



Re: Charles and Barbara Bickford  
Land Use Permit..#5W1186-EB  
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## I. SUMMARY OF DECISION

This decision pertains to an appeal of Land Use Permit #5W1186 and supporting Findings of Fact, Conclusions of Law, and Order (**the** Permit) issued to Charles and Barbara Bickford (the Permittees) by the District #5 Environmental Commission (the District Commission). The Permit authorizes the operation of a stone quarry on a 192 acre tract of land with an annual maximum extraction rate of 50,000 cubic yards (the Project). **The Project** is located off of U.S. Route 2 in Marshfield, Vermont.

An Act 250 permit is required for the Project pursuant to 10 V.S.A. §§ 6001(3) and 6081(b), and EBR 2(A)(2) and (5).

As is explained below, the Environmental Board concludes that the Project, as conditioned by this decision, complies with those portions of the following criteria which are on appeal: 10 V.S.A. § 6086(a)(1) (air and noise), (1)(G) (wetlands), (4) (soil erosion), (5) (traffic), (8) (aesthetics), (9)(E) (earth resources), and (10) (regional plan). Accordingly, the Board issues an amended permit (the Amended Permit)

## II. SUMMARY OF PROCEEDINGS

On November 12, 1993, the District Commission issued the Permit.

On December 3, 1993, the Permittees filed a Motion to Alter pursuant to EBR 31(A).

On December 13, 1993, the District Commission denied the **Permittees'** Motion to Alter.

On December 23, 1993, the Permittees appealed to the Board from **the Permit**. The Permittees also requested that the Board issue a stay of Permit Conditions 7, 27, 28 (second sentence), **32, 34,** and 36 (first sentence) pursuant to EBR 42.

On January 10, 1994, Margaret K. Arthur cross-appealed from the Permit.

On January 12, 1994, Curtis and Ruth **Whiteway** cross-appealed from the Permit. Mr. and Mrs. **Whiteway** also objected to the **Permittees'** request for a stay.

On February 15, 1994, Acting Board Chair Steve E. Wright convened a prehearing conference in Marshfield, Vermont.

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On February 18, 1994, Acting Chair Wright issued a Prehearing Conference Report and Order (the Prehearing Order). The Prehearing Order established deadlines for the submission of memoranda relative to the stay request and other preliminary issues.

On March 11, 1994, Mr. and Mrs. **Whiteway** filed a motion pursuant to 10 V.S.A. § 6086(b) and requested that the Board first decide whether the Project satisfies the requirements of Criterion 10.

On March 15, 1994, the Board issued a Memorandum of Decision relative to the **Permittees'** request for a stay (the Stay Decision).

On March 29, 1994, the Board issued a Supplemental Order relative to the **Permittees'** request for a stay (the Supplemental Order).

On March 30, 1994, Ms. Arthur filed a Motion to Reconsider relative to the Stay Decision.

On March 30, 1994, Mr. and Mrs. **Whiteway** filed a Motion to Alter with respect to the Board's Supplemental Order.

On May 31, 1994, the Board issued a Memorandum of Decision relative to Ms. Arthur's Motion to Reconsider, Mr. and Mrs. **Whiteway's** Motion to Alter, various party status issues identified in the Prehearing Order, and Mr. and Mrs. **Whiteway's** motion pursuant to 10 V.S.A. § 6086(b) (the May 31 Memorandum of Decision).

On June 14, 1994, Mr. and Mrs. **Whiteway** filed a request for permission to take an interlocutory appeal to the Vermont Supreme Court from the May 31 Memorandum of Decision and the Supplemental Order.

On June 15, 1994, the **Permittees** filed a second request for a stay, this time relative to Permit Condition 35(B)-(D).

On July 1, 1994, Acting Chair Wright issued a memorandum to the parties relative to Mr. and Mrs. **Whiteway's** request for permission to take an interlocutory appeal, and the **Permittees'** request for a stay of Permit Condition 35(B)-(D) (the Chair's Memorandum). The Chair's Memorandum informed the parties that the Board had denied the request for interlocutory appeal, and had granted the stay only with regard to allowing the Project to commence operations at 7:00 a.m. instead of 8:00 a.m.

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The parties filed prefiled testimony and evidentiary objections through August 12, 1994, and on August 17 and September 28, 1994, the Board convened a hearing in this matter with the following parties participating:

Charles and Barbara Bickford by Richard Saudek, Esq.  
Curtis and Ruth **Whiteway** by Sheldon Keitel, Esq.  
Agency of Natural Resources by Sandy Lee and  
George Springston  
Margaret Arthur, Pro Se  
Michael Sioufi, Pro Se

At the conclusion of the hearing, the Board requested proposed findings of fact and conclusions of law from the parties.

On October 26 and 28, 1994, the Permittees, Mr. and Mrs. Whiteway, and Ms. Arthur filed proposed findings of fact and conclusions of law, respectively.

On March 8, 1995, Mr. and Mrs. **Whiteway** filed an additional memorandum of law relative to Criterion 10.

The **Board deliberated** on December 6, 1994, and April 26 and May 2, 1995. On May 2, 1995, the Board declared the record complete and adjourned the hearing. This matter is now ready for decision. To the extent any proposed findings of fact and conclusions of law are included below, they are granted; **otherwise**, they are denied. See Petition of Villaae of Hardwick Electric Department, 143 Vt. 437, 445 (1983).

### III. ISSUES IN THIS APPEAL

The Permittees appeal from Permit Conditions 5, 7, 17, 20, 23, 27-29, 31-32, 34-37, 41, 43-45, and 47 (the Appealed Conditions). The Appealed Conditions were made part of the Permit pursuant to 10 V.S.A. § 6086(a)(1)(air pollution), (1)(G) (wetlands), (4)(soil erosion), (5)(traffic), (8)(aesthetics, scenic or natural beauty), and (9)(E) (extraction of earth resources). The only additional criterion on appeal due to the two cross-appeals is Criterion 10 (Regional Plan).

Mr. and Mrs. **Whiteway** withdrew issue IV of their Statement of Issues and Reasons For Cross-Appeal pursuant to the **Permittees'** consent that Permit Condition 9 be modified to require "portable toilets" for use of quarry employees and quarry visitors. The Permit Amendment issued in conjunction with this decision shall so provide.

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Therefore, the issues are:

1. Whether, pursuant to 10 V.S.A. § 6086(a)(1), the Project will result in undue water or air pollution.
2. Whether, pursuant to 10 V.S.A. § 6086(a)(1)(G), the Project will violate the rules of the water resources board, as adopted under section 905(9) of title 10, relating to significant wetlands.
3. Whether, pursuant to 10 V.S.A. § 6086(4), the Project will cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. The parties have agreed that the scope of this issue shall be limited to the Permittees' objection to Permit Condition 23.
4. Whether, pursuant to 10 V.S.A. § 6086(5), the Project will cause unreasonable congestion or unsafe conditions with respect to the use of highways.
5. Whether, pursuant to 10 V.S.A. § 6086(8), the Project will have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas.
6. Whether, pursuant to 10 V.S.A. § 6086(9)(E), the Project will have an unduly harmful impact upon the environment or surrounding land uses and development, and whether there is a site rehabilitation plan which insures that upon completion of the Project the site will be left by the Permittees in a condition suited for an approved alternative use or development.
7. Whether, pursuant to 10 V.S.A. § 6086(10), the Project is in conformance with the Central Vermont Regional Plan.

#### IV. FINDINGS OF FACT

1. The Project is a quarry operation with an annual extraction rate of 50,000 cubic yards, and is located on a 192 acre tract of land in Marshfield, Vermont. The Project currently is and will be conducted on 26 of the 192 acres (the Project Site).
2. Access to the Project Site is by a road which connects with U.S. Route 2 (the Access Road). The Access Road and the Project Site are on the north side of U.S. Route 2.

3. The Permittees own the Project but do not operate the Project. **The** Permittees have stated that they intend to **subdivide** the 192 acre tract and convey a 155 acre parcel to their son for use as a farm.
4. The **Project** is currently operated by J.A. McDonald, Inc (McDonald). McDonald is engaged primarily in road and highway construction projects and operations incident to those projects, including extraction and processing of stone **and gravel**, trucking, and operation of heavy equipment, and is the largest such company in Vermont.
5. The Permittees and McDonald do not have a written contract **for** the operation of the Project; rather, only an oral agreement that McDonald may operate the Project. The agreement may be terminated at any time by either party.
6. McDonald and the Permittees planned how the Project will **progress, including** reclamation, screening, noise control, **safety** measures, and Act 250 compliance.
7. The **Project's "quarry face"** is on the west side of a knoll, is visible to drivers proceeding easterly on U.S. Route 2, and is a light color. The quarry face is in contrast to the green forested hills that surround it.
8. A berm has been constructed and planted with trees at the base of the quarry face. The quarry face is clearly visible as the trees in the berm, at this point, are so small as to provide no relief or mitigation to the view.
9. Around the top portion of the quarry face there is a grassy area. A stand of trees is directly above the grassy area. The grassy area frames the quarry face.
10. The Project is part of an overall landscape that includes rolling hills and forested mountains, woods, the Winooski River, open farmland, houses, the Unique Cabins, the Marsh-Plain Motel, and Twinfield Union School.
11. The Permittees have operated the Project for approximately 30 years. The Project yields a high quality stone product that is suitable for road and highway projects, and has supplied such projects in the past. The amount of material extracted has varied widely over the years. The extraction rate was between 20,000 to 25,000 **cubic** yards in years prior to the late **1980's**.

The extraction rate increased to approximately 50,000 cubic yards per year in the late 1980's through 1992.

