

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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FACT SHEET

Proposed Action:

Modification of Individual Exemption for Cement Kiln Dust

under WAC 173-303-910(3) for disposal at the Dale Strip Pit and for

various beneficial uses issued to Holnam, Inc.

Facility Name:

Holnam, Inc.

EPA/State ID #:

WAD 041 580 176

Facility Owner:

Holnam, Inc.

Facility Location:

5400 W Marginal Way SW

Seattle, WA 98106

Background Information:

The Holnam, Inc. cement kiln generates approximately 30,000 tons per year of kiln dust that they are unable to incorporate back into the portland cement manufacturing process. Holnam, Inc. has an existing Individual Exemption, granted on December 14, 1987, for Cement Kiln Dust (CKD). This exemption allowed five specific disposal or reuse methods as alternatives to managing the CKD as a dangerous waste. These are:

- 1. Agricultural use as a soil conditional and fertilizer,
- 2. Waste solidification,
- 3. Landfill daily cover for solid waste disposal facilities,
- 4. Wet scrubber lime solution for coal power plants and waste incinerators, and
- 5. Disposal at the Dale Strip Pit in Ravensdale.

There was no expiration date for this exemption. The exemption contained general conditions and specific conditions for each option that must be met for the exemption to remain in effect.

Holnam, Inc. has submitted to Ecology a request or petition for modification of the existing Individual Exemption for Cement Kiln Dust. The purpose of this modification is to allow additional uses of CKD not outlined in the original exemption. This petition is subject to a 45 day public comment period and, if necessary or requested by the public, Ecology may hold a public meeting for comments. Ecology will make the final decision after evaluating all comments.

The disposal, recycling, or reuse options listed in this request for modification are:

- 1. Use as a roadbase material,
- 2. Soil stabilization,
- 3. Binder for specialty block manufacture,
- 4. Soil and sludge drying,
- 6. Stabilization of sewage, oil, waste, and sludges,
- 7. Construction landfill cover,
- 8. Subtitle D landfill disposal,
- 9. Sanitary landfill cover,
- 10. Acidic waste neutralization,
- 11. Land reclamation,
- 12. Lime-alum coagulation in waste water treatment; and
- 13. Mineral filler used in manufacture of glass and construction materials.

Basis For Proposed Action:

CKD from Holnam has been tested and has passed the TCLP standards for metals. The CKD designates as a state only criteria dangerous waste for aquatic toxicity due to pH. The Washington State Dangerous Waste Regulations make provision for petitions for exempting dangerous waste from a particular generator in WAC 173-303-910(3). The procedures and basis for exempting this waste are covered in WAC 173-303-072(3). Ecology may grant a temporary exemption before making a final decision when there is a likelihood that the exemption will be finally granted.

The EPA submitted a Report to Congress (RTC) on December 30, 1993. The RTC documents EPA's study of CKD and includes a description of several beneficial and alternative uses of CKD. This report also includes an analysis of the potential environmental and economic impact for each alternative.

After consideration and review of the request for modification Ecology has granted a twelve month temporary exemption. This temporary exemption is hereby effective until May 24, 1996. The disposal, recycling, or reuse options listed in the temporary exemption are:

- 1. Agricultural use as soil conditioner and fertilizer
- 2. Waste solidification

The cement kiln dust may be used for the solidification, stabilization, or drying of hazardous and solid waste including, but not limited to, contaminated soils, oil sludge, or sewage sludge.

- 3. Landfill daily cover for Subtitle D solid waste facilities
- 4. Lime scrubber for waste incinerators and coal power plants

 This use for cement kiln dust may include, but is not limited to, wet lime scrubber solutions and slurries or dry lime scrubbers for waste incinerators and coal power plants.
- 6. Sub base for road construction
- 7. Use as a filler or binder or as a manufacturing ingredient for asphalt roofing and paving materials, specialty block manufacturing, glassification, or other manufacturing processes

- 8. Limé treatment for acid neutralization or coagulation and flocculation in wastewater treatment. This use of cement kiln dust may include, but is not limited to, neutralizing pickle liquor or other industrial acidic wastes.
- 9. Land reclamation for soil stabilization, settling ponds, or engineered backfill. These uses for cement kiln dust that are generally referred to as land reclamation may include, but are not limited to, engineered backfill (such as backfill for mining pipelines, foundation stabilization, or industrial or residential backfill), settling pond stabilization, or other applications where used as an additive or a substitute for portland cement.

