; and
- f. The Permittee shall ensure that any dust control measures taken in accordance with the conditions listed above are in compliance with all other state and federal requirements.
- g. The Permittee shall not allow the operation of a portable gravel or stone crushing plant on the premises with a maximum rated capacity (based on the crusher's largest possible setting and maximum throughput, not actual operating rate) of greater than 150 tons per hour, unless said crushing plant has a permit to operate from the Vermont Air Pollution Control Division.

Conclusions of Law

Under Criterion 1, before granting a permit, the Commission shall find that the development will not result in undue air pollution. The ANR Air Pollution Control Permit AP-21-011 issued on April 2, 2021 creates a rebuttable presumption pursuant to Act 250 Rule 19 that this project will not result in undue air pollution. In addition, the technical determinations ANR made in issuing the permit are entitled to substantial deference. 10 V.S.A § 6086(d). No evidence was presented to rebut the presumption or challenge the technical determinations made by ANR.

Based on the foregoing, the Commission concludes that this project complies with Criterion 1(Air Pollution).

Criterion 1(B) - Waste Disposal:

14. Potential sources of water pollution from the project include water runoff from the quarry operational areas and stockpiles, as well as wash water from the stone washing plant to be established on the property. (Exhibit 1)

- 15. A system of settling ponds and discharge structures provide treatment for runoff from all portions of the site. The new wash plant will use recycled stormwater from the property to wash processed stone after processing, supplemented as needed by water from an existing artesian well on the site. Water from the washing process will include mineral fines, suspended solids, and sediment which would be harmful to water quality if discharged directly. The project proposes an additional settling pond to be constructed in the southwest corner of the site, allowing overflow from the wash plant and runoff from the surrounding enlarged stockpile areas to be collected and settled prior to discharge to the Clarendon River. (Exhibit 1)
- 16. ANR initially raised concerns about insufficient evidence to support the Applicant's assertion that a groundwater monitoring plan was not necessary, as ANR identified five wells potentially within 2,000' of the quarry. (Exhibit 45) At ANR's request, the Applicant supplemented the record with the filing of a well location map. (Exhibit 51) Upon a review of the map, ANR concluded and confirmed that no wells are within 2,000' of the quarry; thus, no groundwater monitoring plan is indicted. (Exhibit 59)
- 17. The project's Standard Industrial Classification (SIC) code is 1429,1442. The Applicant has prepared a Stormwater Pollution Prevention Plan (SWPPP) and will implement Best Management Practices (BMPs) to prevent contaminated runoff from the industrial activity. (Exhibit 9). The Pre-Development Drainage Area Plan is depicted in Exhibit 17a; the Post Development Drainage Area Plan is depicted in Exhibit 18a.
- 18. The ANR Department of Environmental Conservation has issued Authorization to Discharge Stormwater Under Multi-Sector General Permit 9125-9003, issued on November 17, 2020. (Exhibit 10)
- 19. The project requires an Individual Industrial Discharge Permit, which address potential sources of water pollution and water runoff from the project site. The ANR Department of Environmental Conservation issued IDP #3-1570 on November 17, 2021. (Exhibit 60)
- 20. No party presented any evidence or testimony attempting to rebut the Act 250 Rule 19 presumption of compliance with the water pollution Criteria of Act 250 created by those Permits.

Conclusions of Law

10 V.S.A. §6086(a)(1)(B) specifies that an Act 250 permit will be granted when it is demonstrated by the applicant that in addition to all other applicable Criteria, the development will meet any applicable health and environmental conservation department regulations regarding the disposal of waste and will not involve the injection of waste materials or any harmful or toxic substances into ground water or wells.

The ANR permits create a presumption pursuant to Act 250 Rule 19 that the disposal of wastes through the installation of wastewater and waste collection, treatment and disposal systems

authorized by the permits will not result in undue water pollution. Technical determinations made by ANR in issuing the permits are entitled to substantial deference. 10 V.S.A § 6086(d).

The Commission concludes that the project will meet all applicable Department of Environmental Conservation (DEC) regulations on waste disposal and will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells. Therefore, the project complies with Criterion 1(B).

Criterion 1(E) - Streams:

- 21. The project borders the Clarendon River, and a few small tributaries are located adjacent to project activities. For rivers the size of the Clarendon, the ANR Guidance for Act 250 and Section 248 Comments Regarding Riparian Buffers ("Buffer Guidance") suggests a 100' undisturbed riparian zone. For the smaller streams, the Guidance suggests a 50' undisturbed riparian zone from top of bank or slope, unless the stream is located within a Class II wetland. Undisturbed, naturally vegetated riparian zones along streams protect water quality, stabilize streambanks, and help maintain in-stream habitat. (Exhibit 27)
- 22. The ANR Fisheries Program requested that the Applicant file an updated site plan to identify the 100' riparian zone for the Clarendon and the 50' riparian zones for the smaller streams located outside of Class II wetlands. (Exhibit 27)
- 23. The Applicant filed revised plans as requested (Exhibits 12a, 13a, 14a,19a) which the ANR Fisheries Program reviewed and subsequently confirmed that the project will not impact the water resources. ANR's comments included the following: "Riparian zones as identified on the plans shall remain in an undisturbed, naturally vegetated condition to protect stream functions and values." (Exhibit 35)

Conclusions of Law

Under Criterion 1(E), a permit will be granted whenever it is demonstrated by the Applicant that the development of lands adjacent to the banks of a stream will, whenever feasible, maintain the natural condition of any streams, and will not endanger the health, safety, or welfare of the public or of adjoining landowners.

The Applicant filed revised site plans demonstrating that adequate riparian buffer zones will be established and maintained throughout the life of the project, thus maintaining the natural condition of the streams, and avoiding impacts to water resources and public health, safety, and welfare. Accordingly, the Commission concludes that the project complies with Criterion 1(E).

Criterion 1(G) - Wetlands:

24. There are Class II and Class III wetlands on the project tract, which are delineated on revised plans contained in Exhibits 12a through 19a.

- 25. The ANR District Wetlands Ecologist conducted a site visit and confirmed both the wetland delineation and the wetland classifications. (Exhibit 27)
- 26. The project does not require an Individual Wetland Permit or a General Wetland Permit. (Exhibits 1 and 27)
- 27. Project activities occur adjacent to Class II wetland buffers. Silt fencing will be installed adjacent to the southern and western water courses and wetland buffers prior to construction. Filter berms will be constructed upslope of these water courses and the silt fence Best Management Practices (BMPs) will be removed after the berms are stabilized. (Exhibits 1 and 19).
- 28. The ANR Wetland Program specifically requested flagging around wetlands D and E. No flagging is needed around wetlands A and B because as Class III wetlands, they are not jurisdictional for the Program. (Exhibit 27)
- 29. The Applicant stipulated to the inclusion of ANR recommended permit condition requiring the installation of flagging or other boundary demarcation where the project activities occur within 100' of Class II wetlands, consistent with the requirements of the ANR Wetland Program. (Exhibit 32)

Conclusions of Law

Under Criterion 1(G), a permit will be granted whenever it is demonstrated by the Applicant that the development will not violate the rules of the Secretary of Natural Resources as adopted under Chapter 37 relating to significant wetlands.

The Commission concludes that the Applicant's stipulation to the installation of flagging or similar boundary demarcations wherever project activities occur within 100' of Class II wetlands sufficiently demonstrates that the Applicant will be in compliance with the rules of the Secretary of Natural Resources. Accordingly, the Commission concludes that the project complies with Criterion 1(G).

