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United States Environmental Protection Agency
Washington, D.C.
Office of Solid Waste and Emergency Response

INTERPRETATION OF THE BEVILL EXEMPT STATUS OF WASTES AT THE MAGCORP FACILITY

March 23, 1994

MEMORANDUM

SUBJECT: Magcorp Bevill Exemption

FROM: Michael Shapiro, Director
Office of Solid Waste

TO: Robert L. Duprey, Director
Hazardous Waste Management Division
Region VIII

This memorandum is in response to your July 9, 1993, memorandum to Matthew Straus regarding Region VIII's interpretation of the Bevill exempt status of wastes at the Magcorp facility. We agree with your and Terry Anderson's August 4, 1992, letter (attached) which states that the scope of the exemption is limited to the wastewater streams only directly related to the beneficiation and processing of the ore and not a combined waste stream of all wastewaters from the facility.

In particular, in addition to beneficiation waste streams EPA intended that only two waste streams--scrubber underflow process wastewater and scrubber liquor process wastewater--from the Magcorp facility specifically qualify as exempt mineral processing wastes. These waste streams are explicitly identified in the 1990 Mineral Processing Wastes Report to Congress (RTC). (See attached Chapter 11 on Magnesium Production.) EPA relied on a number of information sources in its evaluation, including the 1989 National Survey of Solid Wastes from Mineral Processing, EPA's 1989 Trip Report to Magcorp's Rowley facility, and review of all docket materials including comments from Magcorp. (These are attached for your information.) Based upon this evaluation, EPA intended to distinguish between Magcorp's special waste streams and other

aqueous wastewaters.

Additionally, this exemption applies only to these wastes streams "as generated", which means the point at which they are produced from the processing of the ore or mineral (see 54 FR 36609, September 1, 1989). As applied to Magcorp, this means that the exempt wastewaters are generated from the scrubbers and the exemption may be jeopardized if non-exempt wastes are commingled with the wastewaters.

Magcorp states in its April 21, 1993, letter that the aggregate wastewater stream from the facility is a Bevill exempt waste. This is inconsistent with the EPA's statement in the preamble to the 1989 rule that " . . . the Agency [must] examine individual waste streams in order to determine whether current management practices are adequately protective of human health and the environment and whether individual Bevill wastes are amenable to Subtitle C controls" (see 54 FR 36609, September l, 1989). Further, in response to industry commentors' assertion that segregation of waste streams would be impractical, the preamble to the 1989 rule states "[t]he fact that wastes are currently commingled at some point in the production [is] irrelevant to this determination, as are site-specific permit requirements" (see 54 FR 36610, September l, 1989).

I would like to address the issue of the location of the sample that EPA took in its June 20, 1989, sampling visit. Magcorp states in its April 21, 1993, letter that EPA's sampling team collected a sample of the combined waste stream from the main wastewater ditch downstream from the point of convergence of the component waste streams. Magcorp claims that this sample location represented composite of all aqueous waste streams directly associated with the purification and electrolysis process at its Rowley facility. We do not dispute that EPA took the sample at that location. Prior to EPA's visit to the site, Magcorp indicated on page 5-5 of the survey that there were 4 separate inflows into the impoundment. When EPA arrived onsite to conduct sampling, the Agency, therefore, already understood that there were multiple inflows entering the impoundment. Further, the location of sampling, an open trench, was used by the Agency since access to previously indicated individual inflows was not possible. The fact that the Agency sampled a combined flow at that location does not convey any special status to the entire flow entering the impoundment. This issue was discussed in Chapter 11 of the 1990

Report to Congress.

As discussed above, not all of the aqueous wastestreams associated with the purification and electrolysis process are exempt under 40 CRF 261.4(b)(7). EPA clearly distinguished between several of the Rowley facility's aqueous wastewaters in Chapter 11, pp. 3-4 of the 1990 RTC (e.g., the second source of special waste--scrubber liquor--is differentiated from non contact cooling water which is not a special waste). This is supported by the 1990 Report To Congress statement that "[t]he impoundment is also used for disposal of several other aqueous wastewater that are not special wastes from mineral processing operations (e.g., calcium repulp liquor, calcium chloride thickener, and additional beneficiation wastewaters) . . ." With respect to volumes, EPA relied on Magcorp's comments addressing the October 20, 1988, Notice of Proposed Rulemaking (53 FR 41288) that approximately 2,465,000 metric tons of process wastewater and 1,060,000 metric tons of non-contact cooling water (not a special waste, see above) were generated in 1988. While we understand that the volume of process wastewater includes aqueous wastes in addition to the two specifically identified by EPA in the 1990 Mineral Processing Wastes Report to Congress, our judgement led us to the conclusion that the great majority of this process wastewater does comprise the two special wastes. If in fact the Agency had more detailed information on volumes, we may have reached a different determination regarding the Bevill status of the two aqueous wastestreams.