- 1 2 . The Permittees applied for an Act 250 permit for the Project on July 13, 1990. The District Commission issued Land Use Permit #5W1093 to the Permittees. However, the Board voided the permit in Re: Charles and Barbara Bickford, #5W1093-EB (Revocation), Memorandum of Decision (April 12, 1993), because the permit application did not list Mr. and Mrs. **Whiteway** as adjoining landowners.
13. Mr. and Mrs. **Whiteway** reside 500 feet to the west of the Access Road, on the south side of U.S. Route 2, where they own and operate a small tourist cabin complex known as the Unique Cabins (the Unique Cabins).
14. Ms. Arthur and her husband, Alan W. Cheever, live approximately one mile to the west of the Project on the north side of U.S. Route 2. Their house is on a rise approximately 200 feet above U.S. Route 2. The view from the house's south (and longest) side is of rolling hills and forested mountains, and the Winooski River; to the east, the quarry face unobstructed by hills, trees, knolls or other buildings or structures; and to the west, the Twinfield Union School in the valley set against a backdrop of rolling hills and mountains.
15. The Project is divided into three stages based upon the estimate that there exists sufficient stone to conduct operations for 50 years. The stages are only projections as the Project's pace depends upon market demand for quarried products. The Permit, as issued by the District Commission, **is** due to expire in the year 2020.
16. Stage 1 of the Project is expected to last eight years or more. After the existing excavation area has been widened, the plan is to proceed up behind a wooded area and excavate the top of the knoll. This procedure will have the effect of screening operations from viewpoints around the Project Site.
17. Stage 2 consists of excavating the part of the Project Site behind the stand of trees described in Stage 1 until both floors of the Project Site are approximately 925 feet above sea level. By that time, McDonald believes that the trees on the berm at the front of the quarry face will have grown to the point where they will provide substantial screening such that the retained trees from Stage 1 may be removed as part of Stage 2.

18. Stage 3 **involves** lowering the entire quarry floor to the level of **floor** that is now to the west of the berm, i.e. 885 feet above sea level, as depicted in Bickford Exhibit 2-E.
19. Bickford **Exhibit 2-G** shows how the Project Site will look after **all reclamation** is completed in the year 2043. As depicted **on** Exhibit Bickford 2-G, the shaded areas are quarry **walls** that descend well below the tree line; and the **floor** of the quarries would be topsoiled and seeded. McDonald expects that trees and brush would grow up in this location. The Project, if carried out for 50 years, will **ultimately** result in the removal of a **sizeable** hill.
20. The **plans** for the berm, plantings, seedlings, erosion control, and excavating were prepared, in part, by Terrence Boyle, a landscape architect and planning consultant. Mr. Boyle produced these plans based on the assumption that the Project would be in operation for 50 years. **The** Permittees and McDonald have adopted the plans prepared by Mr. Boyle.
21. Mr. Boyle did not appear as a witness for the Permittees. There is **no** evidence as to whether Mr. Boyle will be monitoring the Project to ensure compliance with the plans he prepared.
22. The **Permittees** have paved the initial 40 feet of the Access Road and have lined the 100 feet of Access Road **immediately** preceding the paved length with coarse stone.
23. There is **a** wetland adjacent to the Access Road. The wetland is a wet meadow dominated by sedges, bulrush, common **cattail**, and water horsetail and is underlain by hydric **mineral** soil. A small PVC culvert pipe carries runoff **from** the Project Site across the Access Road and into the **wetland**.
24. The wetland extends off the 192 acre tract both to the north **and to** the southwest. The flow of water in the wetland is in a southerly direction toward U.S. Route 2.
25. The **wetland** is a Class Two wetland and is protected under the **Vermont** Wetland Rules (VWR) by a fifty foot buffer. Showing **the** wetland and buffer zone on a site plan which depicts **the** Project will provide a permanent record of the wetland location and will lessen the likelihood of quarry operations encroaching upon the wetland or buffer zone.

26. The Permittees constructed a small farm pond within the wetland to the southwest of the Project Site.
27. A covered spring-box is located within the wetland to the north of the farm pond. This spring serves as the water source for Mr. and Mrs. **Whiteway's** personal residence and the Unique Cabins. Mr. and Mrs. **Whiteway** have deeded rights to the spring. The spring is located within **one-hundred** feet of the Project Site. The Project has not and will not have any adverse effect on the spring.
28. There is a Class Two wetland located on the south side of U.S. Route 2. This wetland is connected to the wetland which is adjacent to the Access Road. The two wetlands are contiguous via a culvert under U.S. Route 2. The contiguous wetlands are Class Two wetlands.
29. The Access Road was in existence in substantially its present state since before February 23, 1990, the effective date of the VWR.
30. Permit Condition 6 provides:

This permit incorporates all terms and conditions of Air Pollution Control Division Permit #AP-93-25 as issued on August 30, 1993.
31. To describe the effects of environmental noise the generally accepted descriptor is the 24 hour Equivalent Sound Level, Leq in **dB**. Leq is found by a logarithmic averaging process using the levels and durations of different sound levels.
32. The EPA has determined that for purposes of hearing conservation alone, a level which is protective of that segment of the population at or below the 96th percentile will protect virtually the entire population. This level has been calculated to be an Leq of 70 **dB**. This hearing loss level represents annual averages of the daily level over a period of forty years.
33. Interference with activity and annoyance will occur if outdoor noise levels exceed 55 **dB**. The Project's operation has caused-such interference and **annoyance**.
34. If the difference between the sound levels produced by two sources is greater than 5 **dB**, the lower source contributes nothing to the sound level. The human ear perceives an increase or decrease of 10 **dB** in the sound

**level** as rendering it twice or half as loud, **respectively**. A change in the sound level, to be at all perceptible to the human ear, must be a minimum of 2-3 **dB**.

35. The **sound** level reduces as one moves away from a sound source. In open country (meadows, lawns, brush) this **reduction** is approximately 6 **dB** for each doubling of the **distance**.
36. With regard to vehicles, the sound level perceived by a stationary observer rises as the vehicle approaches, reaches a peak, and then falls as the vehicle recedes.
37. Sound travels by line-of-sight. Sound is dissipated where there are obstructions blocking the view of the sound source.
38. Barriers **such** as berms, hills, or trees lead to reduction in sound levels due to their obstruction of the **line-of-sight** between the sound source and listener. The level of reduction achieved by trees depends on the thickness of growth, their height, and the depth of tree planting.
39. The **Permittees'** sound expert is Dr. M.S. Hundal. Dr. Hundal is a professor and chairman of the Department of Mechanical Engineering at the University of Vermont, and a registered professional engineer in Vermont. Dr. **Hundal's specific** fields of expertise include measurement, analysis and control of vibration and acoustics and industrial and environmental noise.
40. In 1993, **the** Permittees asked Dr. Hundal to estimate the noise **levels** of traffic to and from the Project, and the sounds **that** were generated by the Project's operation. Dr. Hundal also compared these noises with the noise **generated from** traffic along U.S. Route 2.
41. The results of Dr. **Hundal's** investigation are contained in his report of July 13, 1993 (the 1993 Report).
42. The 1993 **Report** is not based on actual operations at the Project **because** the Project was not operating at that time. Rather, the 1993 Report is based on sound readings taken at other sites which McDonald represented to Dr. Hundal **as being** comparable to the Project. Dr. Hundal assumed that the Project's operation would involve a jaw crusher, ~~cone~~ crusher, screens, and loaders.

43. In the 1993 Report, Dr. Hundal concluded the following:

CONDITION	Leq, dBA
Traffic without any trucks from the Project	74.3
Traffic with average Project traffic - 72 truck passbys per day	74.4
Traffic with peak Project traffic 350 truck passbys per day	75.0

Based on these calculations, Dr. Hundal concluded that there is no significant incremental sound impact from the truck traffic associated with the Project, and that the sound levels from the crushers and associated equipment are below the levels caused by traffic.

44. The Leq levels estimated in the 1993 Project are for the area within the vicinity of the Project along U.S. Route 2. There is no evidence that persons will be exposed to these Leq levels in the Project's vicinity along U.S. Route 2 on a daily basis over a period of forty years since exposure varies as a person goes through the routine of time spent inside, outside, and away from home.
45. McDonald's crusher system is "state-of-the-art" equipment.
46. Dr. Hundal's conclusions in the 1993 Report are based, in part, on the assumption that all truck traffic from the Project will be medium size trucks. There are no prohibitions or limitations on the use of heavy trucks at the Project.
47. Dr. Hundal took sound readings on June 28, 1994, at the locations listed below using a Type 1, Gen-Rad Model 1933 Sound Level Meter. The results of the June 28, 1994, noise measurements are as follows:

LOCATION	DBA	CONDITION
(I) AT QUARRY		
Quarry - 150/200 ft from crusher	80 dBA	Crusher on
West side of berm	67 dBA	Crusher on

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LOCATION	DBA	CONDITION
(II) AT QUARRY ENTRANCE Quarry entrance	40-50dBA	No traffic; Crusher on
--- " ---	40-50dBA	No traffic; Crusher off
--- " ---	70-75dBA	Cars and light trucks; Crusher on
--- " ---	70 - 75 dBA	Cars and light trucks; Crusher off
(III) AT UNIQUE CABINS Unique Cabins driveway	42-50 dBA	No traffic; Crusher on
--- " ---	42-50 dBA	No traffic; Crusher off
--- " ---	70-75 dBA	Cars and light truck; Crusher on
--- " ---	70-75 dBA	Cars and light trucks; Crusher off
--- " ---	85 dBA	Heavy truck

LOCATION	DBA	CONDITION
(IV) EATON CEMETERY ROAD/ ARTHUR DRIVEWAY		
Eaton Cemetery Road & Arthur Driveway Intersection	40-50 dBA	No traffic; Crusher on
--- " ---	40-50 dBA	No traffic; Crusher off
--- 11 ---	60-65 dBA	Cars and light trucks; Crusher on
--- " ---	60-65 dBA	Cars and light trucks; Crusher off

48. Based on these instantaneous sound measurements, Dr. Hundal concluded: (a) at Ms. Arthur's house and at the Unique Cabins, the crusher sound is barely audible or nearly inaudible; (b) the difference in sound levels, whether the crusher system is operating or not, even with no traffic on U.S. Route 2, is insignificant and does not register on the Type 1 (high precision) Sound Level Meter; (c) the dominant noise source in the area is the vehicular traffic on U.S. Route 2; and (d) the crusher noise at the neighboring properties is significantly less than that predicted in the 1993 Report.
49. The berm has reduced the Project's sound level at Ms. Arthur's and Mr. **Cheever's** house. Reduction of noise levels at the Unique Cabins has also occurred; but this is primarily from trees and not the berm.
50. Dr. Hundal considers a three axle, 14 yard truck to be a heavy truck. Measured at a distance of 50 feet from the center line of the traveled lane, heavy trucks produce between 85 and 95 dBA.
51. A person would suffer hearing impairment if the person stood 50 feet from the center line of the traveled lane and experienced 350 heavy truck passbys.