Criterion 5 – Transportation and 9(K) Criterion 9(K) – Development Affecting Public Investments:

30. Entrance and egress to the quarry is via the existing two-way access road on the east side of Vermont Route 133-the highway is an adjacent public facility/investment. The access road runs east and west and intersects VT-133 via a three-approach, unsignalized intersection with stop control on the access road. The speed limit of VT-133 at the intersection is 40 mph. The sight distance at the intersection is 458 feet to the south and 475 feet to the north, which exceeds AASHTO minimum recommended stopping sight distances. The project access has no history of crashes. Minor roadside vegetation removal will occur at the access intersection to increase sight distance. New "Trucks Entering" signs will be installed along VT-133. (Exhibits 1 and 7)

- 31. Land Use Permit Administrative Amendment 1R0489-7 authorized the Applicant's use of "legally loaded trucks". In response to the Commission's request as to whether "legally loaded trucks" included use of tri-axle trucks, the Applicant confirmed, further noting legally loaded trucks include any other truck regardless of # of axles, that can be used legally on a State Highway in VT based on total loaded vehicle weight and # of axles. Over time vehicle specifications, and engineering understanding of modern trucks and their impacts on roadways improved. Modern roadways are regulated based on weight per axle on the road and the understanding that more axles are safer and better for protecting the roadways. Current roadway requirements incorporate this finding to qualify as a legally loaded truck. Furthermore, over time, trucks have generally increased the amount of material they can haul which means fewer trips on nearby roads to move an equivalent volume of material. (Exhibit 32)
- 32. The number of loaded trucks permitted to exit the site daily and hourly was permitted in the Board's 1R0489-4EB decision: Criterion 5 Conclusions at Page 26 state: *In summary, the Board concludes that as conditioned, up to 85 loaded truck trips per weekday, with no more than 10 loads per hour and 20 loaded truck trips per Saturday, with no more than 10 loads per hour, will not cause unreasonable congestion or unsafe conditions with respect to the use of Route 133/Clarendon Avenue and Route 4A.*
- 33. While the Applicant proposes no changes to the permitted hauling limits of 85 loaded truck trips per weekday and 20 loaded truck trips per Saturday, this application proposes to remove the permitted limitation of 10 loaded truck trips per hour. (Exhibit 1a)
- 34. The Applicant's consulting traffic engineers prepared a <u>Traffic Impact Study</u>. In addition to acknowledging the currently permitted conditions, the traffic study noted that based on the maximum allowed aggregate haul loads leaving, the average hourly loads leaving the quarry during the week is less than 2 loads leaving per hour (85 loads / 55 hours per week = 1.54). The average hourly haul loads leaving the quarry on a Saturday during existing conditions is approximately 7 haul loads per hour (20 loads / 3 hours = 6.67). (Exhibit 7)
- 35. The traffic study found that while the average hourly haul loads calculated above can be used for reference, the actual hourly hauling from the quarry can vary. The traffic count from September 9th and recorded information from the quarry was used to determine a more accurate current hourly volume. (Exhibit 7)
- 36. In accordance with conditions in Land Use Permit #1R0489-4-EB, the Applicant documents the amount of material and number of haul trucks which leave the quarry daily. This information was analyzed by the traffic consultant from July 2017 to June 2020. (A summary is included in Appendix B of the Traffic Impact Study) Based on this data the maximum average number of daily loads was 27.6 loads per day with an overall average of 13.5 loads per day. Based on these daily averages, the average number

of hourly haul loads leaving the quarry between 2017 and 2020 was between 1-3 loads per hour. (Exhibit 7)

- 37. During the 24- hour traffic count on September 9, 2020 conducted by the traffic consultant, 10 haul trucks exited the quarry and 11 entered. The maximum number of haul trucks leaving the quarry during any 1- hour period during the count was 3, with 2 haul trucks also entering during that hour. The maximum number of vehicles (not exclusive to haul trucks) entering and exiting the quarry occurred between 10:00 am and 11:00 am. During this hour, 7 vehicles exited the quarry and 5 vehicles entered. It should be noted that during this hour, only one of the vehicles which entered or exited was a haul truck. During the 24- hour count, 86% of the vehicles leaving the quarry turned right and headed north on VT-133 while only 14% turned left and headed south on VT-133. (Exhibit 7)
- 38. Based on the observed 24- hour traffic count on Wednesday, September 9, 2020, the <u>Traffic Impact Study</u> assumed the following conclusions:

The directional distribution leaving the quarry is: 86% Northbound on VT-133 (turning right) and 14% Southbound on VT-133 (turning left).

The peak traffic volume to and from the quarry generally occurs between 9:00 AM-4:00 PM, which does not correspond to the morning (7:00 AM-8:00 AM) and evening (4:30 PM – 5:30 PM) peak hours on VT-133.

Approximately 80% of the traffic volume entering and exiting the quarry daily is considered a heavy vehicle, classified as FHWA vehicle classes 4 to 13.

- 39. With respect to Saturday traffic, data from VTrans traffic counters R395 and R464, located north and south of the project location on VT-133, was referenced to determine the traffic patterns and volumes of VT-133 on Saturdays. Based on both traffic counters R395 and R464, the traffic volume on Saturdays on VT-133 was approximately 10% less on Saturday than Weekdays. As such no separate analysis was conducted for background volume on Saturday. (Exhibit 7)
- 40. The <u>Traffic Impact Study</u> concluded that the continued use of the quarry will not cause undue traffic congestion through the year 2030; and that continued truck traffic is not expected to cause undue traffic congestion or unsafe conditions on the surrounding roadway network. (Exhibit 7)
- 41. No party provided any evidence of crashes or accidents caused by trucks entering or exiting the project.
- 42. No Transportation Demand Management (TDM) strategies are proposed for this project. (Exhibit 1)

- 43. The Town of West Rutland receives annual compensation from the Applicant per Conditions 13-18 of Land Use Permit 1R0489-4-EB, paid to the Town once a year, to compensate it for potential impact on its roads from quarry traffic due to the fact that the vast majority of truck traffic from the quarry passes through the Town of West Rutland. (Exhibit 36 and Testimony)
- 44. The Town raised several concerns during the hearing: the Applicant's proposed elimination of the hauled volume reporting requirement; the project's potential for increased wear and damage to West Rutland town highways; need to avoid truck convoys to avoid potential conflicts with school buses; restricting engine brakes with town limits. (Testimony and Exhibit 48)
- 45. After the hearing, the Applicant met with the Town representatives to discuss the concerns. The parties agreed to the following as detailed in Exhibit 48:

The Applicant will continue to report the annual tonnage of stone hauled from the quarry to the Town of West Rutland. The Applicant will file this report on or before February 1 each year for the tonnage hauled the preceding calendar year. The Town concurs with this approach.

The Applicant will continue to pay the toll to the Town of West Rutland required in prior Land Use Permits. The Town concurs that this resolves the foregoing concern.

Although no accidents have been reported involving haul trucks and school uses, the Applicant will use its best efforts to ensure that multiple trucks do not exit the quarry at the same time to mitigate any potential conflicts with school buses. The Town concurs that no additional permit conditions are needed to address this issue.

The Applicant will agree to a permit condition stating that trucks under its ownership or control will not use engine braking within West Rutland Town limits.

46. Based on the foregoing agreements between the Parties, the Town of West Rutland would not object to the Applicant's proposal to eliminate the requirement in Land Use Permit 1R0489-4-EB (Revised) Conditions 9 and 10 for the Applicant to host an open house at the start of each operating season to discuss safety issues with the residents of the Town of west Rutland. (Exhibit 1a, 36 and 48)

Conclusions of Law

Criterion 5(A) requires that the project "will not cause unreasonable congestion or unsafe conditions with respect to use of the highways." Notwithstanding the requirement for a positive finding, the Commission may not deny a permit solely on the reasons set forth under

Criterion 5. See 10 V.S.A § 6087(b). The Commission may, however, attach reasonable conditions to alleviate traffic burdens. *Id*.

Criterion 5(B) requires that a project, "as appropriate . . . incorporate transportation demand management strategies and provide safe access and connections to adjacent lands and facilities and to existing and planned pedestrian, bicycle, and transit networks and services." 10 V.S.A § 6086(a)(5)(B). In determining what is appropriate for a particular project, the Commission considers whether the measure is reasonable, "given the type, scale and transportation impacts" of the proposed project. *Id*.