9. Disposal at Dale Strip Pit.

Ecology proposes to issue the final exemption only for the above disposal, recycling, or reuse options. Ecology does not plan to include in the exemption CKD disposal or applications at landfills that do not meet the Minimum Functional Standards in 173-351 WAC.

This petition is subject to a 45 day public comment period before a final decision is made and, if necessary or requested by the public, Ecology may hold a public meeting for comments. Ecology will make the final decision after evaluating all comments. This temporary exemption, and final exemption if issued, will apply as long as all conditions are met and as long as the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC), Federal Hazardous Waste Regulations (40 CFR), or test methods do not change in a manner which affects this waste.

Public Comment

A copy of the Request for Modification of Individual Exemption for Cement Kiln Dust, the Temporary Exemption for Cement Kiln Dust granted to Holnam, Inc. on May 24, 1995, and the Executive Summary of the EPA Report to Congress are available for public review at the following location:

Department of Ecology 3190 160th Ave SE Bellevue, Wa 98008

The comment period will begin on SEPTEMBER 1, 1995 and end on OCTOBER 15, 1995. Ecology will consider all comments received during the comment period. All persons wishing to comment on this exemption or request a public hearing should submit their concerns in writing to:

Washington Department of Ecology Northwest Regional Office

attn.: Bob Stone 3190 160th Ave SE Bellevue, Wa 98008-5452

CEMENT KILN DUST

Adaska, W.S., Tresouthick, S.W., West, P. Solidification and Stabilization of Wastes Using Portland Cement, Portland Cement Association, 19 pp.

Briefing on the Report to Congress on Cement Kiln Dust Waste, USEPA Office of Solid Waste Branch, Special Waste Branch, April 1992

Canadian Water Quality Guidelines, Canadian Council of Resource and Environmental Ministers, ch. 6, March 1987, excerpts.

Davis, T.A., D.B. Hooks. Disposal and Utilization of Waste Kiln Dust From Cement Industry. EPA-670/2-75-043, May 1975. 54 pp. (Excerpts)

Declaration for the Record of Decision, Portland Cement Co. (Kiln Dust #2 & #3) Operable Unit No. 1, Salt Lake City, Utah, July 19, 1992. USEPA

Encyclopedia Britannica, "Cement and Concrete" 1963.

Fact Sheet, Portland Cement Co. Sites #2 & #3, Operable Unit 2. Utah Department of Environmental Quality, Division of Environmental Response and Remediation, November 1991.

Haynes, B.W., G.W. Kramer. Characterization of U.S. Cement Kiln Dust. BuMines IC8885, 1982, 19 pp.

Ideal Basic Industries, Cement Division, Individual Exemption Petition to Washington State for Cement Kiln Dust Solid Waste Designation, November 1984 Appendix B-6

Ideal Basic Industries, Cement Division, Individual Exemption Petition for Ideal Cement-Kiln Dust from Washington State's Dangerous Waste Regulation: Final Report. June 10, 1987 (Excerpts)

Multimedia Assessment and Environmental Research Needs of the Cement Industry, EPA-600/2-79-111, USEPA, May 1979 (Excerpts)

Portland Cement Company Non-NPL Listed Superfund Sites Near Salt Lake City, Utah, Utah Department of Environmental Quality, Division of Environmental Response and Remediation, October 1, 1991

Potential Hazardous Waste Site Disposition:

Columbia Cement, Bellingham, WA
Ideal Basic Industries, Gold Hill, OR
Ideal Basic Industries, Irvine, WA
Ideal Basic Industries, Grotto, WA
Ideal Basic Industries, Seattle, WA
Ash Grove Cement West, Seattle, WA

Proof of Claim, Utah Department of Environmental Quality v. New York Trap Rock Corporation, Lone Star Industries, Inc., et. al. Case No. 90-B-21277, October 10, 1991

Record of Decision, Portland Cement Co. (Kiln Dust #2 & #3)
Operable Unit No. 2 Salt Lake City, Utah, March 31, 1992. USEPA

Summary of Industrial Processes, Products, Wastes Generated and Regulation of the Cement Kiln Industry, Draft, excerpt. SAIC December 14, 1990.