52. If all truck passbys from the Project were heavy trucks, in the vicinity of the Project, there would be a few tenths of a decibel increase over the 1993 Report conclusion of Leq 75.0 dBA, U.S. Route 2 traffic and peak quarry traffic, all heavy trucks.
53. There was **no** drill operating when Dr. Hundal made his sound **measurements** on June 28, 1994. Dr. **Hundal's** measurements do not take into account all possible sources of noise which the Project may generate.
54. Dr. Hundal made "**no traffic**" sound readings, that is, sound readings with no traffic in the vicinity of the sound measurement location. When a heavy truck from the Project passes by the Unique Cabins while there is no traffic, the **dba** level will rise from a low of 42-50 to a peak of 85-95. The increase is between six and ten times as loud as the no traffic condition and is a high increase.
55. The Project Site is in the rough shape of an amphitheater. The face of the quarry bounces sound off and causes an echo effect. This reduces the berm's overall effectiveness.
56. Although the sound generated by the Project--exclusive of passing Project truck traffic--does not cause an increase in the Leq level, the Project can still be heard as a distinct **noise**.
57. Permit Condition 23 of the Permit provides:  
  
Beginning in Spring 1994 and continuing for **each year** of operation, the permittees shall **file written** pre-operation reports with the District Commission signifying that all erosion controls are in place. These reports shall be prepared and filed by a licensed engineer. Similar reports shall be filed by October 15th of each year summarizing the status of site stabilization and reclamation measures.
58. Permit Condition 27 provides:  
  
**Warning** beacons with appropriate warning signs shall be installed on both approaches on US Route 2 prior to any hauling in 1994. The specifications and details for the beacons shall be

determined by the permittees and [the Agency of Transportation] and will be subject to Commission approval. The beacons shall be used at all times when material is hauled from the quarry. No material may be hauled from the quarry beginning in 1994 until the beacons are installed and operable.

59. The Board stayed Permit Condition 27 pending hearing and final resolution of this appeal in the Supplemental Order and the May 31 Memorandum of Decision.
60. U.S. Route 2 runs in a general east/west direction, is part of the national highway system, and is a major interstate artery for cars and trucks.
61. The average traffic volume of approximately 36 trucks per day from the Project will not add appreciably to the truck traffic on U.S. Route 2 nor result in a significant diminution of safety on U.S. Route 2.
62. Average speed on U.S. Route 2 tends to be in the range of 49-50 mph, which is typical for this type of rural highway, The Vermont Agency of Transportation (AOT) does not consider this a high speed area.
63. U.S. Route 2 has a standard 22 foot width with shoulders that are 2 to 3 feet wide. Horizontal and vertical alignments do not require any special signs.
64. Sight distances are adequate from the cab of a truck departing the Access Road and turning onto U.S. Route 2. The area surrounding the Access Road does not have significant pedestrian or animal activity (with the exception of the Bickford farm's nearby cattle crossing, which has appropriate signs).
65. No accidents have occurred in the vicinity of the Access Road during the Project's operation over the last 30 years, including a period of intense operations from 1988 to 1992.
66. AOT studied whether flashing beacons were needed near the Access Road. AOT concluded that the evidence clearly shows that flashing beacons are not warranted.
67. AOT recommends that square, 36-inch-by-36-inch, **black-on-orange** portable signs attached to tripods be located 600

to 800 feet in advance of the Access Road in each **direction** and that these signs be used only when the Project is active. These portable signs will be more **effective** in alerting motorists to entering trucks instead of permanent beacons or signs.

68. Permit **Condition** 29 provides:

Exclusive of the 1994 growing season, the **permittees** shall ensure that all landscaping **trees** are maintained so as to attain an annual average growth rate of at least 18 inches. The quarry may not operate if the average height is not **achieved**. Beginning in November 1995, the **permittees** shall have a professional forester certify that this annual growth rate is being attained. All dead and diseased berm trees **shall** be replaced as soon as seasonably **possible** and the replacements must be of a **height** sufficient to maintain the cumulative 18 **inch** per year growth rate.

69. Before the District Commission, the Permittees represented that the trees being planted would grow an average of 24 inches per year.

70. There is an opening at one end of the berm. The plans call for extending the berm to close the opening. Trees will be planted on the extended berm. McDonald uses this gap area for stockpiling quarried material away from the staging area below the quarry face.

71. Permit Condition 31 provides:

**When** the opening is plugged prior to the beginning of operations in 1996, an additional 4 trees shall be planted which must be nursery stock, fully branched, and at least 10 feet **tall**.

72. Permit Condition 32 provides:

In order to alleviate the **"matchstick"** visual **effect** of the existing trees atop the quarry face, the permittees shall plant fast growing shrubs and softwoods across the length of the face **at** the edge of the treeline. The plantings must be completed prior to any blasting or crushing operations at the quarry.

73. Permit Condition 35 provides:

The quarry shall be operated only under the following restrictions:

- A) From April 1 through the Friday before Memorial Day (State or Federal, whichever comes first), the quarry may operate from 7:00 am to 5:00 pm. Operations may include blasting, drilling, crushing and hauling.
- B) From Memorial Day through Labor Day, the quarry may operate from 8:00 am to 5:00 pm. No blasting or drilling may take place during this period. Crushing may take place during June.
- C) From the Tuesday after Labor Day through September 15th, the quarry may operate from 7:00 am to 5:00 pm. Operations may include blasting, drilling, crushing and hauling.
- D) From September 15th until Columbus Day, the quarry may operate from 8:00 am to 5:00 pm. No blasting, drilling or crushing may take place during this period.
- E) From the Tuesday after Columbus Day until December 1, the quarry may operate from 7:00 am to 5:00 pm or sunset, whichever comes first. Operations may include blasting, drilling, crushing and hauling.
- F) The quarry may not operate on Saturdays or Sundays or the following holidays: Memorial Day (State & Federal), July 4th, Labor Day, Columbus Day (Federal), Thanksgiving and the Friday after Thanksgiving. The quarry may not operate between December 1 and March 30.

74. Permit Condition 36 provides:

**During** the use of lift 1, a flagperson shall be **used to** direct loaders and trucks and all backup alarms in the loading area shall be **deactivated**. At all other times, loaders and **equipment** operated elsewhere in the quarry must be fitted with discriminating radar activated **alarms** set to the lowest allowable decibel **level**.

75. Permit Condition 37 provides:

The **Commission** retains jurisdiction over **impacts** from back-up alarms once the full use of **lift 2** has commenced for loading and stockpiling. The use of a flagperson may be imposed should the berm and stockpiles prove insufficient as noise dampeners.

76. The Town of Marshfield adopted zoning regulations on March 20, 1985. The zoning regulations provide, in part:

Section 120 - Purpose

\* \* \*

Further, the Town of Marshfield specifically finds that the economic and social welfare of its present and future citizens depends in large part upon the conservation of its primarily undeveloped rural and forest character and appearance. ... Accordingly and in specific amplification of the purposes set forth above, it is the purpose of these Regulations to provide for and encourage the orderly and planned land development in areas where adequate provision is or can be made for the **furnishing** and maintenance of governmental **services** for the adequate protection of the health, safety and welfare of all of the **Town's citizens**, present and future, and where **residential**, commercial or industrial **development** will not have a material or a substantial adverse impact on the undeveloped rural and forest character and appearance of the Town.

\* \* \*

Re: Charles and Barbara Bickford  
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Findings of Fact,

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- Extraction of Soil, Sand and  
Gravel

In accordance with §4407(8) of the Act, the removal of soil, sand and gravel for sale shall be permitted only upon approval of a plan for the rehabilitation of the site by the Planning Commission.

The Unique Cabins were built in 1938 and are listed in the Vermont State Register of Historic Places. The Unique Cabins are modelled on the huts seen in Walt Disney's "Snow White and the Seven Dwarfs," and are the most architecturally outstanding example of their type in Vermont.

Due to the decline in popularity of tourist cabins in favor of motels and other accommodations, this type of property is now becoming comparatively rare in Vermont. The Project will have no direct physical impact on the historic value of the Unique Cabins.

Permit Condition 41 provides:

Each contractor-operator of this quarry shall be joined as a co-permittee under Environmental Board Rule 10(A). Upon receipt of relevant information, the Commission will recognize such co-permittees by means of an administrative amendment pursuant to Board Rule 34(D).

Permit Condition 43 provides:

Prior to the commencement of Stages 2 and 3, timely and adequate amendment applications shall be filed for the review of the Commission under all applicable criteria which will encompass, at a minimum, criteria 1 (Air), 4, 8, 8(A) & 9(E). However, criterion 10 shall be specifically excluded from subsequent amendment application reviews.

Permit Condition 44 provides:

Consistent with our conclusions under criterion 9(E) and prior to any new excavation or processing at this quarry, the permittees shall execute a bond in favor of the District Commission in the amount of \$100,000 to ensure

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proper completion of the project and  
reclamation of the site.

82. Permit Condition 45 provides:

At the end of each month of quarry operation,  
the permittees shall file with the Commission  
**compliance** affidavits which state the number of  
blasts, the amount of material crushed, and the  
amount of material hauled from the site.