The Applicant referred to its daily truck traffic logs to support its position that removal of the permitted 10 trucks per hour limitation would not result in unreasonable congestion or unsafe conditions on local highways. According to the <u>Traffic Impact Study</u>, the Applicant's daily logs indicate that the average number of hourly haul loads leaving the quarry between 2017 and 2020 was between 1 – 3 loads per hour. Additionally, the <u>Traffic Impact Study</u> demonstrated that the truck traffic exiting and entering the project occurs between the hours of 9:00 AM-4:00 PM, which does not correspond to the morning (7:00 AM-8:00 AM) and evening (4:30 PM – 5:30 PM) peak hours on VT-133. Further, the Applicant has stipulated to a permit condition prohibiting truck convoys; i.e., no more than two trucks would ever leave the site simultaneously.

The Commission concludes that removing the permitted limitation of 10 loaded truck trips per hour will not cause unreasonable congestion or unsafe conditions with respect to use of roads, particularly as the project will be limited to no more than two loaded haul trucks exiting the site simultaneously, and as these trips will not occur during peak AM or PM hours. Therefore, the Commission concludes that the project complies with Criterion 5(A). The Commission further concludes that project incorporate all appropriate transportation measures and complies with Criterion 5(B).

Under Criterion 9(K), a permit will be granted for development adjacent to governmental and public utility facilities, services, or lands. With regard to such projects, the applicant bears the burden of proving that the project will not unnecessarily or unreasonably endanger the public or quasi-public investment in the facility, service, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of, or access to, the facility, service, or lands.

The Town of West Rutland expressed concerns during the hearing that increased truck trips leaving the quarry could constitute truck convoys that could potentially conflict with bus routes. The Parties met after the hearing the discuss the issue. The Applicant stated that the overall number of truck trips is not proposed to change, and there are no records of accidents on West Rutland roads involving trucks travelling to and from the quarry. Additionally, the Applicant stipulated to "use its best efforts to ensure that multiple trucks will not exit the quarry at the same time". These assurances sufficiently satisfied the Town's concerns.

The Applicant proposed the following permit condition to address the Town of West Rutland's concerns:

Trucks shall be limited to a maximum of 85 loaded trucks per day Monday – Friday, and 20 loaded trucks on Saturday with no hourly loaded truck limit. No truck convoys, meaning three or more trucks leaving the quarry together, shall be allowed.

The Permittee shall continue to abide by the toll arrangement with the Town of West Rutland established in the – 4 EB (Revised) Permit. The Permittee may cease this payment at such time as the Town of West Rutland consents or upon obtaining an amendment to this Permit.

The Commission concludes that the project complies with Criterion 9(K).

Criterion 8 – Aesthetics

- 47. The Casella Clarendon Quarry, owned by Casella Group and operated by Casella Construction, Inc., occupies approximately 60 acres of a 297 acres tract located off Vermont Route 133 in Clarendon, Vermont. The aggregate quarry has been in operation since prior to 1985 and permitted under Land Use Permit Series 1R0489. The operations within this quarry include mineral mining activities consisting of material extraction, crushing, screening, and hauling. The extracted and processed material from this quarry is used as aggregate for off-site construction operations. (Exhibit 7)
- 48. The quarry facility has been in existence for more than 30 years and consists of operational and industrial surfacing throughout. The majority of the approximately 60 acres quarry project site contains exposed bedrock or is surfaced by gravel for operational areas and internal haul roads. In addition to the active quarry, aggregate crushers, a job trailer, material stockpiles, a wash plant, internal haul roads, settling ponds, and a scale house are located on site. There is one paved road, running east and west, providing access from VT Route 133 to the quarry. (Exhibit 7)
- 49. The outdoor activities on site consist of the extraction, crushing/processing, washing, storage, and transportation of stone aggregate material. Extraction of stone occurs within the active quarry pit and consists of cutting, drilling, and blasting when necessary. A blasting report, in accordance with applicable regulations, is conducted prior to any blasting operation. The excavated stone is loaded and transported to the existing crusher equipment to be broken down into construction aggregate size. The crushed aggregate is washed within the wash plant for particle size separation. The crushed and wash aggregate is then loaded and transported to material stockpiles on the southwest corner of the site. The final aggregate is loaded into haul trucks and weighed at the scale house prior to leaving the site for delivery. (Exhibit 9)
- 50. There are also two small marble and mineral mines on the property, located north of the active quarry pit. These mines have vertical walls, are self-contained, and are surrounded by fences for safety. (Exhibit 9)

- 51. Currently, the quarry's operating season is permitted from May 1 to November 30. Operations include striping, drilling, blasting, and crushing. The Applicant proposes to increase the operating season for drilling, blasting, and crushing to now be permitted from March 1 through December 31, except for federal holidays. (Exhibit 1a)
- 52. The permitted general operating hours are 6:30 AM to 5:30 PM Monday through Friday, and 9:00 AM to 12:00 PM on Saturdays. No crushing, blasting, or hammering on Saturdays. The Applicant proposes no changes to the permitted general operating hours.
- 53. The Applicant proposes no changes to the permitted maximum annual crushing rate of 650 tons per hour through the primary crusher and 422 tons per hour through the secondary crusher. (Exhibit 1a)
- 54. The permitted crushing hours are currently from May 1-November 30, from 8:00 AM to 3:00 PM Monday through Friday, not to exceed 6 hours per day, and not to exceed 720 hours per year.
- 55. The Applicant proposes changes to all of these permitted crushing limits. Crushing season would now be from March 1 through December 31. The daily hours allowed for crushing would now be from 7:00 AM -5:00 PM, Monday through Friday. Both the permitted daily and yearly limits would be eliminated. (Exhibit 1a)
- 56. There are also permitted limits for blasting. No more than 6,000 pounds total explosives per blast, no more than 975 pounds of explosive per delay. Blast limits are set at once per week, and no more than 15 such weekly blasts in any one year. (Exhibit 1a)
- 57. The Applicant proposes to eliminate the maximum 6,000 pounds total per blast and the limit of one blast per week-no more than 15 such weekly blasts in one year in favor of utilizing new innovations in modern electronic vibration wave cancelling detonation system. (Exhibits 1a and 6) The maximum allowed charge weight of 975 lbs. per delay would remain unchanged. (Exhibit 6)
- 58. Modern seismographs record ground vibration and air concussion from blasting consistent with the U.S. Bureau of Mines recommended limits. Provided that ground vibration from blasting is below the reference line in the ground vibration graph (See Page 4, Exhibit 6) and provided that the decibel limits from air concussion are below the values in the U.S. Bureau of Mines recommendations, there is a high degree of certainty that blasting will not result in damage to fragile above and below ground structures. (Exhibit 6 and Testimony of Smith)
- 59. The Applicant's consultant Maine Drilling and Blasting prepared a <u>Rock Extraction Blasting Plan</u>. The Plan proposes the introduction of electronic initiation detonation control technology that will allow for improved control, energy efficiency and productivity improvements in the rock resource extraction process. This control technology will provide increased protection to neighboring property and the

- environment and has been found effective in reducing annoyance caused by blasting vibration. (Exhibit 6)
- 60. According to the Plan, electronic initiation will cut the current overpressure limit (measured at nearest residence) of 139dBL in half to 133dBL. (A 27-mph wind gust is equivalent to 133dBL; a 40-mph wind gust is equivalent to 140dBL) (Exhibit 37). This means that the air over pressure from blasting experienced at surrounding residences will be far below existing wind generated pressures. (Exhibit 6)
- 61. The Applicant has stipulated to the use the electronic detonation system for all shots in the quarry which have the potential for significant off-site impacts. There may be small shots which will not use this technology due to the fact that the size of these blasts is so small that use of the technology is not feasible or necessary. Therefore, non-electronic detonation may be used for shots consisting of less than 6000 pounds of total explosives. (Exhibit 48)
- 62. Consistent with the Plan, the Applicant will offer pre-blast surveys to owners/occupants of dwellings within 2000 feet. Surveys would be arranged by appointment with and conducted by representatives of Maine Drilling and Blasting. Surveys will be documented through video or still photographs an appropriate narration or written reports. (Exhibit 6)
- 63. Additionally, as recommended in the Plan, the Applicant will install ground and air response monitoring. A minimum of two seismograph monitors will be installed. The primary monitoring device shall be located at the closest inhabited structure on Misty Meadows Circle, which is the closest occupied structure to the blast location. A second unit will be located at the Casella Well south of the property. To demonstrate compliance with the permit, for each blasting event, a compliance report will be generated from each monitor, graphically plotting the recorded vibration data. Prior to commencement of blasting operations, permission to monitor will be sought from the homeowner or representative. If access should be denied, an alternate accessible location will be selected. To represent the ground and air response at the identified structure, the chosen location should best match the distance and direction to the structure. The set-up and use monitoring equipment will be in accordance with the best practice guidance specified by NFPA 495 National Code requirements. (Exhibit 6)
- 64. The Applicant proposes that blasting now be permitted to occur Monday through Friday, once per week, up to 25 per year. Blasting allowed twice per week, five times a year. No blasting on federal holidays. (Exhibit 1a)
- 65. The Applicant stipulated to providing prior written notification of the blasting schedule to those with homes within 2000 feet of the quarry who so request. (Exhibit 1a)

