

ROCKY MOUNTAIN LOW-LEVEL RADIOACTIVE WASTE BOARD

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MEMORANDUM

TO: Rocky Mountain Low-Level Radioactive Waste Board

FROM: Leonard C. Slosky, Executive Director

RE: **Executive Director Report on Proposed Limited Regional Facility**

DATE: May 19, 2005

This memorandum serves as the Executive Director's report ("Report") required by the Board's rule regarding the application from the State of Colorado (dated April 18 and May 5, 2005) ("Application") to designate a regional facility at the Clean Harbors Deer Trail Facility ("CHDTF"). This Report identifies the key issues associated with the application to aid the Board with its decision. Please note that at any time during the proceedings on May 27 that a Board member has questions for legal counsel, the Board may go into executive session to seek legal advice.

Regulatory Provisions

Rule 3.5 C. of the Board states the following.

Executive Director Report. The Executive Director shall review the Application for a Regional Facility in light of the requirements of the compact and shall prepare a report for the board recommending approval, together with any proposed conditions, or disapproval of the Application for a Regional Facility.

Rule 3.6 of the Board states the following.

The Board shall approve the proposed facility only if it finds, after considering information presented in the Application for a Regional Facility, any written comments, and testimony received at the meeting, that (1) there will be for the foreseeable future sufficient demand to render the operation of the proposed facility economically feasible without endangering the economic feasibility of the operation of any other regional

MEMBER STATES: COLORADO, NEVADA, NEW MEXICO
EXECUTIVE DIRECTOR: LEONARD C. SLOSKY

facility; and (2) that the proposed facility will have sufficient capacity to serve the needs of the region for a reasonable period of years. The Board may impose on an approved regional facility reasonable conditions that may be necessary to carry out the intent of the compact.

I am hereby presenting the Executive Director's Report pursuant to Board Rule 3.5 C.

Analysis

Nature of the Waste to be Accepted by the Proposed Regional Facility and the Existing Clean Harbors Deer Trail Facility

The nature of the proposed Regional Facility and the nature of the existing CHDTF are important factors to consider in the assessment of the Application.

1. The Application is for a narrow category of low-level radioactive waste ("LLW") as defined in the Compact.

Waste from the mining, milling, smelting, or similar processing of ores and mineral-bearing material primarily for radium ("Radium Process Wastes").

Thus, the Application does not proposed to accept most types of LLW as defined in the Compact.

2. The CHDTF is an existing hazardous waste treatment and disposal facility that has been permitted and has been operating under the Resource Conservation and Recovery Act and the laws of the State of Colorado for a number of years.

Economic Impact On Any Other Regional Facility

The first criterion in Rule 3.6 that the Board must consider in evaluating the Application primarily addresses the economic impact of a proposed regional facility on existing regional facilities. As there currently are no designated regional facilities, this criterion is basically moot.

The first criterion could also be interpreted to addresses whether there is sufficient demand to render the operation of the proposed facility economically feasible. As the CHDTF is an operational hazardous waste treatment and disposal facility, the Application and supporting documents represent that the modifications in operational procedures needed to accept Radium Processing Wastes are modest. The fact that the operator of the CHDTF has made application to the State of Colorado to dispose of Radium Processing Wastes is evidence that the operator believes that the proposed facility is economically feasible. In addition, the quantity of Radium

Processing Wastes that the City and County of Denver (“Denver”) plans on disposing over the next few years is large in terms of LLW generation and disposal. I understand that from 2005 through approximately 2007, Denver plans on disposing approximately 426,000 cubic feet of Radium Processing Wastes. For comparison, in 2004 the total quantity of non-radium processing LLW exported from the Compact Region was 8,846 cubic feet. The total quantity of waste disposed at the Northwest Compact’s regional facility in 2004 was 66,186 cubic feet.

Thus, I conclude that the Application meets criterion one.

Capacity To Serve The Needs Of The Region For A Reasonable Period Of Years

The second criterion in Rule 3.6 that the Board must consider in evaluating the Application is the capacity of the facility to meet the needs of the Compact Region.

1. Need for the Proposed Facility. The only significant quantities of Radium Processing Wastes that I am aware of in the Compact Region are the Denver radium wastes. I am aware of two activities that are currently disposing of Denver radium wastes. The first is the Denver project that is expected to result in the disposal of approximately 15,800 cubic yards of waste over the next three-or-so years. The second is the Shattuck site remediation which is expected to be completed in 2005 with all waste being exported for disposal outside of the Compact Region. Thus, I estimate the Region’s need for Radium Waste disposal to be approximately 16,000 cubic yards over the next three-or-so years.

