9433.1987(21)

DELISTING PETITIONS FOR K-WASTES MANAGED IN ON-SITE LAND-BASED UNITS-MONITORING REQUIREMENTS

SEP 28 1987

Mr. John P. Gay
Manager-Environmental Engineer
Ashland Petroleum Company
Division of Ashland Oil, Incorporated
P.O. Box 391
Ashland, Kentucky 41114

Dear Mr. Gay:

The Permits and State Programs Division has completed a preliminary review of your petition (#0700), submitted on July 7, 1987, which requested the exclusion of EPA Hazardous Waste Nos. K048 through K052 generated at Ashland's Kentucky facility. Based on our preliminary evaluation of your petition we will recommend to the Administration for Solid Waste and Emergency Response that the petition be denied for the reasons discussed below.

We now require all petitioners who employ on-site land-based management of petitioned waste(s) to submit four quarters of ground-water monitoring data collected from a monitoring system judged to be adequate by the Regional EPA office or authorized State (i.e., the system must comply with all of the 40 CFR §265 Subpart F requirements). We note that your petition did not contain any monitoring data characterizing the ground water at the sedimentation basin, and therefore, your petition is incomplete. Submission of ground-water monitoring data which show no existing contamination is not, in itself, sufficient grounds for the exclusion for petitioned wastes. The Agency also evaluated the analytical data for the petitioned wastes for evaluate their potential to contaminate ground water.

Despite the fact that your petition is not complete, the analytical data submitted for the sedimentation solids is statistically sufficient to characterize the petitioned wastes, and therefore, a preliminary evaluation of these data was conducted. Based on our evaluation of the EP leachate data for lead and total constituent data for benzo(a)anthracene

presented in your petition, your wastes have the potential to contaminate ground water at levels which exceed the regulatory standards for these constituents. Our evaluation is based on results computed by using the vertical and horizontal spread (VHS) model (see 50 Federal Register 48886, November 27, 1985). We use this model to predict constituent concentrations in the ground water at the compliance point located 500 feet downgradient

from the disposal site. The VHS model uses the maximum annual waste generation rate to determine the amount of dilution that may occur in an underlying aquifer. The results of the model are compared with the Agency's level of regulatory concern for that particular constituent.

We also use, in conjunction with the VHS model, an organic leachate model (OLM) that was developed to predict the mobility of organic toxicants from land-disposed wastes (see 51 Federal Register, 41084, November 13, 1986). The OLM generates leachate values for each organic constituent compliance-point concentrations are then compared with the Agency's regulatory standards for each constituent. For lead and benzo(a)anthracene we have established the levels of regulatory concern as 0.05 mg/1 and 1.0x10-5 mg/1, respectively. Data presented in the petition for the sedimentation basin solids reported a maximum EP leachate value for benzo(a)anthracene as 1.6 mg/kg. Using these values for our preliminary evaluation, the OLM/VHS model predicted a maximum lead and benzo(a)anthracene concentration of 0.075 mg/1 and 5.98x10-5 mg/1 respectively, in the ground water at the downgradient compliance point. Two of the four EP leachate values for lead and two of the four total constituent values for benzo(a)anthracene values generate compliance-point concentrations that exceed the Agency's standards. These failing values were derived from a sampling scheme that involved compositing, thereby allowing the averaging of five separate samples (per section) of which, one or more may have exceeded the reported average values. In order to prevent double averaging, as performed by your contractors in their VHS model evaluation, we do not allow the averaging of composite samples.

Based on our preliminary evaluation of your petition, we have concluded that (1) your petition is not complete due to the lack of four quarters of ground-water monitoring data, and (2) based on the analytical data submitted as part of your petition, the wastes could present a significant hazard to both human health and the

environment. We believe that the wastes should therefore be considered hazardous, and subject to regulations under 40 CFR Parts 262 through 268 and the permitting standards of 40 CFR Part 720. We will therefore recommend to the Assistant Administrator that a denial notice be published in the Federal Register.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register when our preliminary evaluation determines that the wastes will be denied exclusion. If you prefer this option, you must send us a letter withdrawing your petition and indicating that the wastes are considered hazardous and will be managed as such. If you send such a letter, it should be forwarded to this office within two weeks of the date of receipt of today's correspondence. If you choose not to withdraw your petition, a denial decision will be published in the Federal Register.

If you have any questions regarding our preliminary findings, please contact Mr. Myles Morse of my staff at (202) 382-4788.

Sincerely,

Bruce R. Weddle, Director
Permits and State Programs Division

cc: Tricia Herbert, Region IV
Allan Antley, Region IV
Howard Finkel, ICF Technology