

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DECEMBER 30, 1991

Mr. Edwin Bates
XENIUM Fiberglass Corporation
921 Monroe Street
P.O. Box 2696
Paducah, Kentucky 42002-2696

Dear Mr. Bates:

This letter is in response to your delisting petition for XENIUM (#0843), which was forwarded to us by EPA Region VII. You presented the petition in two parts. First, you petitioned for an exclusion of acetone wastes that are recycled and reused to clean tools and parts at your Caruthersville, Missouri facility. Second, you petitioned for an exclusion of the distillation bottom wastes that are generated during the recovery of acetone. These still bottoms are listed as EPA Hazardous Waste No. F003 because they are derived from the treatment of a listed hazardous waste.

In response to your petition regarding the exclusion of beneficially used wastes, we note that there is not a formal petition process set up under 40 CFR Part 261 that requires EPA to determine whether a waste is beneficially used, reused, or legitimately recycled or reclaimed. Rather, the classification of a waste as a "recycled" material is the facility's responsibility and, thus, a self-administered regulatory program. Because the XENIUM facility generating the waste in question is located in Missouri, a RCRA authorized state, we recommend that you discuss the beneficial use of your acetone waste with the appropriate State of Missouri authorities.

In accordance with 40 CFR §§260.20 and 260.22, which provide for a formal "delisting" petition process, we have reviewed the information submitted in your petition for the exclusion of your still bottom waste. Based on this review, we believe your petition to be seriously deficient. Although you have provided responses to each of the information requirements outlined under 40 CFR §§260.20 and 260.22, the information that you have provided is not sufficient for us to determine whether the petitioned still bottom waste should be excluded (i.e., delisted).

Our primary concern is that you have not demonstrated that the petitioned still bottoms do not contain significant levels of hazardous constituents. At a minimum, the delisting program requires petitioners to demonstrate that leachable levels of the organic and inorganic constituents listed in 40 CFR §261.24 do not exceed levels of concern. This demonstration requires designing a sampling plan to collect representative samples, identifying a target list of constituents, and analyzing the samples (using SW-846 methods) for total and leachable concentrations of hazardous constituents identified on this

target list. Typically, analytical data for a minimum of four samples would be necessary to support a petition for wastes such as yours.

Enclosure I to this letter describes, in general terms, the additional information that would need to be submitted to complete your petition. However, before you decide to provide tile additional information, you may wish to conduct a cost benefit analysis for submitting a complete petition (and possibly obtaining an exclusion) for the still bottom wastes, versus disposing of these wastes as hazardous. This would seem to be a reasonable approach since the maximum estimated volume of the petitioned wastes is less than 2 tons per year. You should also be aware that, because the delisting process is a rulemaking process, it typically takes at least 2 years before a final exclusion is published in the Federal Register. In addition, if a final exclusion is granted, XENIUM may be required to demonstrate (by testing a representative sample for the constituents potentially present), on an annual basis, that characteristics of the petitioned waste remain as originally described.

If you do decide to pursue a delisting, we recommend that you obtain a copy of the delisting guidance manual entitled "Petitions to Delist Hazardous Wastes - A Guidance Manual", EPA Publication No. EPA/530-SW-85-003, April 1985. This manual outlines all of the information necessary to submit a complete delisting petition. As we explained in our letter, dated July 25, 1991, you can obtain this document from the National Technical Information Service by contacting (703) 487-4650.

Finally, you may wish to consider whether your petitioned waste could be classified as a non-hazardous waste under the provisions of 40 CFR §261.3(a)(2)(iii). Based on language found in 40 CFR §261.3(a)(2)(iii), a mixture of a non-hazardous solid waste with a hazardous waste listed solely because it exhibits a characteristic specified in 40 CFR Part 261, Subpart C (e.g., your petitioned F003 waste), is not a hazardous waste if the resultant mixture no longer exhibits any hazardous waste characteristic. The delisting criteria of 40 CFR §260.22(c)(2) do not apply to such a waste and, therefore, a delisting is not required for exemption from regulation as a hazardous waste. As with delisted waste, however, the generator remains obligated to demonstrate to responsible State (or other) authorities that the resultant mixture remains non-hazardous based on the hazardous waste characteristics. If you wish to explore this option, we urge you to contact the appropriate authorities in Missouri and Region VII. As a RCRA-authorized state, Missouri would determine if this approach would apply to your specific waste.