2. Capacity of the Proposed Facility to Meet the Regional Need. The Application indicates that the capacity of the proposed facility for the disposal of Radium Processing Waste is on the order of 593,000 cubic yards, while the total capacity of the facility is on the order of 2,374,000 cubic yards. Thus, the proposed facility has far more physical capacity than the amount of Radium Processing Waste expected to be disposed of by generators in the Compact Region. However, the Application also states that no decision has yet been made by the Colorado Department of Public Health and Environment (“CDPHE”) as to the acceptable capacity of the permitted cells for radioactive wastes. It is also stated in the Application that a specific set-aside capacity has not been identified for Radium Processing Wastes.

During the Board meeting on the Application, the CDPHE should be asked if the State has determined the acceptable capacity of the proposed facility for Radium Processing Wastes and if a specific set-aside capacity for such wastes has been identified.

According to the Application, Clean Harbors has estimated the life expectancy of the CHDTF to be a minimum of 30 years. The Application also indicates that the proposed facility clearly has sufficient capacity for Radium Processing Wastes for at least five years.

3. Conclusion. Given the significant quantities of Radium Processing wastes in the Compact Region expected to be disposed of over the next three-or-so years and the very large physical capacity of the proposed facility, I conclude that the proposed facility has sufficient capacity to serve the needs of the Region for a reasonable period of years if the proposed facility is authorized by the CDPHE to accept at least 16,000 cubic yards of Radium Processing Wastes.

Thus, if the CHDTF is authorized by the CDPHE to accept at least 16,000 cubic yards of Radium Processing Wastes, I believe that the Application has met the second criterion. If this is the case, the Application has met both criteria in Board Rule 3.6 for designation of the CHDTF as a Regional Facility for the disposal of Radium Processing Wastes.

Recommendations

The Application for the proposed facility has met the criteria in Board Rule 3.6 once the facility is authorized by the CDPHE to accept at least 16,000 cubic yards of Radium Processing Wastes. Therefore, I recommend that the Board designate the CHDTF as a Regional Facility for disposal of Radium Processing Wastes and that the Board authorize the Executive Director to issue a permit to the CHDTF as a Regional Facility for the disposal of Radium Processing Wastes, incorporating the conditions outlined below at such time, if any, that the Executive Director receives documentation that the CDPHE has authorized the facility to accept at least 16,000 cubic yards of Radium Processing Wastes subject to the following:

1. The designation shall be effective only if and when the CDPHE fully licenses and authorizes the proposed facility to accept at least 16,000 cubic yards of Radium Processing Wastes;
2. The CDPHE includes as a condition of the license/permit issued to the CHDTF that at least 16,000 cubic feet of capacity be set aside for Radium Processing Waste; and
3. The CDPHE includes as a condition of the license/permit issued to the CHDTF a prohibition on the receipt of any radioactive waste, as defined by the Board's Rules, from outside the Compact Region without written authorization from the Board.

Conditions

It is recommended that the Board's permit for the Clean Harbors Deer Trail Regional Facility contain the following conditions.

- A. The CHDTF shall not accept any radioactive wastes, as defined by the Board's Rules, except for wastes from the mining, milling, smelting, or similar processing of ores and mineral-bearing material primarily for radium in which the total activity of natural uranium and

thorium decay chain products is less than 2,000 picocuries per gram and the concentration of radium 226 is less than 400 picocuries per gram.

B. The CHDTF shall not accept any radioactive wastes, as defined by the Board's Rules, from outside the Compact Region unless authorized to do so in writing by the Board.

C. The CHDTF shall not accept any naturally occurring radioactive material or technologically enhanced naturally occurring radioactive material without written authorization by the Board.

D. Clean Harbors shall provide the Board a monthly report specifying the number of tons of Radium Processing Wastes received from each source (generator). The monthly reports shall be provided to the Board within 10 days of the end of each month.

E. Upon request by the Board, Clean Harbors shall provide the Board access to and copies of any shipping documents and/or manifests for radioactive and non-radioactive wastes received at the CHDTF.

F. Clean Harbors shall collect the Compact Surcharge imposed by the Board on each unit of radioactive waste, as defined by the Board's Rules, that is received at the CHDTF. Clean Harbors shall pay the Compact Surcharge to the Board within 30 days of the end of each month.