83. Permit Condition 47 provides:

This permit shall expire on November 1, 2020,  
unless extended by the District Commission.

84. The Central Vermont Regional Plan Commission (CVRPC)  
adopted a **regional** plan on May 11, 1993 (the Regional  
Plan). The Permittees filed their application for the  
Permit on **June 4, 1993**.

85. The Regional Plan provides, in part:

#### Introduction

\* \* \*

#### **Implementation**

Throughout this document are specific  
**policies**, recommendations, strategies, offers  
and proposals designed to reflect the values of  
**Central Vermont** residents and help realize the  
**goals** of this Plan. It is primarily through  
the statutory functions and obligations of  
**CVRPC**, and the initiative of the region's  
**municipalities**, that these and other aspects of  
the **Plan** will be implemented. A six point  
implementation program is highlighted in the  
**following** passages:

\* \* \*

- \* CVRPC will continue to participate in Act  
250 proceedings in accordance with our  
**adopted** guidelines for the purpose of  
**advancing** the goals of this Plan.

The goals and policies of this Plan should be **reasonable** and uniformly applied. No specific goal or policy of the Plan should be construed or applied in isolation from the other goals or policies of the Plan.

\* \* \*

#### **LAND USE ELEMENT**

\* \* \*

#### **Mineral Resources:**

The mineral deposits of Central Vermont are recognized as an important resource. The presently known mineral resources of the Region include granite, talc, asbestos, **chromite**, **verde** antique, sand and gravel.

The granite quarries of Barre Town and granite industries of Barre City, Northfield, and Montpelier are major contributors to our economy and living monuments to a colorful part of our regional heritage. While our sand and gravel deposits are less renowned, they play an important part in local and personal economies and **are** relied upon by municipalities for road building and maintenance materials.

The products of earth resource operations are so important that we must accommodate them even as we guard against their more harmful aspects. This is an example where the planning process can be used to encourage locations and operating procedures that could minimize the conflicts and uncertainties of the regulatory process.

\* \* \*

#### **CVRPC LAND USE GOALS AND POLICIES**

\* \* \*

**Goal 2:** To enhance and support the viability of the Region's resource based industries.

Policies:

1. CVRPC supports and encourages the protection and continued productivity of viable agricultural soils, productive forest land and mineral resources. Sound land use planning (including flexible development options), fair government pricing, taxation and subsidy programs, and promotion of value-added products and industries are viewed as means to this end.

\* \* \*

5. The extraction of sand and gravel should not be unduly detrimental to surrounding land uses or the environmental quality of the area. A reclamation plan should be included as part of any extraction proposal. Possible alternative uses should be identified in local plans. Municipalities are encouraged to map the important, accessible sources.

\* \* \*

**Goal 4:** To protect environmentally sensitive or unique areas.

**Policies:**

\* \* \*

8. It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Region's wetlands.

9. Municipalities are encouraged, through design, to make a concerted effort to preserve access to and enjoyment of scenic views for the public. Unless effectively screened, or clearly in the best interest of the general public, ridgeline or hilltop development is discouraged.

\* \* \*

**CVRPC TRANSPORTATION GOALS AND POLICIES**

GOAL 2. To maintain the existing roadway system, and refurbish it as needed to make the most efficient use of existing facilities.

\* \* \*

HISTORICAL AND ARCHEOLOGICAL RESOURCES GOAL:  
To promote the protection and use of the Region's historical and archeological resources.

**Policies:**

\* \* \*

6. Where an area is not designated as an historic district, but where there are buildings of local historical significance, **projects** should be designed to maintain and protect the historic character of the area. **Municipalities** are encouraged to develop criteria that would assist in protecting the character of an area considered historic, whether designated as such or not.

\* \* \*

8. Activities having substantial impact on an important historical site or structure should be planned in consultation with the Division for Historic Preservation, Agency of Development and Community Affairs.

\* \* \*

**CVRPC ECONOMIC GOALS AND POLICIES**

**Goal 1.** Promote and support a diversified economy that will provide full employment at a **decent** wage, display minimal fluctuation, and have minimal negative environmental impact.

**Policies:**

1. CVPRC encourages municipalities to identify and assist expansion of locally based

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industries that utilize the region's natural resources and raw materials, with particular **emphases** on value-added processing of mineral, agricultural and forest products;

86. The CVRPC provided prefiled testimony by Christopher Walsh, Senior Planner. Mr. Walsh's testimony concluded that the Project is in conformance with the Regional Plan, **and that** potential conflicts with the Regional Plan could be **avoided** through "good operating practices and appropriate permit **conditions.**"

V. **CONCLUSIONS OF LAW**

A. **Burden of Proof and Permit Conditions**

Under 10 V.S.A. § 6088(a), the Permittees have the burden of proof on Criteria (1), (1)(G), (4), (9) (E), and (10).

Under 10 V.S.A. § 6088(b), opponents have the burden of proof under Criteria (5) and (8). However, the Permittees must provide sufficient information for the Board to make affirmative findings. Re: Killinston, Ltd. and International Paper Realty Corp., #1R0584-EB-1, Findings of Fact and Conclusions of Law and Order (Revised) at 21 (Sept. 21, 1990).

The Appealed Conditions were made part of the Permit pursuant to 10 V.S.A. § 6086(c). 10 V.S.A. § 6086(c) provides that a permit may contain such requirements and conditions as are allowable within the police power and are appropriate with respect to **the Act** 250 criteria.

The **Board's** understanding of the Appealed Conditions is that such conditions alleviate adverse effects that would otherwise be caused by the Project, and that those adverse effects would require a conclusion that the Project does not comply with the criteria at issue unless the conditions are followed. Ultimately, any condition imposed must be reasonable. In re Denio, 158 Vt. 230, 240 (1992); Re: Taft Corners Associates, Inc., #4C0696-11-EB (Remand), Memorandum of Decision at 18 (May 5, 1995); Re: Crushed Rock, Inc. and Pike Industries, #1R0489-4-EB, Findings of Fact, Conclusions of Law, and Order at 25 (Feb. 18, 1994).

B. **Involved Land of the Project**

The **Permittees'** appeal of Permit Condition 5 raises a **jurisdictional issue** regarding the Project's involved land.

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Permit Condition 5 requires that any subdivision of the 192 acre tract be preceded by the filing of an Act 250 permit amendment application with the District Commission pursuant to EBR 34 based on the conclusion that the entire 192 acre tract is subject to Act 250 jurisdiction as the Project's involved land.

The **Permittees** contend that the Project's involved land should only be the 26 acre Project Site. EBR 2(F) defines "**involved land**" as including:

(1) The entire tract or tracts of land upon which the construction of improvements for commercial or industrial purposes occurs.

In 1985,; the Legislature ratified the Board's rules such that they have the same effect as any law passed by the Legislature in the first instance. The ratified Board rules have "**effectively** become part of the Act 250 legislative scheme codified at chapter 151 of Title 10." In re Barlow, 160 Vt. 513, 521 (1993); In re Spencer, 152 Vt. 330, 336 (1989).

The Board cannot create an exception to EBR 2(F)(1) and exclude all but the Project Site from the Project's involved land since this would violate the Board's own rules. See Conservation Law Foundation v. Burke, 4 Vt. Law Week 279, 281 (1993). Based on EBR 2(F)(1), the Project's involved land is the 192 **acre tract** owned by the Permittees and the entire 192 acre tract is subject to Act 250 jurisdiction.

Once Act 250 jurisdiction is triggered, subsequent events do not void the attachment of jurisdiction. See e.g. Re: John Rusin, #8B0393-EB, Findings of Fact, Conclusions of Law, and Order (June 10, 1994), aff'd In re John Rusin, 5 Vt. Law Week 241 (1994); Re: Wildcat Construction Co., Inc., #6F0283-1-EB, Findings of Fact, Conclusions of Law, and Order (Oct. 4, 1991), aff'd In re Wildcat Construction, 160 Vt. 631 (1993); City of Barre Sludge Management Program, Declaratory Ruling #284 (Oct. 7, 1994); Re: Richard Farnham, Declaratory Ruling #250 (July 17, 1992); and Re: Stevens and Gyles, Declaratory Ruling #240 (May 8, 1992).

The Permittees have stated that they intend to subdivide the 192 **acre tract**. Such subdivision cannot dissolve **jurisdiction over** the 192 acre tract, and nor can it be excused **from review** under Act 250. The Board concludes that Permit Condition 5 is reasonably necessary to ensure

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compliance with Act 250 since the entire 192 acre tract is subject to Act 250 **jurisdiction.**<sup>1</sup> Permit Condition 5 shall remain as is.

The Board also concludes that Permit Condition 5 is reasonable and necessary based on the Board's decision in Re: Charles and Barbara Bickford, #5W1093-EB (Revocation), Memorandum of Decision at 4-5 (April 12, 1993), wherein the Board **specifically** concluded that the Project's involved land is the entire 192 acre tract. The Permittees did not appeal this decision **and**, in this proceeding, have not addressed the issue of whether the prior decision should be set aside **notwithstanding** the doctrine of res iudicata. See Berisha v. Hardy, 144 Vt. 136, 138 (1984); Re: John A. Russell Corn., #1R0257-2A-EB, Memorandum of Decision (Oct. 22, 1992).

C. Criterion 1 (Water) and (Air)

Pursuant to 10 V.S.A. § 6086(a)(1), before granting a permit, the Board shall find that the development "[w]ill not result in undue water or air pollution.<sup>11</sup>

The Permittees originally appealed from Permit Condition 7. Permit Condition 7 requires the Permittees to pave the initial 40 feet of Project access road off U.S. Route 2, and to line the 100 feet of access road immediately preceding the paved length with coarse stone. Because the Permittees have done so, their appeal of this condition is moot.

Mr. and Mrs. Whiteway and Ms. Arthur both cross-appealed under Criterion 1.