- 66. In addition to blasting, quarry operations also include noise impacts associated with crushing, haul trucks loading material into crushers, and operation of machinery including excavators, rock drills, rock hammers, and haul trucks and customer trucks coming and going daily, and the proposed wash plant. (Exhibit 5)
- 67. Resources Systems Group (RSG), the Applicant's noise control engineers, conducted sound level monitoring at two locations over a period of five to six days from Tuesday, July 28, 2021 to Sunday August 2, 2021. (Of the east and west monitors, the west monitor ran through Monday, August 3, 2021.) The quarry was operating as permitted during the monitoring period. (Exhibit 5)
- 68. In performing its sound study, RSG used the ISO 9613 sound model methodology which is an internationally recognized system for modeling noise impacts from sound sources and which is commonly used by noise control professionals to predict noise from industrial operations. The methodology is employed using the CADNA computer model. The model takes into account surrounding terrain, vegetation, topography on the site and similar factors which can influence sound propagation. (Exhibit 5)
- 69. The project site is primarily rural, sparsely populated, forested land that rises in elevation above VT-133. The quarry is accessible via a paved, 24′ wide access drive, approximately 1000′ long. There are no residences along the quarry access drive. (Exhibits 7 and 12a) The character of the area is a rural working landscape with a mixture of industrial (the existing quarry), agricultural, and rural residential land uses. The closest residence to the project, as measured from the crushing area, is approximately 485 meters (1,591 feet) to the west at 958 VT-133. There are other residences to the west along VT-133 at between 525 and 605 meters (1,722 and 1,985 feet). The closest residence to the south is approximately 630 meters (2,067 feet) from the crushing area, at 5784 Walker Mountain Road. To the east, the closest residences are along Misty Meadows Circle between 800 and 1,000 meters (2,625 and 3,281 feet) from the crushing area. (Exhibit 5)
- 70. The east monitor was located at 156 Misty Meadows Circle, the last house on the road. The monitor was located at the edge of the forest and a side yard approximately 58 meters (190 feet) south of the residence. Both the monitor and residence were approximately 480 meters (1,575 feet) east of the current extraction area, and 785 meters (2,575 feet) east of the crushing area. This location was selected to be representative of the background sound levels at residence east and south of the project site that are further away from VT-133. (Exhibit 5)
- 71. The west monitor was on the edge of a field between the project site and the closest residence, 958 VT-133. It was located approximately 95 meters (312 feet) east-northeast of the residence, 120 meters (394 feet) east of VT-133, 120 meters (394 feet) south of the access road to the Project site, 465 meters (1,526 feet) west-northwest of the crusher area, and 645 meters (2,116 feet) west-northwest of the current extraction area. This location

was selected to be representative of background sound levels at the closest residences to the west along VT-133, however, this monitor would have measured sound levels that are lower than those experienced by residences that are closer to VT-133 where traffic noise would be more dominate. For example, the residence at 958 VT-133 is only setback approximately 15 meters (49 feet) from the road, and the residence at 1035 VT-133, which is across from the access road to the project site, is only setback approximately 13 meters (43 feet) from the road. Other residences however, such as 925 and 927 VT-133, are setback from the road further, approximately 80 to 90 meters (262 and 295 feet). (Exhibit 5)

- 72. From the model results, the following observations were made:
 - The receptors with the highest projected sound levels vary somewhat by scenario, but generally the receptors with the highest projected sound levels are 812, 925, 958, and 1035 VT-133, 18 Doaner Lane, and 5919 Walker Mountain Road.
 - The highest projected sound level of the existing operation, Scenario 1, is 56 dBA which occurs at 958 and 1035 VT-133, 18 Doaner Lane, and 5919 Walker Mountain Road.
 - With the addition of the mitigation on the crusher (noise reducing liner on primary jaw crusher) and modifications to the crusher area berm (increasing its current height by 6 feet), sound levels are reduced under Scenario 2, the initial proposed operation, with the highest projected sound level of 55 dBA 5919 Walker Mountain Road and less than 55 dBA at other receptors.
 - Sound levels are further reduced as the proposed operation progresses and the sources that operate within the extraction area operate deeper in the pit and further north. The highest projected sound level under Scenario 3, the proposed operation near full extraction, is 54 dBA and occurs 5919 Walker Mountain Road.
 - Maximum sound levels at the property line are less than in 70 dBA for all modeled scenarios, and with the proposed operations, maximum sound levels at residences are "below the Barre Granite standard limit." (The Board's decision *Barre Granite Quarries*, 7C1079 (Rev)-EB (December 8, 2000) concluded that a project that does not exceed 55 dBA Lmax at homes or areas of frequent human use, or 70 dBA Lmax at the project's property line does not have an "adverse" aesthetic impact under the Board's <u>Quechee Lakes</u> test) The modeling results for all monitored properties are included in Appendix C. at Pages 29 and 30 in Exhibit 5
- 73. The <u>Noise Assessment Study</u> enumerated three noise mitigation measures proposed to be undertaken by the Applicant to mitigate noise impacts for Scenarios 2 and 3:
 - 1. Increasing the height of the existing crushing area berm, shown in the photograph in Figure 9 on Page 19 by 6 feet for a top elevation of 645 feet. (Also See Exhibit 14a)

- 2. Installing a noise reducing liner on the inside of the primary jaw crusher hopper to reduce the sound from rocks hitting the metal hopper as they are being loaded into the hopper. The Applicant has already been in contact with a supplier for the material, and the supplier has indicated that a 5 to 10 dB reduction in sound levels from rock being loaded into the hopper is expected. A reduction of 5 dB was used in the sound propagation model. If alternative mitigation that offers 5 dB of reduction from this source of sound is available, it can also be used, and similar model results as presented in Scenarios 2 and 3 would be achieved.
- 3. Limiting the use of the rock hammer to only within the extraction area; and if hammering at an elevation greater than 216 meters (709 feet) not operating the rock hammer and drill simultaneously. (Exhibit 5)

These mitigation measures listed above will result in a reduction of 1 to 3 dB over the existing sound levels at the worst-case receptors. (Exhibit 5)

- 74. In addition to the mitigation measures listed above, it was recommended that all onsite equipment be equipped with an alternative backup alarm, such as a broadband, variable loudness, or radar-type backup alarm. Broadband alarms are often found to be less annoying because they do not have the pure tonal qualities of regular backup alarms. They are also more directional and attenuate more quickly over distance. Broadband backup alarms emit a sound that is often described as being similar to static. The consultant also recommended that truck routes be planned in a circular pattern to minimize the need to backup, which would reduce the likelihood of customer trucks using backup alarms. (Exhibit 5)
- 75. The Applicant has stipulated to implementing all of the foregoing mitigation measures. (Exhibit 32)
- 76. The Commission incorporates herein its Findings and Conclusions under Criterion 1 with respect to dust control.
- 77. No party rebutted the testimony of either the blasting engineer or the noise engineer.
- 78. There are no clear written community standards in the Clarendon Town Plan specific to noise or dust aesthetic impacts.

