STATE OF VERMONT Water Resources Board

Appeal of Vermont Natural Resources Council and Connecticut River Watershed Council from Sunrise Group Certification of Compliance #1R0501-4 10 V.S.A. §1269
Findings of Fact,
Conclusions of Law and
Order

A hearing regarding the above entitled matter was held by the Water Resources Board on June 6, 1985. On the Board's own motion, the hearing was subsequently reopened on September 20, 1985. The following parties to this proceeding were present at the hearing:

- a. Vermont Natural Resources Council/Connecticut River Watershed Council by Harvey Carter, Esquire and Robert Woolmington, Esquire, Witten and Carter, Bennington;
- b. Sunrise Group, by F. Ray Keyser, Jr., Esquire, Keyser, Crowey, Banse, and Facey, Rutland;
- c. Killington, Ltd., by Allan R. Keyes, Esquire, Ryan, Smith, and Carbine, Ltd., Rutland.
- d. Agency of Development and Community Affairs, by Curt Carter (September 20, 1985, only).

During the course of this proceeding the following document was entered as an exhibit:

VNRC/CRWC Exhibit #1: A document dated May 14, 1985 entitled "Hydrologic Effects of Proposed Spray Irrigation at Site F" prepared by S. Lawrence Dingman, Ph.D.

Findings of Fact and Conclusions of Law

- 1. By issuance of Certification of Compliance #1R0501-4 to the Sunrise Group, the Department of Water Resources and Environmental Engineering ("Department"), acting on behalf of the Secretary of the Agency of Environmental Conservation (Secretary), determined that a Discharge Permit was not required under the Vermont Water Pollution Control Act, 10 V.S.A., Chapter 47 for the disposal of treated effluent applied by spray irrigation to Site "F."
- 2. The Secretary's decision that a Discharge Permit is not required prior to the disposal of treated effluent applied by spray irrigation to Site F is appealable to the Water Resources Board pursuant to 10 V.S.A. §1269.

- 3. The Water Resources Board, by its order dated April 25, 1985, regarding the Sunrise Group appeal of Certification of Compliance #1R0501-4, ruled that Certification of Compliance #1R0501-4 is properly issued under the authority of the Vermont Health Regulations, Subchapter 10, Part III and that under those regulations, Site F is approved for the disposal of 100,000 gpd of secondarily treated sanitary wastes by spray irrigation.
- 4. In paragraph 6 of its April 25, 1985 order the Water Resources Board stated that its decision regarding the Sunrise Group appeal of Certification of Compliance #1R0501-4 "does not in any manner address the applicability of 10 V.S.A., Chapter 47."
- 5. Spray irrigation is a method of waste disposal in which treated wastewater is piped to a spray site, and uniformly sprayed under pressure over the site at controlled intervals. This is accomplished through a gridwork of pipes from which vertical pipes with spray nozzels are installed.
- 6. Site F is located within the Town of Mendon, in a forested area between the so-called "Juggernutt Ski Trail" operated by Killington Limited, and the North Branch of Madden Brook.
- 7. Wastewater sprayed on Site F would penetrate through a minimum of one foot of unsaturated soil until it reaches the groundwater.
- 8. Groundwater moves through soil in response to hydraulic pressures and after a period of time finds its way into surface waters.
- 9. The groundwater flow regime of the area in which Site F is located, is to the North Branch of Madden Brook.
- 10. Effluent sprayed on Site F in the volume and at the rate permitted by Certification of Compliance #1R0501-4, will result in a hydrologic response in the North Branch of Madden Brook in 1.3 to 9.6 days depending on the rate and place of application. (VNRC/CRWC Exhibit #1)
- 11. The characteristics, properties and qualities of the water which would enter the North Branch of Madden Brook as a result of the disposal of treated effluent by spray irrigation to Site F would be measurably different than the characteristics, properties and qualities of naturally occurring water entering the North Branch of Madden Brook. The differences would include, the concentration of nitrates, nitrites and chlorides.
- 12. Because the water which would enter Madden Brook as a result of the disposal of treated effluent applied by spray irrigation to Site F would be measurably different from

naturally occurring water entering the Brook, it constitutes "waste" within the meaning of 10 V.S.A. §1251(12).

- 13. The North Branch of Madden Brook, a body of surface water in the Ottauquechee River watershed, constitutes "waters" (of the State) within the meaning of 10 V.S.A. §1251(13).
- 14. The placing, depositing or emission of a waste into the waters (of the state), regardless of whether it reaches those waters by a direct or an indirect route, constitutes a "discharge" within the meaning of 10 V.S.A. §1251(3).
- 15. The subsurface flow of treated effluent applied by spray irrigation to Site F into the North Branch of Madden Brook, would constitute the discharge of a waste into the waters of the state within the meaning of 10 V.S.A. §1251(3, 12, and 13).
- 16. Any person who intends to discharge a waste into waters of the state must first obtain a Discharge Permit, 10 V.S.A. §1263.
- 17. To the extent that they are inconsistent with the foregoing, all Findings of Fact and Conclusions of Law proposed by the parties are hereby denied.

Order

On the basis of the above Findings of Fact and Conclusions of Law, the Water Resources Board makes the following Order:

- The Water Resources Board has determined that it has jurisdiction in this appeal under authority of 10 V.S.A. §1269.
- 2. The Sunrise Group shall obtain a Discharge Permit pursuant to 10 V.S.A. §1263 prior to the disposal of 100,000 gpd of treated effluent by spray irrigation at Site F.

Done this 10th day of October, 1985, at Berlin, Vermont.

Dermont Water Resources Board

Catharine B. Rachlin, Chairman

William Boyd Davies

Kathleen A. Scheele