1. Water

The Board **determines** whether there is undue water pollution based upon the facts specific to each individual case. Re: Upper Valley Regional Landfill (Revised), #3R0609-EB, Findings of Fact, Conclusions of Law, and Order at 32 (Nov. 12, 1991).

'Apart from Permit Condition 5 the Board notes that while the 192 acre tract is subject to Act 250 jurisdiction, only those changes to the Project which are substantial or material changes require a permit amendment under EBR 34. If the **Permittees are** in doubt as to whether a particular change triggers the requirements of EBR 34, they may request a **jurisdictional opinion** pursuant to 10 V.S.A. § 6007(c).

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There **is** a wetland adjacent to the Access Road. The wetland extends off the 192 acre tract both to the north and to the southwest. The flow of water in the wetland is in a southerly **direction** toward U.S. Route 2. The Permittees constructed a small farm pond within the wetland to the southwest of **the** Project Site. A covered spring-box is located within the wetland to the north of the farm pond. This spring **serves** as the water source for Mr. and Mrs **Whiteway's** personal residence and the Unique Cabins. Mr. and Mrs. **Whiteway** have deeded rights to the spring. The spring is located within one-hundred feet of the Project Site. The Project has not and will not have any adverse effects on the spring.

Based upon the preceding, the Board concludes that the Project will **not** cause undue water pollution.

## 2. Air

Noise is considered air pollution under Criterion 1 when it poses a threat of physical harm (primarily hearing loss); noise is also considered under Criterion 8 for its effect on the aesthetic sensibilities. See Re: John and Joyce Belter, #4C0643-6R-EB, Findings of Fact, Conclusions of Law, and Order at 13 (May 28, 1991); Re: Sherman Hollow, Inc., #4C0422-5-EB, Findings of Fact Conclusions of Law and Order (Revised) at 30 (Feb. 17, 198-9); Re: Juster Development Co., #1R0048-8-EB, Findings of Fact, Conclusions of Law and Order at 24 (Dec. 19, 1988).

Dr. **Hundal's** 1993 Report is not based on actual operations at the Project. Rather, the 1993 Report is based on sound readings taken at other sites which McDonald represented to Dr. Hundal as being comparable to the Project. The 1993 Report concludes, in part, that the sound levels from the crushers **and** associated equipment are below the levels caused by traffic.

On June 28, 1994, Dr. Hundal took instantaneous sound measurements **of** certain pieces of equipment while they were in operation at **the** Project Site. Based on these readings, Dr. Hundal concluded that: (a) at Ms. Arthur's house and at the Unique Cabins, the crusher sound is barely audible or nearly inaudible; (b) the difference in sound levels, whether the crusher system is operating or not, even with no traffic on U.S. Route 2, is insignificant and does not register on the Type 1 (high **precision**) Sound Level Meter; (c) the dominant noise source in the area is the vehicular traffic on U.S. Route 2; and **(d)** the crusher noise at the neighboring

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properties is significantly less than that predicted in the 1993 Report. Finally, Permit Condition 6 incorporates Air Pollution Control Division Permit #AP-93-25.

Based on the preceding the Board concludes that the Project's equipment which Dr. Hundal considered will not cause undue air pollution.

With regard to truck traffic, in the 1993 Report, Dr. Hundal assumed that all traffic from the Project would be medium sized trucks. While this may not be the case, even if all truck passbys attributed to the Project were of heavy trucks, there would be only a few tenths of a decibel increase over the 1993 Report's conclusion of Leq 75.0 **dba**.

The EPA has determined that for purposes of hearing conservation alone, a level which is protective of that segment of the population at or below the 96th percentile will protect virtually the entire population. This level has been calculated to be an Leq of 70 **dB**. However, this hearing loss level represents annual averages of the daily level over a period of forty years.

There is no evidence that persons will be exposed to the Leq levels in the Project's vicinity on a daily basis over a period of forty years since a person's exposure to noise varies as a that person goes through the routine of time spent inside, outside, and away from home. While a person would suffer hearing impairment if he or she was situated 50 feet from U.S. Route 2 and experienced 350 passbys of heavy trucks, we are not persuaded that the Project's neighbors or guests at the Unique **Cabins** will be so situated.

Based upon the preceding, the Board concludes that the peak Project truck traffic, even if composed exclusively of heavy trucks, will not cause undue air pollution.

D. **Criterion 1(G) (Wetlands)**

Pursuant to Criterion 1(G), Wetlands, a permit will be granted whenever it is demonstrated by the applicant that the development will not violate the rules of the water resources board, as adopted under 10 V.S.A. § 905(9), relating to significant wetlands.

The Permittees appeal whether Permit Conditions 17 and 20 are necessary under Criterion 1(G). Mr. and Mrs. **Whiteway** have party status on Criterion 1(G).

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The wetland adjacent to the Access Road is a wet meadow dominated by sedges, bulrush, common cattail, and water horsetail and is underlain by hydric mineral soil. A small PVC culvert pipe carries runoff from the Project Site across the Access Road and into the wetland. The wetland extends off the 192 acre tract both to the north and to the southwest. The flow of water in the wetland is in a southerly direction toward U.S. Route 2.

There is also a Class Two wetland located on the south side of U.S. Route 2. This wetland is connected to the wetland which is adjacent to the Access Road. Because the two wetlands are contiguous via a culvert under U.S. Route 2, they are both Class Two wetlands. See VWR § 2.07.

The Permittees constructed the farm pond within the wetland to the southwest of the Project Site. The portion of the Class Two wetland occupied by the farm pond is exempt from the VWR provided it is used exclusively as a farm pond. See VWR § 3.1.

Because the Access Road was in existence in substantially its present state since before February 23, 1990, the effective date of the VWR, its use and maintenance does not require a Conditional Use Determination. See VWR § 1.1(3).

The contiguous Class Two wetlands are protected by a 50 foot buffer zone. See VWR § 4.3. Showing the wetland and buffer zone on a site plan which depicts the Project will provide a permanent record of the wetland location and will lessen the likelihood of quarry operations encroaching upon the wetland or buffer zone. Permit Condition 17 requires that Bickford file a site plan, depicting the limits of the wet meadow and its 50 foot buffer. The Board concludes that Permit Condition 17 is necessary to ensure compliance with Criterion 1(G). The Board will, however, extend the date of compliance with Permit Condition 17 until August 1, 1995.

Whereas Permit Condition 17 is related to protecting the wetland from encroachments by the operation of the Project, Permit Condition 20 seeks to regulate possible prospective activity which may bear no relation whatsoever to the Project. Permit Condition 20 requires that any deed conveying the 155 acre farmstead portion of the 192 acre tract specifically reference **the** presence of the Class Two wetland area, and include a prohibition against any disturbances unless consistent with the VWR. Because such a subdivision will be subject to Act 250 review pursuant to Permit Condition 5, the Board will delete Permit Condition 20 and leave it to the

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District Commission to determine what measures, if any, are necessary under Criterion 1(G) when and if the Permittees convey the 155 acre parcel.

Based on the preceding, the Board concludes that the Project, as conditioned by this decision, will not violate the VWR. Therefore, Permit Condition 17 will remain as is except that the **compliance** date shall be August 1, 1995, and Permit Condition 20 shall be deleted.

E. Criterion 4 (Soil Erosion)

Pursuant to Criterion 4, Soil Erosion, before granting a permit, the Board must find that the development will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result.

As clarified by the Prehearing Order, the parties agreed that the scope of the Board's review under Criterion 4 is limited to Permit Condition 23's requirement that reports be filed by a licensed engineer. The Permittees only object to the requirement that the reports be filed by a licensed engineer.

Terrence Boyle prepared plans to control erosion at the Project Site, and the Permittees and McDonald have adopted these plans. However, Mr. Boyle did not appear as a witness for the Permittees, and there is no evidence as to whether Mr. Boyle will be monitoring the Project to ensure compliance with the plans he prepared. Compliance with the plans is vital under Criterion 4.

Based on the preceding, the Board concludes that requiring reports to be filed by a licensed engineer will ensure that either the plans are followed or variations from the plans are made known to the District Commission. The Board Concludes that Permit Condition 23 is necessary to ensure that **unreasonable** soil erosion does not result. Therefore, Permit Condition 23 shall remain as is.

F. Criterion 5 (Traffic)

Criterion 5 of 10 V.S.A. § 6086(a) requires the Board to find that the **Project** will not cause unreasonable congestion or unsafe conditions with respect to the use of highways. The burden of proof is on any party opposing the Project.

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The **Permittees** have appealed Permit Condition 27. Ms. Arthur has cross-appealed on Criterion 5.

U.S. Route 2 runs in a general east/west direction. U.S. Route 2 is part of the national highway system and is a major interstate artery for cars and trucks. The Access Road and the Project Site are on the north side of U.S. Route 2. The Access Road into the Project Site enters onto U.S. Route 2 in a rural area between the villages of Plainfield and Marshfield.

Permit Condition 27 requires that warning beacons with appropriate warning signs be installed on both approaches on U.S. Route 2 **prior** to any hauling in 1994, and that the beacons be used at all times when material is hauled from the Project.

The Board stayed Permit Condition 27 pending hearing and final resolution of this appeal in the Supplemental Order and the May 31 Memorandum of Decision.

The Project will generate 350 truck trips per day at peak operation. The average traffic volume of truck traffic is approximately 72 trucks per day. The average traffic volume from the Project will not add appreciably to the truck traffic on U.S. Route 2. Average speed on U.S. Route 2 tends to be in the range of 49-50 mph, which is typical for this type of rural highway. AOT does not consider this a high speed area.

The sight distances are adequate from the cab of a truck departing the Access Road and turning onto U.S. Route 2. The area surrounding the Access Road does not have significant pedestrian or animal activity (with the exception of the Bickford farm's nearby cattle crossing, which has appropriate signs).

No accidents have occurred in the vicinity of the Access Road during the Project's operation over the last 30 years, including a period of intense operations from 1988 to 1992.