Your letter also states that when hazardous wastes are introduced into a Bevill exempt waste stream, the combined stream is subject to full Subtitle C requirements. The promulgated rule applicable to the mixture of a characteristic hazardous waste with a Bevill-exempt waste or other solid waste states that such a mixture may be hazardous waste if the resulting mixture exhibits a hazardous characteristic not exhibited by the Bevill waste alone (see 54 FR 36622 September 1, 1989; 40 CFR 261.3(a)(2)(i)). From the available information, it is clear that several exempt and non-exempt waste streams are mixed at various points in the Magcorp operations. Under EPA's rules, the act of mixing a hazardous waste with a Bevill-exempt waste, listed hazardous waste, or other solid waste may also require a Subtitle C permit if treatment of the hazardous waste is occurring because of the mixing (see definition of treatment at 40 CFR 260.10).

Some of these waste streams mentioned in Terry Anderson's letter, such as wastes from lab drains and vehicle maintenance, would be considered wastes that are not uniquely associated with mineral extraction, beneficiation, or processing. These wastes may be subject to RCRA Subtitle C if they are characteristically hazardous or they are listed as hazardous. The concept of "uniquely associated" has been used consistently by the Agency as a factor in determining which wastes would remain under the Bevill Amendment. (See 45 FR 76619, November 19, 1980, and 54 FR 36616, September 1, 1989.) The Bevill exclusion does not apply to solid wastes such as discarded commercial chemicals; they are not uniquely associated with mineral extraction, beneficiation, or processing. Other wastes not uniquely associated with mineral extraction, beneficiation, or processing include many cleaning wastes (such as a spent commercial solvent that was used in cleaning production vessels) and used lubricating oils.

To summarize, based upon the information in Terry Anderson's letter concerning wastes produced at the Magcorp facility, and upon the Agency's interpretation of the scope of the Bevill exemption, the following wastes would not be uniquely associated with mineral extraction, beneficiation, and processing and would not be exempt from RCRA Subtitle C under 40 CFR 261.4(b)(7):

> washdown water from facility cleaning operations, lab drains, vehicle maintenance floor drains, used antifreeze, demineralized water plant discharge, surface runoff, cooling tower discharge, ethylene glycol from auto shop and cast house, and lubrication oils from compressor blowdown.

According to the 1990 Report to Congress, at the Magcorp facility mineral processing begins with the addition of chlorine gas to the impure anhydrous magnesium chloride powder. Based upon interpretation of EPA's rules, wastes generated after mineral processing begins do not qualify for the Bevill exclusion unless those wastes are one of the 20 mineral processing wastes under 40 CFR 261.4(b)(7)(i-xx). As previously stated, only two waste streams, specifically scrubber underflow process wastewater and scrubber liquor process wastewater from the Magcorp facility qualify as exempt mineral processing wastes. Beneficiation wastes generated prior to the start of mineral processing wastes also qualify for the Bevill exclusion (see 54 FR 36619, September 1, 1989.) In the July 1990 Report to Congress on Special Wastes from

Mineral Processing, page 11-2 (attached), we identified two such waste streams. Specifically, the waste stream from the desulfation process and the waste stream from the boron removal process would be exempt beneficiation wastes.

In order to determine the status of the other waste streams mentioned in Terry Anderson's letter, it would be necessary to determine specifically whether these wastes are generated prior to or after the start of mineral processing. We believe that it would be most efficient for the Region and state inspectors to make these determinations since they are the most familiar with Magcorp's current operations.

I hope this is useful in your efforts to determine the regulatory status of the wastes at Magcorp. If your staff needs to discuss this matter further, please contact Bob Hall or Steve Hoffman of my staff at (703) 308-8424 or (703) 308-8413, respectively.

Attachments