

PPC 9551.1991(09)

NO-MIGRATION PETITION FOR CONOCO, MT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAY 29 1991

Robert A. Olsen
Senior Process Engineer
Conoco Billings Refinery
P. O. Box 2548
Billings, MT 59103-2548

Re: No Migration Petition for Conoco's Land Treatment Facility (LTF),
Billings, MT (F-91-NCBP-FFFFF)

Dear Mr. Olsen:

The purpose of this letter is to respond to issues raised by Conoco during EPA's site visit on May 7, 1991. Specifically, Conoco requested guidance on how they should address bioaccumulation in the assessment of environmental impacts at the Billings land treatment facility. To address this issue, Conoco should first assess the environmental threat that exists at the LTF. An environmental threat can be assumed to exist at a LTF only if three criteria are met. These are:

- 1) Sensitive environmental receptors are within the vicinity of the site (such as aquatic ecosystems or endangered or threatened species located within 1000 feet);
- 2) There is an exposure pathway by which these receptors may be exposed to contaminants from the site (is there hydraulic connection between ground water and receptors or airborne transport of contaminants); and,
- 3) The receptor could be exposed to the contaminants at hazardous levels.

If any of these three conditions does not hold, then no significant ecological threat is presumed to exist and the issue of bioaccumulation does not need to be addressed. If these conditions do exist, Conoco should:

RO 13479

- 1) Determine and state which substances present in Conoco's hazardous waste have a bioconcentration factor (BCF) over 1000, particularly mercury, cadmium, lead, and zinc. The most reliable source of peer-reviewed BCF values are EPA ambient water quality criteria documents;
- 2) Acknowledge those substances present in the waste and their potential for bioaccumulation; and,
- 3) And dismiss possibilities (no hazardous constituents leaving the treatment zone, no environmental receptors, no surface runoff).

If you have any additional questions on this issue or related issues, please call me at (202) 475-9712.

Sincerely,

Newman Smith
Office of Solid Waste
Disposal and Technology Section (OS-343)

cc: Mike Gansecki, Region VIII
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