CONCLUSIONS OF LAW

Under Criterion 8, prior to granting a permit, the Commission must find that the subdivision or development under Criterion 8 "will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas." This project involves concerns under Criterion 8 related to noise.

The Commission uses a two-part test established by the former Environmental Board in its

Quechee Lakes Corporation decision to determine whether a project may result in impacts relating to aesthetics and natural and scenic beauty. First, it determines whether the project will have an adverse effect. If so, the Commission must then apply the second test to determine whether the adverse effect is undue. Re: Quechee Lakes Corporation, #3W0411-EB and #3W0439-EB, Findings of Fact, Conclusions of Law, and Order at 18-20 (Vt. Envtl. Bd. Nov. 4, 1985), aff'd In Re Quechee Lakes 154 VT543 (1990). The burden of proof under Criterion 8 is on any party opposing the project, 10 V.S.A. § 6088(b), but applicant must provide sufficient evidence for the Commission to make affirmative findings. Id. "Either party's burden, however, may be satisfied by evidence introduced by any of the parties or witnesses" In re McShinsky, 153 Vt. 586, 589 (1990) (quoting In re Quechee Lakes Corp., 154 Vt. 543, 553–54 (1990)).

1. Adverse Effect

In order to determine whether a project will have an adverse aesthetic effect, the Commission must determine whether the project will "fit" within the context it is proposed. In making this determination, the Commission examines a number of specific factors, including: the nature of the project's surroundings; the compatibility of the project's design with those surroundings; the suitability of the colors and materials selected for the project; the locations from which the project can be viewed; and the potential impact of the project on open space. Id.

The former Environmental Board's decision In Re: Barre Granite Quarries, 7C1079 (Revised)-EB (December 8, 2000) held that if the noise from a development measured 55 dBA Lmax at adjacent residences or areas of frequent human use; and 70 dBA Lmax at the project's property boundaries, the project would not result in an "adverse" impact under the first test of the Quechee analysis.

In considering whether the project "fits" within its surroundings the Commission acknowledges that the project constitutes an industrial use in the Residential and Commercial District, wherein the town plan prohibits industrial uses. However, the quarry has been operational and permitted by Act 250 in this location for over 30 years. Nevertheless, despite the rural project location, the Commission concludes that the proposed increases in seasonal operations involving the use of three crushers, excavators, haul trucks, rock drills, rock hammers, and blasting to now be 10 months a year (March 1-December 31), and proposed expansion of the daily operation hours, to now be from 7:00 AM to 5:00 PM on weekdays, will have an adverse impact on noise levels until the quarry is reclaimed by April 1, 2056. The Applicant itself acknowledged the noise impacts associated with the proposed operational changes and hired engineering consultant to develop a blasting plan and conduct a noise assessment. Therefore, as the Commission has concluded that project will have an adverse aesthetic impact, the Commission must determine whether that impact is "undue."

2. Undue Adverse Effect

An adverse aesthetic impact is undue if any of the following is true: (1) the project violates a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area; (2) the project offends the sensibilities of the average person, or is offensive or shocking because it is out of character with its surroundings or significantly diminishes the scenic qualities of the area; or (3) the Applicants failed to take generally available mitigating steps which a reasonable person would take to improve the harmony of the project with its surroundings. *In re Rinkers* 302-12-08 *Vtec*, *Decision and Order at* 15 (*May* 22, 2010) (*citing In re: Times & Seasons, LLC*, 2008 *VT* 7, ¶ 8; *In re McShinsky*, 153 *Vt. at* 592).

(a) Clear, Written Community Standard

In evaluating whether a project violates a clear written community standard, the Commission looks to town plans, open land studies, and other municipal documents to discern whether a clear, written community standard exists to be applied in review of aesthetic impacts of a project. Hannaford Brothers Co. and Southland Enterprises, Inc., #4C0238-5-EB, Findings of Fact, Conclusions of Law, and Order at 18 (Vt. Envtl. Bd. 4/9/02). A clear, written community standard must be intended to preserve the aesthetics or scenic beauty of the area where the project is located. Re: Green Meadows Center, LLC, The Community Alliance and Southeastern Vermont Community Action, #2WO694-I-EB, Findings of Fact, Conclusions of Law, and Order at 36 (Vt. Envtl. Bd. 12/21/00).

A plan which states "consideration should be made . . ." is not a clear, written community standard. Barre Granite Quarries, LLC and William and Margaret Dyott, #7C1079(Revised)-EB, Findings of Fact, Conclusions of Law, and Order at 81 (Vt. Envtl. Bd. Dec. 8, 2000). Although the proposed project does not meet the specific goals or objectives cited above, there are no clear community standards relevant to the proposed Project's impacts on aesthetics.

The Commission has reviewed relevant portions of the town plan. The Plan identified no specific standard relating to the aesthetics of the area in which the project is located. Therefore, the proposed project does not violate a clear community standard.

(b) Offensive or Shocking Character

Criterion 8 "was not intended to prevent all change to the landscape of Vermont or to guarantee that the view a person sees from their property will remain the same forever." *Re: Okemo Mountain, Inc.* #250351-S-EB Findings of Fact, Conclusions of Law, and Order (Dec. 18, 1986). Criterion 8 was intended to ensure that as development occurs, reasonable consideration will be given to visual impacts on neighboring landowners, the local community, and on the special scenic resources of Vermont. *Rinkers, No.* 302-12-08 Vtec, Decision and Order at 11-12; Horizon Development Corp., #4C0841-EB, Findings of Fact, Conclusions of Law, and Order (Vt. Envtl. Bd. Aug. 21, 1992).

The Applicant has stipulated that the permitted footprint of the project is not proposed to be altered or expanded. Excavation will progress north to areas currently undisturbed. However, due to its rural, forested setting, and the surrounding topography, the quarry will still not be

highly visible as extraction progresses. Additionally, the Commission noted that no changes to the forested area surrounding the footprint of the quarry are proposed, thereby ensuring that the forest will be maintained and continue to screen the quarry operation.

Given all of these considerations and conditions, the Commission concludes that the project is not offensive or shocking.

(c) Generally Available Mitigating Steps

The question under this factor of the aesthetics analysis is whether the Applicant has "failed to take generally available mitigating steps that a reasonable person would take to improve the harmony of the proposed project with its surroundings." *In re Times & Seasons*, 2008 VT 7, ¶ 8. If a project does have an adverse aesthetic effect, the applicant must "take generally available mitigating steps to reduce the negative aesthetic impact of a particular project," otherwise, "failure to take advantage of available alternatives may render an aesthetic impact unduly adverse." *In re Stokes Communications Corp.*, 164 Vt. 30, 39 (1995) (quoted in In re Rinkers, 302-12-08 Vtec, Decision and Order at 19 (May 22, 2010)). A generally available mitigating step "is one that is reasonably feasible and does not frustrate [either] the project's purpose or Act 250's goals."

To mitigate the aesthetic impacts of the project, the Applicant will implement a new electronic blast initiation technology that will reduce the vibration and noise impacts to adjoining property owners; blasts would be monitored on site by seismographs to ensure that ground vibrations do not exceed U.S. Bureau of Mines standards. The Applicant stipulated to permit conditions that require the use of the new electronic initiation technology for all blasts consisting of 6,000 pounds total explosives or greater; and to monitoring all blasts via seismographs consistent with the U.S. Bureau of Mines requirements. The Commission further notes that the Applicant stipulated to a permit condition to offer a pre-blast survey for owners of residences within 2,000 feet of any future blast site, which would be conducted by Maine Drilling and Blasting. Additionally, the Applicant will file written notification of the blasting schedule to those with homes within 2000 feet of the quarry who so request.