AOT studied whether flashing beacons were needed near the Access Road. AOT concluded that the evidence clearly shows that flashing beacons are not warranted. Instead, AOT recommends that square, 36-inch-by-36-inch, black on orange portable signs attached to tripods be located 600 to 800 feet in advance **of** the Access Road in each direction when the Project is active. These portable signs will be more effective in alerting motorists to entering trucks instead of permanent beacons or signs.

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Based on this evidence, the Board will delete Permit Condition 27 and set a new condition which incorporates **AOT's** recommendation that portable signs be used instead of flashing beacons.

Based on the preceding, the Board concludes that the Project, as conditioned by this decision, will not cause unreasonable congestion or unsafe conditions with respect to the use of **U.S.** Route 2.

G. Criterion 8 (Aesthetics, Historic Sites, and Rare and Irreplaceable Natural Areas)

10 V.S.A. § 6086(a)(8) requires that, prior to issuing a permit for **the proposed** project, the Board must find that the project "[w]ill not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics . . . ." The Board uses a two-part test to determine whether a project meets Criterion 8. First, it determines whether the project will have an adverse effect. Second, it determines whether the adverse effect, if any, is undue. Re: Ouechee Lakes Corn., Applications #3W0411-EB and #3W0439-EB, Findings of Fact, Conclusions of Law and Order at 18-19 (Jan. 13, 1986).

In **evaluating** whether adverse effects on aesthetics and scenic beauty are undue, the Board analyzes three factors and concludes **that** a project is undue if it reaches a positive conclusion with respect to any one of these factors, which are:

- a. **Does the** project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area?
- b. Does **the** project offend the sensibilities of the average person? Is it offensive or shocking because it is out of character with its surroundings or significantly diminishes the scenic qualities of the **area**?
- c. Has the Applicant failed to take generally available mitigating steps which a reasonable person would take **to** improve the harmony of the proposed project with **its** surroundings?

The Permittees have appealed from Permit Conditions 29, 31-33, and **35-37**. Ms. Arthur and Mr. and Mrs. **Whiteway** have cross-appealed **under** Criterion 8.

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1. Adverse Effect

The Project's quarry face is on the west side of a knoll and is visible to drivers proceeding easterly on U.S. Route 2. There is a grassy area with a stand of trees directly above the top **portion** of the quarry face. The grassy area frames the quarry **face**. At the base of the quarry face there is a berm planted **with** trees.

The **quarry** face is of a light color and in contrast to the green **forested** hills that surround it. The quarry face is clearly **visible** as the trees in the berm, at this point, are so small as **to** provide no relief or mitigation to the view. The quarry **face** is part of an overall landscape that includes rolling **hills** and forested mountains, woods, the Winooski River, open **farmland**, houses, the Unique Cabins, the **Marsh-Plain** Motel, and Twinfield Union School.

Mr. and Mrs. **Whiteway** reside 500 feet to the west of the Access Road, on the south side of U.S. Route 2, and operate the Unique **Cabins**. The Unique Cabins are small structures which serve the tourist trade. The Marsh-Plain Motel is within one mile of the Unique Cabins.

Ms. Arthur and Mr. Cheever live approximately one mile to the west of the Project and their house is approximately 200 feet above the north side of U.S. Route 2. Their views are of the rolling hills and mountains, the Winooski River, the Twinfield Union High School, and the quarry face. The view of the quarry face is unobstructed by hills, trees, knolls or other buildings or structures.

The **Project's** truck traffic can generate noise which, while not a health hazard, can interfere with activity and cause annoyance during those periods when there is no traffic along U.S. Route 2. Interference with activity and annoyance will occur **if** outdoor noise levels exceed 55 **dB**. If a heavy truck hauling material from the Project passes by the Unique Cabins while **there** is no other traffic, the **dba** level will rise from a **low** of 42-50 **dba** to a peak of 85-95 **dba**. On an instantaneous basis, this would be a high increase in noise.

Based on the preceding, the Board concludes that the general character of the area surrounding the Project is rural, and that the Project and its traffic will have an adverse effect on the aesthetics of the area.

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2. Undue

- a. Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area?

The Town of Marshfield adopted zoning regulations on March 20, 1985. After a review of the zoning regulations and, in particular sections 120 and 360, the Board concludes that the Project does not violate a clear, written community standard. The zoning regulations' general statements regarding its purposes, and the requirement of a rehabilitation plan, are not sufficiently detailed to establish an aesthetic standard. See Re MBL Associates, #4C0948-EB, Findings of Fact, Conclusions of Law, and Order at 31 (May 2, 1995).

- b. Does the project offend the sensibilities of the average person? Is it offensive or shocking because it is out of character with its surroundings or significantly diminishes the scenic qualities of the area?

As already noted, the uses in the area surrounding the Project are homes, tourist motels and cabins, and a school. These uses are set against a backdrop of rolling hills and forested mountains, and the Winooski River. In contrast, the Project is a large-scale industrial use which, over its fifty-year operation<sup>41</sup> life, may result in the removal of a sizeable hill.

Based on the preceding, the Board concludes that the Project is shocking because it's out of character with the surrounding land uses and rural environment.

The quarry face is in the rough shape of an amphitheater and, therefore, sound bounces off and causes an echo. This reduces the berm's overall effectiveness. Further, although the sound generated by the Project and its truck traffic only causes an incremental increase in the Leq level, the Project or its truck traffic can still be heard as a distinct noise, and, as already discussed, interfere with outdoor activity and cause annoyance to persons. The Board concludes that the noise from the Project and its truck traffic will significantly diminish the scenic qualities of the area.

- c. Has the Applicant failed to take generally available mitigating steps which a reasonable

person would take to improve the harmony of the proposed project with its surroundings?

The Project is divided into three stages based upon the estimate **that there** exists sufficient stone to conduct operations for 50 years.

Stage 1 of the Project is expected to last eight years or more. After the existing excavation area has been widened, the plan is to proceed up behind a wooded area and excavate the top of the knoll. This procedure will have the effect of screening operations from viewpoints around the Project Site.

Stage 2 consists of excavating the part of the Project Site behind the stand of trees described in Stage 1 until both floors of the Project Site are approximately 925 feet above sea level. By that time, McDonald believes that the trees on the berm created at the front of the quarry will have grown to the point where they will provide substantial screening such that the **retained** trees may be removed as part of this second stage.

Stage 3 /involves lowering the entire quarry floor to the level of floor that is now to the west of the berm, i.e. 885 feet above sea level, as depicted in Bickford Exhibit 2-E. Finally, Bickford Exhibit 2-G shows how the Project Site will look after **all** reclamation is completed in the year 2043 pursuant to the 50 year estimate. As depicted on Exhibit Bickford **2-G**, the shaded areas are quarry walls that descend well below the tree line; the floor of the quarries would be topsoiled **and** seeded; and McDonald expects that trees and brush would grow up in this location.

The plans for the berm, plantings, seedlings, erosion control, and excavating were prepared, in part, by Terrence Boyle, a landscape architect and planning consultant. Mr. Boyle **produced** these plans based on the assumption that the Project **would be** in operation for 50 years. The Permittees and McDonald have adopted the plans prepared by Mr. Boyle. However, there is no evidence that Mr. Boyle will be monitoring the Project to ensure compliance with the plans he prepared.

In sum, while the Permittees have attempted to show what the Project will look like, their drawings merely depict what they expect will happen in the future. **Given** that the Project provides for the extraction of 50,000 cubic yards per year, the Permittees cannot conclusively predict what the Project will look like in the future as the three stages unfold.

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Although not due to a lack of effort, the Board nevertheless concludes that Permittees have not taken generally available mitigating steps which a reasonable person would take to improve the harmony of the Project with its surroundings. However, the Board concludes that Permit Condition 43 alleviates this aspect of the Project's undue adverse effect such that the Board, in part, can make an affirmative finding under Criterion 8.

While the Board concludes that the Project will have an undue adverse effect under Criterion 8, conditions can alleviate this effect such that the Board can make an affirmative finding with respect to aesthetics.

The Board addresses the specific Permit Conditions which the Permittees have appealed.<sup>2</sup>

i. Permit Condition 29

Permit Condition 29 requires, in part, that all landscaping trees be maintained so as to attain an annual average growth rate of at least 18 inches, and that the Project may not operate if the average height is not achieved.

The Board notes that before the District Commission, the Permittees represented that the trees being planted would grow an average of 24 inches per year. Based on the Permittees' own representation, the District Commission held the Permittees accountable for an annual average growth rate of 18 inches. The significant role that trees will play in mitigating the visual and noise effects from the Project make it vital that this core requirement of Permit Condition 29 remain as is.

The Board, however, concludes that conditioning the Project's operation on the achievement of the average height is to ask the Permittees to guarantee what only nature can decide. In this regard, the second sentence of Permit Condition 29 exceeds that which is reasonable and, therefore, it shall be deleted. See Denio, 158 Vt. at 240. Otherwise, Permit Condition 29 shall remain as is.

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<sup>2</sup>Originally, the Permittees appealed from Permit Conditions 28, 29, and 31-37. However, the Permittees have since dropped their appeal of Permit Conditions 28 and 34.

ii. Permit Condition 31

Permit Condition 31 requires that "when the opening is plugged prior to the beginning of operations in 1996, an additional 4 trees shall be planted which must be nursery stock, fully branched, and at least 10 feet tall."

There is an opening at the end of the berm. The plans for the Project contemplate extending the berm to close the opening. Trees will be planted on the extended berm. McDonald uses this gap area for stockpiling quarried material away from the staging area below the quarry face.

The Permittees contend that requiring the gap to be plugged prior to beginning operations in 1996 is unduly restrictive given that the Project's stages are estimates dependent upon market demand, and that the gap area is used as a stockpiling area. Therefore, they request that there be no specific time requirement as to when the gap must be plugged.

