

9441.1989(48)

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

SEP 12 1989

MEMORANDUM

SUBJECT: Laclede Steel Company, Alton, Illinois
(ILD 006 280 606)

FROM: Matthew Straus, Deputy Director
Characterization and Assessment Division

TO: David A. Ullrich, Associate Director
Office of RCRA
Waste Management Division

This memorandum is in response to your memorandum dated July 25, 1989 in which you request our review and determination of the regulatory status of waste produced by Laclede Steel Company, which manufactures specialty carbon and alloy steel from scrap iron.

Based on the information provided, the characterizations of the particulates generated in the furnaces during the melt down process, which are collected in a baghouse, as electric arc furnace dust (Hazardous Waste No. K061) and the spent pickle liquor as Hazardous Waste No. K062 are correct. There appears to be little question in this regard. The issues in question and on which this memorandum focuses relate to the exclusions claimed by Laclede Steel Company with respect to their K062 waste.

Laclede Steel has claimed three separate exclusions from the definition of solid waste for its K062 waste. The Agency believes each of these claims to an exclusion are unfounded, at least under Federal regulations. Each of the exclusions is discussed below.

The first exclusion claimed is the "closed-loop recycling" exclusion found at 40 CFR 261.4(a)(8). This exclusion, promulgated in the July 14, 1986 Federal Register notice (51 FR 25422), states that a material is not a solid waste if it is recycled and returned to the original process from which it was generated provided that: 1) only tank storage is involved; 2) the entire process is closed by being entirely connected by pipes; 3) the reclamation does not involve combustion; 4) there is no speculative accumulation of the material; 5) the

reclaimed material is not used to produce a fuel; and 6) the reclaimed material is not used to produce a product that will be placed on the land.

Laclede is not eligible for this exemption. The reason is that the K062 is trucked (not piped) to the recycling site. While the closed-loop exclusion does allow for the use of "other comparable enclosed means of conveyance," the Agency would not deem trucks to be comparable. The preamble discussion found at 51 FR 25443 clearly states EPA's intent that the closed nature of the process is a decisive factor and further defines that "closed" refers to "hard connections from point of generation to point of return to the original process." Trucks do not meet this definition. In addition, if the recycled materials are used to produce a product (such as fertilizer) that is applied to the land (i.e., used in a manner constituting disposal per Section 261.4(a)(8)(iv)), the solid waste exemption would not apply. There may also be some question as to whether the storage unit Laclede uses meets the definition of a tank or a surface impoundment. There was not enough information provided to make that determination; the Region or State must define the storage unit.

The second exclusion that Laclede is claiming is found at section 721.104(a)(7) of the State regulation (which is assumed to be equivalent to 40 CFR 261.2(e)(ii), involving use/reuse of a material as a substitute for a commercial product). While this exclusion may apply to the iron sulfate by-product from the reclamation activity, it would definitely not apply to the K062 waste. This exclusion applies to materials which are used or reused without reclamation (see the January 4, 1985 Federal Register notice, 50 FR 637, 638). The K062 is clearly being reclaimed and, therefore, is not eligible for this exclusion. Again, the exemption would not apply if use constituting disposal is involved (see Section 261.2(e)(2)(i)).

The third exclusion Laclede claims is under section 721.102(e)(1)(B) of the State regulation (which is assumed to be equivalent to 40 CFR 261.4(a)(7), involving the exemption of spent sulfuric acid used to produce virgin sulfuric acid from the definition of solid waste). Apparently, Laclede is confusing reclamation of a spent material with the production of virgin material. The K062 is definitely being reclaimed (i.e., contaminants are being removed to make it reusable). The preamble discussion found at 50 FR 642 (January 4, 1985) clearly describes the process of using spent sulfuric acid as an ingredient in the production of virgin sulfuric acid. Nothing in the reclamation process indicates that virgin sulfuric acid is being produced with K062 used as an ingredient. Therefore, this exclusion is also not applicable

to Laclede.

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The regulatory determination of concern associated with the Laclede facility is that K062 is a hazardous waste being reclaimed. The residues of the reclamation process (which itself is not regulated) are also hazardous waste K062 (although the sulfuric acid that is recovered is an effective substitute for a commercial chemical product) and must meet the treatment standards (and notification requirements) under the land disposal restrictions program (40 CFR Part 268) prior to placement on the land (i.e., before a fertilizer produced from the iron sulfate can be applied to the land). Also, the iron sulfate (after reclamation) may be demonstrated to be an effective substitute for a commercial chemical product for uses other than those constituting disposal and, if so, would cease to be a K062-derived hazardous waste.

If you have any additional questions, please contact Mitch Kidwell at FTS 475-8551.