The Applicant also proposes three mitigation measures for noise associated with crushing, drilling, hammering, loading, and hauling: the height of the existing crusher berm will be increased by 6 feet (for a top elevation of 645′); a rubber liner will be installed into the hopper of the primary crusher; and the rock hammer will be utilized only within the extraction area; and if hammering is to occur at an elevation greater than 709 feet, the rock hammer and drill will not be operated simultaneously. The noise assessment concluded that the implementation of the foregoing mitigation measures would result in the reduction of 1 to 3 dB over the existing sound levels at the worst-case receptors, thus meeting the <u>Barre Granite</u> standard. The Applicant further stipulated to reconfiguring the on-site truck circulation, so vehicles needn't backup, thus reducing noise from back-up alarms.

Along with the preceding mitigation measures, the Commission will impose an additional condition with respect to the operation of the crushers. The Commission concluded that

operating the crushers for 8 hours a day is reasonable, given that the average workday is 8 hours long. The Applicant may vary the hours on a daily basis, but the Commission will require that the Applicant keep a daily log of the crushers' operation that shall be available to the Commission upon request.

Finally, the Commission took into consideration that there are no changes proposed to the permitted extraction rate of 325,000 raw tons and 260,000 processed tons per year, or the permitted crushing rates of 650 tons per year (not to exceed 422 tons per hour) or to the maximum weekday haul loads (85 loads) and Saturday haul loads (20). And there were no rebuttals to the conclusions set forth in either the blasting plan or the noise assessment or the consultants' testimony.

(d) Conclusion

Based on the foregoing, the Commission concludes that the project will not have an undue adverse effect on the aesthetics or natural and scenic beauty of the area.

Criterion 8(A) - Wildlife Habitat and Endangered Species:

- 79. The ANR District Wildlife Biologist identified habitat of the endangered Northern Long Eared Bat in areas proposed for the project expansion. ANR requested that the Applicants provide information as to the amount of tree clearing proposed for each phase of the expansion to determine whether would be potential impacts to bat habitat. (Exhibit 27)
- 80. The ANR Natural Resources Atlas indicates the presence of a large deer wintering area located south of the project area. (Exhibit 27) However, a site visit by the ANR District Wildlife Biologist confirmed that "there are no issues with respect to deer wintering habitat and the project." (Exhibit 35)
- 81. During that site visit, the Wildlife Biologist identified one adult and one juvenile Peregrine Falcon, and what appeared to be a stick nest on the Northwest wall of the quarry face, where the project proposes to expand. Migratory birds such as Peregrine Falcons are protected under Vermont's Migratory Bird Species Act. (Exhibit 35)
- 82. With respect to tree clearing, the Applicant stipulated to certain clearing restrictions to address the issue of potential Northern Long Eared Bat habitat adjacent to the project site. The Applicants proposed to clear less than 1% of the forested area within a mile of the project. In addition, the Applicant stipulated to a permit condition restricting tree clearing to November 1 through April 14 (dates inclusive), which limits potential impacts to Northern Long Eared Bats. (Exhibits, 45, 46, and 50)
- 83. Regarding the Peregrine Falcon nest, ANR provided approval for the Applicant to remove the nest as the nesting period was over. If the Peregrine Falcon were to reestablish a nest on the quarry face, ANR requested that the Applicant contact the

Department of Fish and Wildlife District Wildlife Biologist. Activities involving the quarry face and area directly above an active Peregrine Falcon nest shall cease during the nesting period of March 1-July 31 (date inclusive.) (Exhibit 45)

84. The Applicant stipulated to conditioning the permit per ANR's request. (Exhibit 50)

Conclusions of Law

Under Criterion 8(A), the Commission shall not grant a permit if it the proposed project will destroy or significantly imperil necessary wildlife habitat or any endangered species, and

- (i) the economic, social, cultural, recreational, or other benefit to the public from the development or subdivision will not outweigh the economic, environmental, or recreational loss to the public from the destruction or imperilment of the habitat or species, or
- (ii) all feasible and reasonable means of preventing or lessening the destruction, diminution, or imperilment of the habitat or species have not been or will not continue to be applied, or
- (iii) a reasonable acceptable alternative site is owned or controlled by the applicant which would allow the development or subdivision to fulfill its intended purpose.

The burden of proof is on the opponent under Criterion 8(A).

Necessary wildlife habitat is defined by Act 250 as "concentrated habitat which is identifiable and is demonstrated as being decisive to the survival of a species or wildlife at any period in its life including breeding and migratory periods." Criterion 8(A) involves a three-part test:

- (1) whether the project will impact any "necessary wildlife habitat" or endangered species;
- (2) if so, whether the project will destroy or significantly imperil such habitat or species; and
- (3) if so, whether one or more of sub-criteria (i) through (iii) is satisfied.

Re: Gary Savoie d/b/a WLPL and Eleanor Bemis, #2W0991-EB, Findings of Fact, Conclusions of Law, and Order (Vt. Envtl Bd. October 11, 1995). If the Project will destroy or significantly imperil necessary wildlife habitat, and if any of the sub-criteria apply, then the permit must be denied. Southview Associates, 153 Vt. 171 (1989).

The project has the potential to impact Northern Long Eared Bat habitat; however, the Applicant has stipulated to a permit condition limiting clearing to less than 1% of the forested area within a mile of the project. In addition, the Applicant stipulated to a permit condition restricting tree clearing to November 1 through April 14 (dates inclusive). The Applicant has also stipulated to a permit condition requiring the Applicant to contact the Department of Fish and Wildlife District Wildlife Biologist should a Peregrine Falcon reestablish a nest on the

quarry face. Activities involving the quarry face and area directly above an active Peregrine Falcon nest shall cease during the nesting period of March 1-July 31 (date inclusive.)

Based on the foregoing, the Applicant has taken all feasible and reasonable means of preventing or lessening the destruction of necessary habitat; therefore, the proposed project will not destroy or significantly imperil necessary wildlife habitat or any endangered species. Accordingly, the Commission concludes that the project complies with Criterion 8A.

Criterion 9(D) - Earth Resources and Criterion 9(E) - Extraction of Earth Resources:

- 85. The project tract includes large dolomite rock deposit that has been quarried for over 30 years. The quarry occupies approximately 60 acres of the 297 acres tract. (Exhibits 1, 1a) Exhibit 12a depicts the existing quarry layout. The project proposes the ongoing extraction and processing of this mineral resource for another 35 years, until April 1, 2056. (Exhibit 1a). Quarry Sections and Cross Sections for the existing quarry area and the continued quarry area are detailed on Exhibit 15a. No expansion of the quarry or its footprint is proposed. (Exhibit 1a)
- 86. No changes are proposed for the permitted extraction rate of 325,000 raw tons per year and 260,000 processed tons per year. (Exhibit 32)
- 87. Exhibit 14a is the "Site Plan" and includes the proposed new construction, which includes the reconfiguration of a portion of the internal gravel access road-the new portion will be 30' wide with a stone lined swale on each side; an expansion of the berm (height to be 563') along the north and west sides of the existing settling pond adjacent to the Clarendon River; the expansion of the stockpile area, which includes the installation of a new settling pond, identified on the plan as SP-4 (Exhibit 21 includes pond details); the extension and enlargement (6' higher) of the existing vegetative berm; and the installation of a new wash plant on the southern side of the operational crushing area with a series of new settling pond infrastructure. (Exhibit 1)
- 88. The new wash plant is a horizontal screw style unit that uses recycled water at approximately 1,000 gallons per minute to separate finer particles from the processed and screened aggregates. The noise for the unit is minimal, relative to other equipment on site, and was included in the RSG modeling. The unit will be used during normal operating hours when there is a need for washed sand materials. (Exhibit 32) The new wash plant will be served by the installation of a catch basin and settling pond infrastructure. Exhibit 14a depicts the location of the wash plant and the new settling ponds, identified as ponds SP-1, SP-2, and SP-3. Design details of the settling pond sections are included in Exhibit 21.
- 89. In addition to the new wash plant, the following equipment is utilized on site: Three crushers, grinding mill, two screeners, conveyors, excavators, rock drills, rock hammers, loaders, fuel and trailer trucks, water truck, haul trucks, and employee passenger