The berm plays a vital role in screening the Project. Screening the Project has a dual effect--it makes the Project less visible and it makes the Project less noisy. The sooner the gap is plugged, the more effective the berm is in screening the Project's visual and noise impacts. Yet, the berm has been effective in reducing noise.

Based on the preceding, the Board will modify Permit Condition 31 to require that the gap be plugged prior to the beginning of operations in 1997. This modification will not diminish the berm's current mitigation capacity, and will delay its enhanced capacity by one year. This change both satisfies the overall requirements of Criterion 8 and the requirement that permit conditions be reasonable.

iii. Permit Condition 32

Permit Condition 32 requires that fast growing shrubs and softwoods be planted across the length of the quarry face at the edge of the treeline. Permit Condition 32 is related to alleviating both the Project's visual and noise effects, as screening achieves both goals. Based on the findings of fact and the evidence, the Board concludes that this condition is necessary to mitigate the undue adverse aesthetic effect of the Project and it shall remain as is.

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iv. Permit Condition 35

Permit Condition 35 sets the general schedule for the Project's operation. The Permittees contend that there should be no **restrictions** on the Project's operation between April 1 and December 1 of each year, and that the Project should open at 7:00 a.m.

Permit Condition 35 regulates four basic kinds of activity at the Project: blasting, drilling, crushing, and hauling.

When Dr. Hundal made his sound measurements on June 28, 1994, there was no drill operating and, therefore, his measurements do not take into account all possible sources of noise which the Project may generate.

The Project's noise level is also predicated on McDonald being the operator. Dr. Hundal relied on McDonald's representations in formulating the 1993 Report, and Dr. **Hundal's** June 28, 1994 noise measurements are of McDonald's equipment. McDonald's crusher system is "state-of-the-art" equipment. However, McDonald's oral agreement with the Permittees can **be** terminated at any time. Based on the preceding, the **Board** concludes that the Permittees cannot be granted carte **blanche** between April 1 and December 1.

On the other hand, the same evidence persuades the Board that Permit Condition 35(B) is simply over-restrictive in relation to the Project's undue adverse aesthetic effect. Noise and visual mitigation measures have begun to take hold and bring relief.

The Board will modify Permit Condition 35 to allow blasting, drilling, crushing, and hauling from April 1 through June 30 of **each** year, and for operations to commence at 7:00 a.m. whenever the Project is authorized to be operating. Otherwise, Permit Condition 35 shall remain as is.

These **less** restrictive operating conditions still mitigate the Project's undue adverse aesthetic effect, but do so **in a** more reasonable manner--the operator has through June to build a stockpile and the Project's neighbors have July and August, and during early fall, as a respite from the most intrusive aspects of the Project. Given the sum total of the Project, this operating schedule will reasonably help to harmonize the Project with its surrounding land uses.

v. Permit Condition 36

Permit Condition 36 requires the use of flagpersons instead of backup alarms. The dominant noise in the immediate vicinity is of traffic. Therefore, the Board will delete that portion of Permit Condition 36 which requires that during the use of lift 1, a flagperson be used to direct loaders and trucks, and that all backup alarms in the loading area be deactivated. The Board reaches this conclusion, in part, based on its decision relative to Permit Condition 37. But for Permit Condition 37, the Board would not alter Permit Condition 36.

vi. Permit Condition 37

Permit Condition 37 provides that the District Commission retains jurisdiction over impacts from back-up alarms once the full use of lift 2 has commenced for loading and stockpiling, and that the use of a flagperson may be imposed should the berm and stockpiles prove insufficient as noise dampeners. Because the future of this Project is subject to change, both with regard to its operator and the success of the agricultural mitigation measures, Permit Condition 37 is necessary to mitigate the Project's undue adverse aesthetic effect and it shall remain as is.

With regard to historic sites, because the Project will have no direct physical impact on the historic value of the Unique Cabins, the Board concludes that there will be no undue adverse effect on historic sites. With regard to rare and irreplaceable natural areas, the Board concludes that the Project, as conditioned by this decision, will not have an undue adverse effect on such areas.

H. Criterion 9(E) (Extraction of Earth Resources)

Criterion 9(E) requires the Board to find that the extraction of earth resources "will not have an unduly harmful impact upon the environment or surrounding land uses and development," and that "upon completion of the extracting . . . operation the site will be left by the applicant in a **condition** suited for an approved alternative use or development."

The Permittees appeal from Permit Condition 41, 43, 44, 45, and 47, all of which were made part of the Permit pursuant to Criterion 9(E). Mr. and Mrs. **Whiteway** have cross-appealed under Criterion 9(E).

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i. Permit Condition 41

Permit Condition 41 requires that each contractor **of' the** Project shall be joined as a co-permittee under Board Rule **10(A)**.

The Permittees contend that Permit Condition 41 should be deleted because **it's** the Permittees who are responsible for the performance of the Permit Conditions and they alone will suffer if a permit is not complied with. Further, the Permittees contend that there could be practical problems if the **Permittees contracted** with different persons to conduct drilling, blasting, or crushing operations.

The **issue under** Criterion 9(E) is to ensure that the Project will not have an unduly harmful impact upon the environment **or**, surrounding land uses and development. Thus, it is not only the Permittees who will suffer if the Project is not operated pursuant to the terms and conditions of its Act 250 **permits**.

While we expect the Permittees will meet all permit conditions, the Board cannot make an affirmative finding under Criterion 9(E) **without** Permit Condition 41. Fundamental to the Board's conclusion is that the day-to-day and long-term avoidance of unduly harmful impacts will depend upon the conduct of the third party or parties that operate the Project for the Permittees.

The Board has found, through the testimony of McDonald, that the Project will be conducted by the largest quarry/road construction company in Vermont with state-of-the-art equipment; that McDonald will follow a detailed set of plans designed **jointly** by the Permittees and McDonald; and that McDonald will **implement** noise and visual mitigation measures during the course of his operation of the Project. McDonald's credibility **is the** underpinning to these findings.

Despite the **Permittees'** extensive reliance upon McDonald's participation in the Project, the Permittees and McDonald only have an oral agreement which either one can terminate. The juxtaposition of McDonald's extensive involvement on the one hand, and the **Permittees'** and McDonald's oral agreement on the other, would cause the Board to deny the Project under Criterion 9(E). The Board would be unable to determine with any reasonable degree of certainty what impacts the Project will cause, who will cause them, and whether they will be unduly harmful since McDonald could leave or be terminated at any time.

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With Permit Condition 41, however, the Board can determine with a reasonable degree of certainty what impacts will be caused, who will cause them, and whether they will be unduly harmful. For example, as noted above with regard to noise, McDonald uses state-of-the-art equipment and Dr. Hundal has evaluated the noise which the equipment makes. Therefore, the Board has concluded that there is no undue air pollution with respect to noise. With regard to the effect of noise on aesthetics, McDonald has been involved in working with the Permittees on how noise will be mitigated. By relying on McDonald's participation in the Project, the Board can determine whether this noise will result in an unduly harmful impact under Criterion 9(E). Ultimately, Permit Condition 41 makes the person who operates the Project responsible for it.

The Permittees contend that Permit Condition 41 is not practical if more than one operator conducts the Project. Based on the foregoing, however, the Board concludes that the scenario of multiple operators makes it imperative that Permit Condition 41 remain. Each new operator should be made a co-permittee so that it's legally obligated to conduct the Project in the same manner as represented by McDonald. Without Permit Condition 41, the Project with each successive operator conducts may not necessarily be the same Project reviewed and approved by the Board.

With regard to enforcement, the Board concludes that there is no practical problem with having multiple co-permittees because co-permittees do not always share equal responsibility for permit violations. Rather, the determination of individual liability is the responsibility of the Environmental Law Division, and that court must analyze the circumstances of each party individually when assessing penalties. Secretary, Vermont Agency of Natural Resources v. Handy Family Enterprises and Taft Corners Associates, Inc., \_\_\_ Vt. -I #93-367, slip op. at 11-12 (Vt., Apr. 14, 1995).

Based on the evidence and the preceding findings of fact, the Board concludes that the Project will not have an unduly harmful impact upon the environment and surrounding land uses and development provided Permit Condition 41 remains as is.

ii. Permit Condition 43

Permit Condition 43 requires that prior to commencement of Stages 2 and 3, timely and adequate amendment applications be filed for the review of the District Commission under all applicable criteria which, at a minimum, shall include Criteria 1, 4, 8, 8(A), and 9(E). The Permittees contend that

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Permit Condition 43 will, as a practical matter, preclude the Project.

The Board **has** found that the timing of the Project's three stages are approximate based upon market demand; the length of McDonald's tenure is uncertain despite McDonald's extensive involvement in the Project's design; the ultimate success of aesthetic mitigation depends upon what equipment is used and what only nature can decide; and that the Project, if carried out for 50 years, will ultimately result in the removal of a **sizeable** hill. These environmental impacts fall under Criterion 9(E) and are ample justification for Permit Condition 43.<sup>3</sup>

The Project, by its very nature, is subject to many variables which will determine whether it will have an unduly harmful impact on its surroundings. Permit Condition 43 will ensure that each successive stage of the Project meets the requirements of the applicable Act 250 criteria. Without Permit Condition 43, the Board would conclude that the Project will have an unduly harmful impact upon the environment and surrounding land uses and development.

As to whether Permit Condition 43 is unprecedented, in a prior case, the Board agreed with a district **commission's** decision to reserve, in the form of a permit condition, the right to schedule site visits and public hearings, and impose additional conditions with respect to air and noise pollution, landscaping, general aesthetics, and traffic safety and circulation after the issuance of a permit. The Board concluded that if, in the district commission's opinion, "additional conditions might need to be imposed to ensure compliance with the criteria of Act 250, the Commission was properly exercising its authority to reserve the right to reopen the hearings." Re: Wildcat Construction Co., Inc., #6F0283 and #6F0283-1-EB, Findings of Fact, Conclusions of Law, and Order at 9 (Oct. 4, 1991), aff'd, 160 Vt. 631, 633 (1993).