At this time, we recommend that you review the information that we have provided in this letter. If you choose not to pursue a delisting based either on the §261.3(a)(2)(iii) criteria or your re-evaluation of the benefits an exclusion would provide, please forward a letter withdrawing your petition to the following address within one month of receipt of this letter to:

Mr. Jim Kent
U.S. Environmental Protection Agency
Office of Solid Waste, Mail Code OS-333
401 M Street, S.W.

Washington, D.C. 20460

In this letter, please indicate whether you consider the waste to be hazardous and how you intend to manage the waste. Should you still wish to pursue a delisting, you must fully respond to the additional information described in Enclosure I within six months of the date of receipt of today's correspondence. If we do not receive a complete response from you within six months, in accordance with the policy of the Agency, we will dismiss your petition from the petition review process (see 53 FR 6822, March 3, 1988). In that case, we will notify you of dismissal by letter.

Please note that it is to your advantage to submit the requested information before the six months expire, so that any remaining deficiencies identified subsequent to your submittal can be remedied within the six month time frame. If you do not believe that you can fully respond within six months you may wish to withdraw your petition and submit a complete new petition later at your convenience. If you prefer this option, you must send a letter withdrawing your petition and indicating that the petitioned waste will be considered hazardous and will be managed as such. Additional information or other correspondence should be forwarded to Mr. Jim Kent at the address listed above.

If you have any questions about this correspondence, please feel free to contact our technical consultant, Jenny Utz of SAIC at (703) 734-3163 or myself at (202) 260-4787.

Sincerely,

Narendra K. Chaudhari
Delisting Section

cc: Bob Kayser, EPA HQ
Jim Kent, EPA HQ
Chet McLaughlin, EPA Region VII
Jenny Utz, SAIC

ENCLOSURE I

XENIUM Delisting Petition (#0843) -- Additional Information

The following sections describe, in general terms, the types of information that would need to be included in your petition, specifically with regard to (1) Process Descriptions, (2) Sampling Plan Requirements, (3) Analytical Requirements, and (4) Quality Assurance/Quality Control Requirements.

Process Descriptions

The process descriptions that you submitted were incomplete. You would need to submit enough detailed information about the resin manufacturing processes and Smiseth Corporation's acetone recovery process to enable us to assess the potential for hazardous constituents to be introduced into the petitioned waste. This information would need to describe the types of fiberglass reinforced plastic products that are manufactured, the types of resins used, the types of tools and parts that require cleaning, whether processes are run on a batch basis, and the various additives, including paint pigments, that are commonly used. In addition, you should provide the location at which Smiseth Corporation recovers the spent acetone and whether Smiseth includes spent solvents (or any other wastes) from other facilities when recovering XENIUM's spent acetone. You should also provide Material Safety Data Sheets (MSDSs) for all materials, or other descriptive information that identifies the composition of the material (e.g., a listing of hazardous constituents in a material).

From this information, you should determine your target list of constituents for analysis (i.e., those constituents potentially present in the still bottom waste).

Sampling Plan Requirements

Delisting demonstrations require a sufficient number of samples of the petitioned waste to represent the variability or uniformity of the petitioned waste. We assume that the composition of the petitioned still bottom waste will be fairly constant since the acetone is used only to clean tools and parts. However, based on your knowledge of facility operations, you would need to provide an explanation why all samples collected and analyzed are thought to be representative of any fluctuations that may occur in the manufacturing and treatment processes.