- vehicles. Individual customers also visit the site for materials to be taken and used on off-site jobs. (Exhibits 1, 9 and 31)
- 90. The current application proposes expansion to the permitted seasonal and hourly operations, as well as expansion of the crushing hours, and the blasting limits. (Exhibit 1a). The proposed changes would authorize seasonal operations (drilling, blasting, and crushing) to be expanded to March 1 through December 31; crushing hours to be expanded to 7:00 AM to 5:00 PM on weekdays with no daily hour or yearly limitations; and blasting to be authorized Monday through Friday, once per week, up to 25 per year. Blasting allowed twice per week, five times per year. Requested operational changes also include allowing a 15 minimum bench horizontal separation, rather than the permitted 25′ in horizontal separation, the elimination of the maximum quarry slope requirement of 1:2.5. Additionally, the Applicant proposes to eliminate the hourly loaded truck hauling limits. Finally, the Applicant proposes to extend quarry operations for another 35 years, with full reclamation of the site to be completed by April 1, 2056. (Exhibits 1 and 1a)
- 91. The Commission incorporates herein its Findings and Conclusions under Criterion 1 with respect to dust control; under Criterion 1(B) with respect to stormwater management; under Criteria 5 and 9(K) with respect to truck hauling limits; and under Criterion 8 with respect to noise.
- 92. ANR reviewed the Applicant's proposed reclamation plan prepared in accordance with the <u>Vermont Geological Survey Rock Extraction Guidelines</u>. ANR noted that the plan did not include a response to "h", which states: *The plan should discuss and show how the reclamation will be monitored and how remediation will occur if reclamation is not working*. ANR requested additional details as to how the reclamation would be monitored and remediated if reclamation is not working. (Exhibit 27)
- 93. The Applicant filed a revised reclamation plan (Exhibit 16a). The Reclamation Plan includes the removal of all loose rock and debris along the quarry walls. Fractured rock will be cut back and removed. Benches will slope toward the quarry face to encourage water infiltration. The design will consider bedrock structure and leave stable quarry walls/faces. (Exhibit 16a)
- 94. Bench reclamation will consist of benches between 15' to 25' wide, no taller than 50' high, with 12" of native soil and 3" topsoil with conservation seed mix placed on benches. Thereafter, natural succession will occur. (Exhibit 16a)
- 95. Reclamation with topsoil, seed, and mulch of all of the areas outside of the quarry itself currently engaged in crushing, screening, and washing stone. The vegetated berms would remain; as would the pond. However, the wash ponds serving the wash plant would be filled in, the job trailer and scale house would be removed, and existing

- underground infrastructure and above ground water utilities and structures would be removed unless deemed necessary for future purposes. (Exhibit 16a)
- 96. Stone blocks will be located at the reclaimed quarry's former entrance to prevent entry; stockpiled overburden will be returned to quarry benches; large 10' quarry stone blocks will be placed around the top crest perimeter of the extraction zone in an offset pattern; outside of the stone blocks at a distance of approximately 15' from the crest, a 6' tall metal chain link fence will be installed (quarry blocks and fencing will extend around the mine); roadways will be seeded and mulched. (Exhibit 16a)
- 97. At the completion of the project, riprap overflow spillway to be constructed at elevation 630′ from quarry to allow for free drainage. Wetland boundary and buffer shall be determined prior to construction to ensure they are not disturbed. The Vermont River Management Division shall be contacted, and applicable regulations shall be adhered to prior to disturbance within 50′ of the stream. (Exhibit 16a)
- 98. Potential future uses on the tract include agriculture, silvicultural, residential, renewable energy, recreational. (Exhibit 16a)
- 99. Based on a review of the revised plan, ANR concurred with the Applicant that "additional monitoring would not be necessary once the site is stabilized and site conditions are in conformance with those identified on Exhibit 16a. The Agency suggested that the Applicant submit a 5-year report following completion of reclamation activities to provide a status update to the Commission that ensures reclamation is sufficient and/or to determine if any additional measures are needed to remedy reclamation at the site. Alternatively, the Agency is willing to review a proposal from the Applicant regarding a monitoring or reporting schedule. (Exhibit 45)
- 100. The Applicant stipulated to filing a report to the Commission by a professional engineer five years following the completion of reclamation of the project site describing whether the site remains stable, or whether any additional measures are needed to ensure the stability of the site. (Exhibit 45)
- 101. The project will not prevent or significantly interfere with the subsequent extraction or processing of the mineral or earth resources.

Conclusions of Law

Under Criterion 9(D), a permit will be granted whenever it is demonstrated by the applicant that the development of lands with high potential for extraction of mineral or earth resources will not prevent of significantly interfere with the subsequent extraction or processing of the mineral or earth resources.

Under Criterion 9(E), a permit will be granted for the extraction or processing of mineral and earth resources, including fissionable source material:

- (i) When it is demonstrated by the applicant that, in addition to all other applicable criteria, the extraction or processing operation and the disposal of waste will not have an unduly harmful impact upon the environment or surrounding land uses and development; and
- (ii) Upon approval by the District Commission of a site rehabilitation plan that ensures that upon completion of the extracting or processing operation the site will be left by the applicant in a condition suited for an approved alternative use or development. A permit will not be granted for the recovery or extraction of mineral or earth resources from beneath natural water bodies or impoundments within the State, except that gravel, silt, and sediment may be removed pursuant to the rules of the Agency of Natural Resources, and natural gas and oil may be removed pursuant to the rules of the Natural Gas and Oil Resources Board.

The Commission concludes that the record demonstrates that the project will not significantly interfere with the subsequent extraction or processing of the mineral or earth resources, nor will the extraction and processing operations and the disposal of wastes have an unduly harmful impact upon the environment or surrounding land uses and development. Further, the Commission concludes that the revised reclamation plan will leave the site in condition suitable for the alternative uses proposed. The Commission will impose a permit condition requiring the filing a report to the Commission by a professional engineer five years following the completion of reclamation of the project site describing the stability of the site and whether any additional measures are needed to ensure the sies' ongoing stability.

Based on the foregoing, the, Commission concludes that the project complies with Criteria 9(D) and 9(E).

Criterion 10 - Town and Regional Plans:

- 102. The Town of Clarendon adopted its Town Plan on June 13, 2016. (Exhibit 43). In a section entitled "Clarendon Yesterday" at Page 8, the plan acknowledges that at least two quarries have been operated in the town. The larger of the two, known as the Clarendon quarry, was run by a West Rutland marble company. It was operated in the 1800's, closed, and reopened in 1909.
- 103. Under "Mineral Resources at Page 23, the Plan states: The extraction and processing of mineral resources is also a significant economic activity in Vermont and Rutland County. In Clarendon, economically valuable mineral resources include marble, sand, and gravel. Marble is used for many construction-related purposes. It is also used in manufacturing processes, such as in the manufacture of certain types of paper. Economically valuable mineral deposits are located in the Town. Marble resources are focused in the western portion of the town, while sand and gravel resources are scattered. There is currently one stone crushing quarry in the community as well as sand and gravel pits.