The Board **has** also reviewed the permit issued pursuant to Re: Starksboro Sand and Stone Company, Inc., #9A0082-1 (Reconsideration), Findings of Fact and Conclusions of Law and Order (Aug. 6, 1987), and notes that the permit granted therein contained a condition which held open Criteria 1, 3, 5, 8, and 9(E) **throughout** the life of the project, and

<sup>3</sup>As already discussed, the Board also relies upon Permit Condition 43 to make an affirmative finding under Criterion 8.

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required the filing of a permit amendment application prior to the commencement of subsequent project phases. See also Re: J.P. Carrara & Sons, #1R0589-3-EB (Third Revision), Findings of Fact, Conclusions of Law, and Order (April 21, 1995); Re: G.W. Tatro Construction, Inc., Land Use Permit #6F0485 (May 9, 1995).

In evaluating whether Permit Condition 43 is reasonable, the Board also notes that the Permittees may seek modifications in the course of complying with Permit Condition 43. The Board has ruled that res iudicata and collateral estoppel do not apply to administrative proceedings as inflexible rules of law. Even if the elements to either of those two doctrines are satisfied, the Board has ruled that it may waive their application if the permittee proves that changes have occurred that preclude the need for a certain permit condition. Such changes may consist of (a) changes in factual or regulatory circumstances beyond the applicant's control; (b) changes in the construction or operation of the project not reasonably foreseeable at the time the permit was issued; or (c) changes in technology. Re: Cabot Creamery Cooperative, Inc., #5W0870-13-EB, Memorandum of Decision at 11 (Dec. 23, 1992).<sup>4</sup>

Thus, for example, if there are improvements in equipment technology, or if the agricultural mitigation measures exceed expectations in mitigating visual and noise impacts, under Permit Condition 43, the Permittees will be able to bring these new developments to the District Commission's attention and seek such changes as are appropriate during the course of their compliance with Permit Condition 43.

The Board concludes that given the evidence and findings of fact, Permit Condition 43 is both reasonable and necessary to make an affirmative finding under Criterion 9(E) in light of the sum total of the Project and its uncertainties, and that without Permit Condition 43, the Board would deny the Project under Criterion 9(E). Permit Condition 43 shall remain as is.

iii. Permit Condition 44 and 45

Permit Condition 44 requires a bond of \$100,000 to ensure proper completion of the Project and reclamation of the site.

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<sup>4</sup>The Board also required in Cabot that the applicant prove that its permit amendment application was a direct outgrowth of the above-referenced changes. Id.

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Permit Condition 45 requires that compliance affidavits be filed each month.

The Permittees contend that the requirements of Permit Condition 44 and 45 are not found in other quarry or mineral extraction permits, and that they are not needed for effective enforcement or oversight of the Project by the District Commission.

Criterion 9(E)(ii) requires that there be a site rehabilitation plan which insures that upon completion of the extraction operation, the site will be left by the applicant in a condition suited for an alternative use or development. 10 V.S.A. § 6086(c) specifically authorizes the filing of bonds to insure compliance as a permit condition. Based on these statutory provisions, the District Commission and, in turn, the Board has the authority to require a bond.

As the Board has already discussed, this Project is subject to many variables including the timing of its three stages; McDonald's uncertain tenure juxtaposed against his extensive involvement with the Project's design; and aesthetic mitigation measures dependent on nature.

The requirement of a bond brings certainty to this Project--there will be funds available to ensure that the Project is properly completed and that the Project Site is reclaimed, regardless of who owns or operates the Project. Based on the evidence and the findings of fact, there are specific environmental impacts and particular operational circumstances which make Permit Condition 44 necessary for the Board to make an affirmative finding under Criterion 9(E)(ii).

Finally, the requirement of a bond has been used before in the context of an Act 250 permit. In Starksboro Sand and Stone, the permittee is obligated to post a \$50,000 bond and establish a \$100,000 escrow account. Thus, the Board concludes that the bond requirement is not unprecedented, and is reasonable given the sum total of the Project.

With regard to Permit Condition 45, the monthly compliance affidavits will ensure that there is a documented record relative to the number of blasts, the amount of material crushed, and the amount of material hauled from the Project. With these numbers in-hand, there will be no confusion as to the pace of the Project's operation regardless of who is its operator. Further, all parties concerned will be able to evaluate the effectiveness of the aesthetic

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mitigation measures in relation to the specific activities occurring each month.

Collection of this information should be relatively simple. The Permittees and the Operator must keep records of blasting and crushing activity to comply with the terms of their permits, and the amount of material hauled from the Project should be self-evident from these records or from the **Permittees'** or McDonald's billing records.

The Board has also compared the monthly compliance requirement with other extraction operations. In Starksboro Sand and Stone, the permittee is subject to the requirement that it file, periodically, an affidavit certifying that the project is being operated pursuant to its permit. In Re: Crushed Rock, Inc. and Pike Industries, Inc., #1R0489-4-EB (Revised), Findings of Fact, Conclusions of Law, and Order (June 21, 1994), the permittees are required to submit a yearly report to the Town of West Rutland on their monthly and annual production levels for the purpose of verifying the payment of a toll. In Carrara, the permittees are required to submit monthly noise monitoring reports. In G.W. Tatro Construction, the permittees must file an annual report and the district coordinator must make a yearly inspection. Thus, the Board concludes that the monthly affidavit compliance requirement is similar to other reporting mechanism used in extraction permits, notwithstanding that Permit Condition 45 requires reports on a monthly basis.

The Board concludes that, based on the evidence and the findings of fact, Permit Conditions 44 and 45 are necessary for the Board to make an affirmative finding under Criterion 9(E), are reasonable given the sum total of the Project, and shall not be altered or deleted.

v. Permit Condition 47

Permit Condition 47 provides for expiration in 2020.

The Permittees contend that their request for a 50 year permit should be granted since they have estimated that there is sufficient material to sustain a project of that duration, and that no valid reason has been given to grant less than a 50 year permit. After reviewing 10 V.S.A. § 6090(b), the Board concludes that Permit Condition 47 shall be modified to provide for expiration in the year 2043. The Board makes this change in reliance on Permit Condition 43. But for Permit Condition 43, the Board would not alter Permit Condition 47. However, since the Permittees shall be required to file and

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obtain permit amendments prior to the commencement of Stages 2 and 3, the Board will so modify Permit Condition 47.

J. Criterion 10 (Regional Plan)

Criterion 10 requires, in part, that before issuing a permit, the Board find that a proposed project is in conformance with any duly adopted regional plan.

The Board independently reviews the applicable provisions of the **Regional Plan** and bases its conclusion under Criterion 10 on the contents of the Regional Plan. Parties and witnesses, however, may highlight for the benefit of the Board those provisions which they believe are relevant to the Board's inquiry. Re: Robert B. & Deborah J. McShinsky, #3W0530-EB, Findings of Fact, Conclusions of Law, and Order at 11 (April 21, 1988).

Because the Regional Plan was in effect on the date that the Permittees filed their application for the Permit, the Regional Plan is applicable in this proceeding. See In re Frank A. Molaano, Jr., 5 Vt. Law Week 314, 315 (1994).

The Regional Plan provides, in part, that its specific policies and recommendations should not be construed or applied in isolation from its other goals or policies. In this regard, the Regional Plan generally provides for a balanced approach to competing land use development.

The Regional Plan clearly recognizes that the mineral deposits of Central Vermont are an important resource, play an important **part in** local and personal economies, and are relied upon by municipalities for road building and maintenance materials. The Project fits the Regional Plan's description of a locally based industry that uses the region's natural resources and raw materials.

With regard to mineral resources, the Regional Plan acknowledges that while the products of earth resource operations are **important** and that such operations must be accommodated, harmful aspects of these operations must also be guarded against. Related to this is the policy to encourage the preservation of wetlands, including mitigating against the possible adverse impacts of development. In this regard, the Project is consistent with the Regional Plan.

The Regional Plan also recommends that the existing roadway system **be** maintained and refurbished as needed to make the most **efficient** use of existing facilities. The Project

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has historically provided material which is used to help maintain and refurbish the existing roads.

The Project is located on U.S. Route 2. The Project is visible to motorists when they are west of the Project and heading in a easterly direction. The Regional Plan encourages the preservation of scenic views, but it does not prohibit ridgeline or hilltop development. C.f. In re Green Peak Estates, 154 Vt. 363, 368-70 (1990) (Board's denial of Act 250 permit for failure to conform to a regional plan affirmed where denial was because the proposed development violated a specific policy prohibition).

The Regional Plan also seeks to promote the protection and use of Central Vermont's historical resources, but does not specifically prohibit development where there are buildings of local historical significance. Thus, where there are buildings of local historical significance, projects should be designed to maintain and protect the historic character of the area. As conditioned by this decision, the Project is consistent with this part of the Regional Plan.

Based on the preceding, the Board concludes that the Project, as conditioned by this decision, is in conformance with the Regional Plan.

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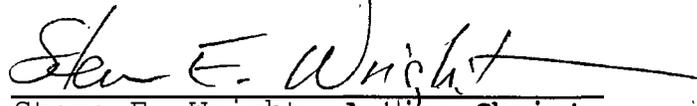
VI. ORDER

1. All **stays** issued prior to the date of this decision are dissolved.

2. Land Use Permit #5W1186-EB is hereby issued. Jurisdiction **is** returned to the District #5 Environmental Commission.

Dated at **Montpelier**, Vermont, this 22nd day of May, 1995.

ENVIRONMENTAL BOARD

  
Steve E. Wright, **Acting Chair\***  
Arthur Gibb  
Samuel Lloyd  
William Martinez  
John T. Ewing

\*On February 1, 1995, John T. Ewing became Chair of the Board. Steve Wright has continued as Acting Chair on this case at Mr. Ewing's request.

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