

PPC 9444.1984(11)

K062 - SPENT PICKLE LIQUOR LISTING

27 JUL 1984

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

Subject: Clarification of K062 - Spent Pickle Liquor Listing

From: John H. Skinner, Director
Office of Solid Waste

To: Directors, Waste Management Divisions
EPA Regions I-X

Within the past year, several EPA Regional Offices have requested clarification of EPA Hazardous Waste No. K062- Spent pickle liquor from steel finishing operations. This interpretive memorandum addresses several questions and issues which have been raised regarding the listing.

- 1) Which operations/processes are considered "steel finishing operations" and thus are covered by the listing?

The Office of Solid Waste (OSW) defines "steel finishing operations" as processes which impart desired mechanical and surface characteristics to steel. The following processes are included in this description and are intended to be covered by the K062 listing, provided that spent pickle liquor is generated:

- 1) acid pickling
- 2) alkaline cleaning
- 3) cold reduction
- 4) blast cleaning
- 5) cold drawing
- 6) cold rolling
- 7) galvanizing
- 8) coating with organic and inorganic compounds
- 9) tempering

- 10) coating of steel with metals 1/
- 11) tin plating
- 12) electropolishing

Although the background document for K062 addresses only spent pickle liquor from the iron and steel industry, the Agency intended the listing to cover all industries engaged in the pickling of steel. Indeed, many persons who generate spent pickle assumed that the listing was much broader than indicated in the background document.^{2/} Furthermore, on January 4, 1984, (see Notice of Availability of Data and Request for Comments, 49 FR 427) the Agency stated that steel finishing is practiced by a diverse group of manufacturers. The large number of notifiers indicate that generators in many industry categories are aware of this interpretation.

Recently, representatives from the porcelain industry informally challenged OSW on its interpretation of the K062 listing. It is their position that the listing pertains only to the iron and steel industry.^{3/} However, for reasons stated earlier, to the extent that facilities within this industry category pickle steel prior to coating or enameling, the spent pickle liquor (or any waste derived therefrom) is considered the listed waste.

The Agency realizes that concentrations of the hazardous constituents of concern for which spent pickle liquor was listed may differ among industries based on process variations; however, wastes that do not meet the criteria for which pickle liquor was originally listed may be excluded from regulation on a site-specific basis (delisting pursuant to 40 CFR 260.20 and 260.22). The Agency also will consider industry-wide petitions to delist these wastes.

1/ Although coating of steel with metal (electroplating) is considered "steel finishing," the Agency did not intend the K062 listing to include electroplating processes that generate spent pickle liquor. This would be duplicative since electroplating wastes are specifically covered under F006.

2/ Data from the RCRA Notification data base indicate that

a diverse group of industry categories pickle steel and generate spent pickle liquor (e.g., metal working machinery and equipment; refrigeration and service industry machinery; coating, engraving and allied services; sanitary services; aircraft and parts, and others).

- 3/ Approximately half of the facilities within the porcelain industry have notified that they generate either K062 or the lime stabilized waste pickle liquor sludge.

At this time, the Agency has taken action on a rulemaking petition submitted by the American Iron and Steel Institute (AISI) to remove lime stabilized waste pickle liquor sludge (LSWPLS) (formerly referred to as lime neutralized waste pickle liquor sludge) from the presumption of hazardousness contained in the regulations. This exclusion however, applies only to LSWPLS that is generated by the iron and steel industry (SIC Codes 331 and 332). (See 49 FR 23284 - 23285, June 5, 1984 for specific details regarding the conditions of the exclusion).

- 2) Many electroplating operations pickle prior to electroplating. Is the waste generated from this process considered F006, K062, D002, or both F006 and K062?

In considering petitions to delist electroplating waste, the Agency has stated that the F006 listing includes acidic wastes (i.e., spent pickle liquor) from the electroplating process. Electroplating operations typically pretreat the metal using acidic baths prior to electroplating. The acidic wastes from this process are generally mixed with spent plating bath solutions and lime treated. Sludge generated from this process is considered F006. For example, an electroplater acid pickles metal parts as part of the electroplating process. The resultant wastewater (including spent pickle liquor and rinsewater) is neutralized with lime. Sludge generated from this process is F006. In another example, a galvanizer also pickles metal parts prior to galvanizing. Since galvanizing is not included under the electroplating category, spent pickle liquor from this process would be considered EPA Hazardous Waste K062. If

the pickle liquor is lime treated prior to disposal, the sludge from this process is a hazardous waste by virtue of the "residue rule" (§261.3(c)(2)).

In cases where acidic wastes from the electroplating operation remain untreated or are segregated from other process waste and treated separately, the waste is then considered K062 (or lime stabilized waste pickle liquor sludge).

- 3) Does the K062 listing pertain to spent pickling acids other than those listed in the background document for K062 (i.e., H₂SO₄, HCL, and HNO₃ + HF)?

In developing the background document for K062, the Agency listed the most commonly used pickling agents. However, we intended the listing to include all acids used in the pickling of steel.

I trust that this memorandum adequately clarifies the K062 listing. Should you have questions, or require additional information, please call Jacqueline Sales at FTS 382-4770.

cc:

Gene Lucero, OWPE
Kirk Sniff, OECEM
Bill Hedeman, OWRR