In designing a sampling plan, we recommend that a minimum of four samples of the still bottom waste be collected over at least a one-month period. We suggest that four different "batches" of still bottom waste generated using Smiseth Corporation's jacketed distillation unit be sampled and analyzed in support of your petition. Samples should be collected in zero headspace containers to prevent potential loss of organic compounds. Because of the small volume of still bottom waste generated annually, we recognize that it may be difficult to collect and analyze samples from four different batches during the six 'month time period that we have allotted. If this is the case, we suggest that you contact us to discuss this (or any other) matter.

Your petition must describe how samples were collected. Specific sample collection information needed is described in the final section of this enclosure.

Analytical Requirements

In order for the petition to be considered complete you would need to perform the following analyses on the still bottom waste samples collected.

- Total constituent and TCLP analyses of the organic and inorganic constituents listed in 40 CFR §261.24, nickel, cyanide, and total sulfide. When testing for leachable cyanide, deionized water should be substituted for acetate buffer in the leaching procedure.
- Percent oil and grease using SW-846 Method 9070 to determine if the Oily Waste Extraction Procedure must be used. Only one analysis method for leachable metals is required: either the Oily Waste Extraction Procedure (OWEP), SW-846 Method 1330, for wastes having an oil and grease content at or above one percent, or the TCLP for wastes having an oil and grease content below one percent. It is to be noted, however, that you should substitute the TCLP for the extraction procedure in Step 7.9 of the OWEP. We plan to continue to require the OWEP for delisting demonstrations because the TCLP currently has no special provisions for oily wastes.
- Total constituent and leachate analyses should be performed for all constituents determined to be potentially present and listed on 40 CFR Part 261, Appendix VIII and the following substances which may be present in your waste: acetone, ethyl benzene, isophorone, 4-methyl-2-pentanone, styrene, and xylene. You may present arguments demonstrating that particular constituents cannot be present because they are not used at XENIUM's facility. You must consider all hazardous organic constituents identified during the evaluation of your manufacturing process information, such as the components of specific paint additives.

We recognize that the Appendix VIII list presents a number of analytical problems for some constituents. For analytical testing purposes, you must analyze the samples for those compounds which can be accurately quantitated using appropriate methods from "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods," (third edition) EPA Publication SW-846, November 1986. It should be noted that SW-846 methods exist for all constituents listed on 40 CFR Part 264, Appendix IX.

- Analyses demonstrating that the waste does not exhibit the characteristics of ignitability, corrosivity, or reactivity. This should include analyses for levels of reactive sulfide and reactive cyanide if total sulfide and cyanide levels exceed 500 and 250 ppm, respectively. In lieu of analytical testing for the above characteristics you may provide an explanation as to why the waste does not exhibit the characteristic.

Quality Assurance/Quality Control Requirements

All sampling and analyses must be accompanied by appropriate QA/QC information, including the following information:

- Detailed descriptions of each procedure used to collect, prepare, preserve, and analyze each sample. Also provide a list of names and models of all sample collection, preparation, preservation, and analytical instruments used. Please note that all analytical data must adhere to all sampling, preservation, and sample holding time requirements set out in SW-846. Dates of sampling, extraction, and analyses should be provided.
- Ensure that each sample is large enough to provide a sufficient volume of material for each of the analysis to be performed as specified by SW-846.
- The practical quantitation limits (PQLs) identified in SW-846 for all extract and waste samples should be followed. If a PQL is not available for a specific constituent, then laboratory detection limits should be as close to established drinking water standards as possible, if a standard has been established. Please report all of the analytical data, including constituents which were not detected (provide the detection limit).
- Descriptions of all appropriate QA/QC procedures followed during sample collection and analysis.
- Results from the appropriate QC procedures cited in SW-846 (e.g., method blank analyses, matrix spikes analyses, matrix spike duplicate analyses, and instrument calibration data). Procedures for these and other appropriate QC procedures are described in Chapter One of SW-846. Each analytical method in SW-846 notes which QC procedures are appropriate for that particular test method.
- Provide the professional qualifications (a brief resume will suffice) of all personnel involved in sampling and analyses.
- A certification statement (per 40 CFR §260.11(i)(12)) signed by an authorized representative of XENIUM (not a contractor).