

TEXAS WATER COMMISSION

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September 27, 1989

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SEP 29 1989

MANAGER'S OFFICE
CORPUS CHRISTI PLANT

R. T. Cardenas
Encycle/Texas, Inc.
Post Office Box 4767
Corpus Christi, Texas 78469-4767

Re: Solid Waste Registration Number 30003

Dear Mr. Cardenas:

This is in response to your letter of July 12, 1989 to the Texas Water Commission (TWC), in which you requested concurrence that the described solids, generated at Encycle/Texas, Inc., are not solid waste when sent to a smelter for the production of refined metals.

The specific exclusion from the definition of a solid waste cited in your letter corresponds to 31 Texas Administrative Code (TAC) 335.1(Solid Waste Definition)(F)(ii). This provision states that materials which are "used or reused as effective substitutes for commercial products" are not considered solid waste, provided they are not disqualified under 31 TAC 335.1(Solid Waste Definition)(G) for this exemption.

The information submitted in your letter of July 12th, Keith Hopson's letter of October 7, 1988 and the July 14, 1989 meeting between representatives of Encycle/Texas Inc. and the TWC, indicates that Encycle/Texas, Inc.'s solids contain higher concentrations of salable metals than typically found in metal concentrates generated from raw ore. It is the understanding of the TWC that the portion of the solids, which will not become refined metal, does not interfere with normal smelting operation or contain hazardous constituents other than: 1) metals which will be "refined" and/or 2) constituents which could cause the material to exhibit a characteristic of a hazardous waste. TWC staff also understands that the solids will be sent to a primary smelting operation. Based upon this information, it appears to the TWC that

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the solids are effective substitutes for the metal concentrates these smelters ordinarily accept. Due to the fact that ore concentrates are products produced from raw ore and are managed as commodities, TWC believes that your solids are eligible for the exclusion from the definition of a solid waste provided to materials which are "used or reused as effective substitutes for commercial products."

TWC staff would like to remind you that it is Encycle/Texas, Inc.'s continuing obligation, under 31 TAC 335.1(Solid Waste)(H), to be able to provide sufficient information to demonstrate that they meet the terms of the exclusion and that the exclusion is not nullified under 31 TAC 335.1(Solid Waste)(G). TWC suggests that, at a minimum, records be kept which reflect the following:

1. The quantity of solids generated;
2. The description (including composition) and quantity of solids sent to each smelter;
3. The identity of each smelter;
4. The quantity of precipitated solids introduced into each smelter's operation; and
5. A description of products produced and their disposition.

The above list is presented to you for guidance purposes only and is not intended to serve as a complete listing of information that might be required to demonstrate that the solids are being managed in accordance with all applicable regulations which may be in effect at the time the appropriateness of the exclusion may be questioned.

If there is a change in the management of the solids (including, but not limited to, the process into which it is incorporated), Encycle/Texas, Inc. shall immediately notify the TWC, in writing, of those changes. If the solids must be disposed of, they will be considered an industrial solid waste and subject to all applicable regulations of 31 TAC Chapter 335 (including, but not limited to, manifesting requirements).

In subsequent telephone conversations between Mr. Hopson and members of the TWC, as well as Mr. Hopson's letter of August 7, 1989 to Lisa Montgomery of the TWC, it was requested that the TWC concur with the following conclusions:

- 1) Encycle/Texas, Inc. solids are not waste when used as ore concentrates in operations other than primary smelting;
- 2) Solids, which are similar to Encycle/Texas, Inc. solids, but are generated by another facility and then sent to Encycle/Texas, Inc. for further treatment and/or sale, are not considered waste when managed as Encycle/Texas, Inc. solids which have been excluded from regulation; and
- 3) Encycle/Texas, Inc. solids, other than those substituting for ore concentrates, are not solid waste if they are effectively used as substitutes for commercial products or as ingredients in industrial processes.

In evaluating these subsequent requests, TWC staff would like to note that each request for an exclusion from regulation as a solid waste is centered around not only the material in question, but also the use of that material.

In order to evaluate your conclusion that the solids are not waste when used as ore concentrates in operations other than primary smelting, TWC staff requires, at a minimum, the following information:

- 1) Identification of the types of operations;
- 2) A description of these operations; and
- 3) A comparison of the solids and the ore concentrate typically used in this type of operation.

The comparison of the solids and the ore concentrate it will be replacing should include, but is not limited to, the identity and concentration of toxic constituents and potentially harmful substances not normally found in the ore concentrate and the identity and concentration of toxic constituents and potentially hazardous substances which exceed levels normally found in ore concentrates.

If the solids are substituting for ore concentrates typically used in these specific operations, and the solids do not contain concentrations of toxic constituents and/or potentially harmful substances which exceed those normally found in these types of ore concentrates, and the solids and their management are in compliance with the regulations exempting a material from the definition of a solid waste, then the solids used as ore concentrates in operations other than primary smelting operations, would not be considered waste.

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TWC has reviewed your conclusion that solids, which are similar to Encycle/Texas, Inc. solids, but are generated by another facility and then sent to Encycle/Texas, Inc. for further treatment and/or sale, are not considered waste when managed as Encycle/Texas, Inc. solids which have been excluded from regulation. TWC would like to state that the fact that a portion of the described process is performed at another location does not alter the status of Encycle/Texas, Inc.'s solids, unless the off-site processing results in solids which differ in composition and characteristics from those produced solely at Encycle/Texas, Inc.

TWC staff has reviewed the conclusion that the solids, other than those substituting for ore concentrates, are not solid waste if they are effectively used as substitutes for commercial products or as ingredients in industrial processes. TWC has adopted legislation which provides for these particular type of exclusions. (Please review 31 TAC 335.1(Solid Waste Definition)(F)(i) and (ii)). A material managed under these circumstances would not be considered a solid waste unless it was managed as described at 31 TAC 335.1 (Solid Waste Definition)(G).

If you wish to have TWC staff review a particular use of your solids in accordance with one the above listed exclusions, please provide the following information, in writing, to the Waste Classification Unit:


1. Evidence showing that the solids can actually be recycled and in sufficient quantities to qualify for the exemption;
2. A detailed description of the industrial process in which the solids will be used and how they will be used in that process;
3. Verification that the solids are handled in a safe and acceptable manner;
4. The effectiveness of the solids in comparison to the material they will be replacing;
5. The concentration of the constituents in the solids that are needed to obtain the proposed results and the basis for this determination;
6. The criteria the solids must meet before they can be accepted for the proposed recycling activity, the basis for this criteria, and the type of procedures to be

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- followed to ensure the solids meet acceptance criteria (including quality assurance/quality control procedures);
7. The material value the solids contribute to the recycling activity; and
 8. The identity and concentration of toxic and/or potentially harmful constituents in the waste and what these constituents contribute to the recycling activity.

While it is the policy of TWC to promote the reuse and recycling of waste, exclusion from regulation is not automatic for all recyclable materials. In order to exempt any waste from regulation as solid waste, TWC must be assured that the method of managing and recycling the waste is legitimate, beneficial, allowable under current state and federal regulations, and assures the protection of the public health and the environment.

Sincerely,



for Allen P. Beinke
Executive Director

cc: Texas Water Commission District 12 Office - Corpus Christi