

9551.1990(11)

NO-MIGRATION PETITION FOR SHELL OIL, WA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

NOV 7 1990

Mr. D. D. Smart  
Manager of Health, Safety, and Environment  
Shell Oil Company  
Anacortes Refinery  
P.O. Box 700  
Anacortes, Washington 98221

Re: No-Migration Petition submitted for Shell Oil Company's  
Anacortes, Washington Land Treatment Facility  
(F-90-NSAP-FFFFF).

Dear Mr. Smart:

I am writing in regard to your January 17, 1990 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Shell oil Company to conduct the land treatment of restricted wastes (EPA Hazardous Waste Nos. K049, K051, K052, and WPO3) at Shell's Anacortes Refinery land treatment facility (LTF). After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration finding. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition is based on several concerns:

- Soil-pore and soil-core monitoring indicate that hazardous constituents have already migrated beyond the unit boundary.
- Shell will not be able to detect migration at the earliest time because Shell has indicated that groundwater monitoring wells will not be used to demonstrate no-migration.

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The details of our concerns are described below.

#### Presence of Hazardous Constituents Below the Treatment Zone (BTZ)

Soil-pore and soil-core monitoring data provided in Shell's petition indicate that migration of hazardous constituents below the treatment unit has already occurred. Specifically, analyses of soil-pore data collected from 1987-1990 have indicated the presence of antimony, benzene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene above health-based levels used in no-migration decision-making. The results of these analyses are presented in Attachment 1.

In addition, several soil samples from beneath the treatment zone indicated the presence of antimony, benzo(a)anthracene, and benzo(b)fluoranthene above health-based levels. The results of these analyses are provided in Attachment 2. Shell personnel, in the course of a March 1990 site visit by EPA representatives, suggested that the presence of certain of these contaminants may be due to cross-contamination in the coring process. However, since these contaminants were found beneath several management sites within the land treatment facility, we question Shell's explanation. Furthermore, many of these contaminants are also present in the soil-pore water, which could not be attributed to cross-contamination during coring activities.

#### Detecting Migration at the Earliest Practicable Time

We have concluded that Shell has failed to meet the requirements of 40 CFR §268.6(a)(4). Specifically, Shell has stated in the petition that ground-water monitoring wells are not part of the no-migration monitoring plan. Shell's determination is inconsistent with 40 CFR §268.6(a)(4) which requires a monitoring plan that detects migration at the earliest practicable time. In addition, Shell has not provided any ground-water monitoring data more current than 1985. Due to Shell's failure to provide this data, the petition is incomplete and significant amounts of information and clarification would be needed to complete the petition. However, because the technical basis for denial already exists, we are not requesting you to provide further information.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in

the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions scheduled to be effective November 8, 1990. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Patricia Cohn, Acting Chief  
Assistance Branch (OS-343)  
Office of Solid Waste  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Original document signed

Jeffery D. Denit, Deputy Director  
Office of Solid Waste

Attachments

cc: Michael Gearheard, Region X  
Carrie Sikorski, Region X  
Kim Anderson, Washington DOE  
Patricia Cohn, PSPD, OSW  
James Michael, PSPD, OSW  
Terry Keidan, AB, PSPD, OSW