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TITLE: Analytical Methods to Determine the Presence of
Creosote and Its Toxic Characteristics

APPROVAL DATE: 1-18-85

EFFECTIVE DATE: 1-18-85

ORIGINATING OFFICE: Office of Solid Waste

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STATUS:

[]	A- Pending OMB approval
[]	B- Pending AA-OSWER approval
[]	C- For review &/or comment
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Key Words: Creosote, Analytical Methods

Regulations: 40 CFR Part 261

Subject: Analytical Methods to Determine the Presence of Creosote and Its Toxic Characteristics

Addressee: Don B. Howard, C-K Associates, Inc., Baton Rouge, Louisiana

Originator: Agnes M. Ortiz, Chemical Engineer, Office of Solid Waste

Date: 1-18-85

Summary:

Creosote is present in K001 and U051. K001 refers to the wastes from wood preserving processes that use creosote and/or pentachlorophenol. U051 refers to creosote as a commercial chemical product which is only considered hazardous waste if discarded or intended to be discarded. Essentially, U051 is not present unless raw creosote is discarded.

Creosote is an extremely complex mixture of many compounds, and there is no single analytical method that can detect its presence. Recent information indicates that the procedure outlined in the footnote associated with creosote in 40 CFR Part 261, Appendix III, is not a reliable method to detect creosote.

Since EPA is primarily concerned with the toxic compounds that are present in creosote, EPA recommends that the owner or operator analyze for the toxic compounds identified as being present in K001 in 40 CFR Part 261, Appendix VIII. Analytical methods for these compounds are provided on Appendix III of 40 CFR, Part 261.

JAN 18 1985

Mr. Don B. Howard
C-K Associates, Inc
11848 South Harrell's Ferry Road
Suite A
Baton Rouge, Louisiana 70816

Dear Mr. Howard:

This letter is in response to your November 6, 1984, request for an analytical method to determine the presence of creosote. Alan Corson referred your letter to me, because I have been working with creosote regulations. In order to properly reply to your letter, I feel that some clarification is necessary.

K001 refers to wastes from wood preserving processes that use creosote and/or pentachlorophenol, which I presume is the case that you described. U051 refers to creosote as a commercial chemical product which is only considered as a hazardous waste if discarded or intended to be discarded. In other words, you will not have 4051 unless raw creosote is discarded.

As you may know, creosote is an extremely complex mixture of many compounds. The concentration distribution of these compounds varies depending both on reaction conditions and on the source of coal used. Unfortunately, we are aware of no single analytical method with which to determine creosote presence. Recent information indicates that following the procedure outlined in the footnote associated with creosote on Appendix III, is not a reliable indicator of the presence of creosote. EPA is presently working on a proposed rule to amend the hazardous waste regulations concerning creosote.

However, we are not concerned with creosote per se but rather, the toxic compounds that are present in creosote. I therefore, recommend you analyze for the toxic compounds identified as being present in K001 on Appendix VII. If any of these are present at the facilities you are concerned with, a potential hazard still exists. Analytical methods for these compounds are provided on Appendix III of 40 CFR part 261. Refer to Test Method for Evaluating Solid Waste (SW-846), Second Edition; Test Methods 8100, 8250, and 8310.

I hope these recommendations will be of assistance. Please feel free to contact me again, if you have any questions at (202) 475-8990.

Sincerely,

Agnes M. Ortiz
Chemical Engineer
Methods Program, WH-562B

cc: Region VI