Planning issues associated with mineral resources seem to be dominated by the impacts that result when people extract them. These impacts, which can be either direct or indirect, include

- conflicts between landowners living near extraction sites and the operators of those sites, and uncertainty about the impact of extraction on the quality and quantity of local groundwater supplies.
- 104. Under "Goals and Objectives to Guide Future Growth", the Plan states at Page 79: Nurture economic activity that provides satisfying and rewarding job opportunities while maintaining high environmental standards.
 - Provide and maintain a transportation system that is safe and efficient, offers multi-use opportunities for pedestrians and bicycles and meets the needs of all segments of Clarendon's population.
- 105. Under "Policies for the Preservation of Natural and Cultural Resources, the Plan states at Page 80, The Town will work to observe the following policies: Work in cooperation with owners of mineral resources to develop policies for resource use and extraction that would help ensure that such activities do not adversely affect the quality of life enjoyed by residents of the surrounding area. Require that extraction areas are suitably graded and reclaimed with proper vegetation when operations cease.
- 106. The Town plan instructs the town's Planning Commission *to make economic development a top priority*. (Page 68) In the Plan's section entitled "Vision for the future," the first listed characteristic of Clarendon Tomorrow is *a place with a vigorous economy*. (Page 78)
- 107. To effectuate the goals of the Town Plan, it encourages the Planning Commission and the Select Board to participate in Act 250 hearings as statutory parties. (Page 86-7). This provides the town *a significant opportunity to shape large scale development projects*. (Page 86) The Planning Commission is a statutory party to this permit application. The designated Planning Commission representative submitted a pleading stating that the application did not conform to the Town Plan and that therefore the permit should be denied. (Exhibit 41) Subsequently the chair of the Planning Commission filed a pleading saying that a majority of the commission endorsed the application as submitted. (Exhibit 49)
- 108. The project tract is located in the Town of Clarendon's "Residential and Commercial District". (Exhibit 1)
- 109. The purposes of the Residential and Commercial District are described at Page 88: to maintain residential areas and allow business enterprises. The district will have adequate parking; suitable landscaping, screening, lighting, and signage; and be designed to minimize traffic impacts in order to protect the character of the neighborhood.
 - An additional purpose of this district is to allow for residential and business uses at densities appropriate with the physical capability of the land and the availability of community facilities and services. Other uses incompatible with residential, commercial, and light industrial uses, such as industrial, will not be allowed for the health, safety, and welfare of the community. Light

- industrial use as defined in the Clarendon Zoning Regulations will be allowed with a conditional use permit.
- 110. The Town of Clarendon adopted Zoning Regulations on February 14, 2011 (Exhibit 44) The project tract is located within the "Residential and Commercial District", which states at under Section 202 B at Page 4: Compatible uses include all uses that are permitted in the Agricultural and Rural Residential District excluding manufacturing.
- 111. The Agricultural and Rural Residential District allows commercial uses characterized as "light industry", which is defined at Page 21 as: the manufacture of finished products or parts, including processing, fabrication, assembly, treatment, packaging, incidental storage, sales, and distribution of such products but excluding basic industrial processing. Includes those uses which are generally not objectionable because of noise, frequent and/or heavy truck traffic or fumes. Light industry uses are those which consist of the production, processing, cleaning, testing, or distribution of material and goods.
- 112. Section 305: Table of Uses at Page 7 does not include *quarry* with *sand and gravel pits* as a permissible conditional use in the Residential and Commercial District.
- 113. Unlike other town zoning bylaws, the Clarendon zoning regulations do not contain any quarry specific regulations. The regulations do contain provisions for handling of properties which preexisting zoning regulations, and which now are considered inconsistent or non-conforming with uses permitted in the zoning district in which they are now located.
- 114. Twice previously, in 1983 and 1986, the Clarendon Planning Commission has issued conditional use permits for operation of the quarry. (Exhibits 38 and 39). As of May 1, 1984, when Act 250 permit 1R0489 was issued, the Town of Clarendon had no town plan. (Exhibit 40)
- 115. The Regional Plan that applies is the <u>Rutland Regional Plan</u> adopted on June 19, 2018.
- 116. The project is located in the "Low Density Development Area" of the Future Land Use Map. The Regional Plan notes that quarries are a key feature in the region and discusses impacts ap Pages 13. 17, and 199. The Regional Plan states at Page 201: Quarrying has a wide range of impacts on surrounding communities: Blasting, dust, air pollution, noise, trucking, intruding into groundwater, dewatering/ storm-water discharge, chemicals, and fuels used on-site. also impacts the community by helping it become more self- sufficient by being able to repair after floods and providing employment and income for the area.
- 117. The Regional Plan further states at page 201: Many communities in our Region report an amicable relationship with their local quarries, but there are also a significant number of complaints that should be looked into. Community needs include limits on noise, hours of

- operation, times of blasting, blasting loads-both the size of each explosion, and the total number of pounds of explosives used each day-and requirements for reclamation.
- 118. Among the stated Goals in the Regional Plan are: Assist towns with the identification of groundwater protection areas and ensure municipal plans and local use bylaws protect them with compatible setbacks, and land uses laws. Assist towns with the identification of transportation routes for transporting materials; Educate towns on best management practices to minimize pollution in areas of mineral extraction; Assist with the development of plans and standards for reclamation of mineral resource sites to minimize impacts on residents, wildlife, and existing and proposed land uses.

Conclusions of Law

Under Criterion 10, before issuing a permit, the District Commission must find that the project is in conformance with any duly adopted local or regional plan or capital program. 10 V.S.A § 6086(a)(10).

The Commission has reviewed the Town Plan and has determined that the Town Plan is sufficiently specific. *Re: The Mirkwood Group #1R0780-EB, Findings of Fact, Conclusions of Law, and Order at 19 (Vt. Envtl. Bd. August 19, 1996).* Because the Town Plan is clear and unambiguous it is unnecessary to review the zoning bylaws. See *In re Frank A. Molgano Jr. 163 Vt. 25 (1994).*

Here we find that the town plan is sufficiently clear that (1) development of mineral resources such as dolomite is an important asset of the town of Clarendon and (2) economic development is a high priority for the town and (3) Work in cooperation with owners of mineral resources to develop policies for resource use and extraction that would help ensure that such activities do not adversely affect the quality of life enjoyed by residents of the surrounding area. These three findings are sufficient for finding that the project is in conformity with the Town plan. See In re Chaves, 195 VT 467 (None of the language in the town and regional plans created a specific policy prohibiting a quarry project such as the applicants.' The fact that the Planning Commission supports the project is also helpful in reaching this conclusion.

As an Act 250 District Commission, we need not and should not inquire into as part of our Criteria 10 consideration the intricacies of how or whether the project complies with the local zoning ordinance, the uses permitted in specific districts, and whether a project is grandfathered because that use predated the adoption of zoning or the creation of specific districts. To do so would take us out of our area of expertise and inject us inappropriately in local zoning decisions. As the applicant itself states, it will address local zoning issues with the Town "at such time as the Commission issues an Act 250 permit as there may be conditions and parameters in the Act 250 permit which will affect the content of any local zoning application."

Accordingly, the Commission concludes that the project complies with Criterion 10.

V. SUMMARY CONCLUSION OF LAW

Based upon the foregoing Findings of Fact, the Commission concludes that the project, if completed and maintained as represented in the application and other representations of the Applicant, and in accordance with the findings and conclusions of this decision and the conditions of Land Use Permit 1R0489-8, will comply with the Act 250 criteria. 10 V.S.A § 6086(a).

VI. ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law, Land Use Permit 1R0489-8 is hereby issued.

Dated this 19th day of November 2021.

By <u>/s/ Matthew Krauss</u>
Matthew Krauss, Chair
District 5 Environmental Commission

Commissioners participating in this decision:
Norma Malone
John H. Fitzhugh

Any party may file a motion to alter with the District Commission within 15 days from the date of this decision, pursuant to Act 250 Rule 31(A).

Any appeal of this decision must be filed with the Superior Court, Environmental Division within 30 days of the date the decision was issued, pursuant to 10 V.S.A. Chapter 220. The Notice of Appeal must comply with the Vermont Rules for Environmental Court Proceedings. The appellant must file with the Notice of Appeal the relevant entry fee required by 32 V.S.A. § 1431.

The appellant must also serve a copy of the Notice of Appeal on the Natural Resources Board, 10 Baldwin Street, Montpelier, VT 05633-3201, and on other parties in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings.

Decisions on minor applications may be appealed only if a hearing was held by the district commission. Please note that there are certain limitations on the right to appeal, including appeals from Administrative Amendments and interlocutory appeals. See 10 V.S.A. § 8504(k), 3 V.S.A. § 815, and Vermont Rule of Appellate Procedure 5.

For additional information on filing appeals, see the Court's website at: http://www.vermontjudiciary.org/GTC/environmental/default.aspx or call (802) 951-1740. The Court's mailing address is: Vermont Superior Court, Environmental Division, 32 Cherry Street, 2nd Floor, Suite 303, Burlington, VT 05401.