



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1250 W Alder St • Union Gap, WA 98903-0009 • (509) 575-2490

June 28, 2019

Karma Suchan
Manager, Solid Waste Division
Yakima County Public Services
7151 Roza Hill Drive
Yakima, WA 98901

Re: No Further Action (NFA) Determination for:

- **Site Name:** Terrace Heights Landfill Pesticide Dump
- **Site Address:** 7601 Roza Hill Drive, Yakima
- **Facility/Site No.:** 457
- **Cleanup Site ID No.:** 4358

Dear Karma Suchan:

The Department of Ecology (Ecology) has reviewed existing file documents for the above-referenced cleanup site. The following is our opinion, based on that review.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

NO. Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Pesticide (Krenite) into soil.



The Site is within the Terrace Heights Landfill in Yakima County, Washington. During excavation work in January 6, 1994, several one-gallon cans of the pesticide Krenite were uncovered at a depth of four feet below ground surface. **Enclosure A** presents maps showing the location of the site and a site plan.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. CH2MHill, "*Terrace Heights Landfill, Field Sampling and Analysis Plan*," dated April 1994.
2. "*Yakima County, Terrace Heights Landfill, Krenite Pesticide Removal Project, Independent Remedial Action Report*," prepared for Yakima County Public Works Department, dated December 1994.
3. Letter from Yakima County Public Works Department (Daniel Hesse) to Department of Ecology (Mark Peterschmidt) dated January 10, 1995.

Those documents are kept at the Central Regional Office of Ecology (CRO) for review by appointment only. You can make an appointment by calling the CRO resource contact at (509) 575-2490 or emailing RecordsOfficer@ecy.wa.gov.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **no further remedial action** is necessary to clean up contamination at the Site.

The conclusion that no further remedial action is necessary is based on the following analysis:

1. **Characterization of the Site.**

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action. Pesticide containers labeled "Krenite" were uncovered during a landfill expansion in 1994. The Site was characterized after excavation and offsite disposal of contaminated soil through confirmation soil sampling.

2. **Establishment of cleanup standards.**

Soil Cleanup Levels

The Method B cleanup level for Krenite has been selected for the site (Method B non-cancer direct contact based cleanup level for 2,4-dinitrophenol of 160 mg/kg).

Krenite has many synonyms including 4,6-dinitro-2-methyl phenol, 4,6-dinitro-o-cresol, dinitro-o-cresol, DNC, fosamine ammonium, ammonium salt, 3,5-dinitro-2-hydroxy toluene, and 2-methyl-3,5-dinitrophenol. The CAS number is 435-52-1. This compound targets the cardiovascular system and the endocrine system. It is bright yellow in color.

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

Point of Compliance (POC): Standard, throughout the Site extending from the soil surface to 15 feet below ground surface (ft bgs).

3. Cleanup.

Ecology has determined that the cleanup performed at the Site Environmental Covenant meets the substantive requirements of MTCA.

Cleanup of the pesticides containers and impacted soil occurred in 1994 as documented in "*Yakima County Terrace Heights Landfill, Krenite Pesticide Removal Project, Independent Remedial Action Report*," prepared by CH2M Hill for Yakima County Public Works Department, dated December 1994. Ecology was involved in the cleanup efforts as documented in letters to Yakima County dated February 10, 1994 and September 16, 1994.

Pesticides and contaminated soil above the Method B cleanup level were shipped offsite for incineration disposal by Aptus, Inc. in Aragonite, Utah. Additional soil impacted by Krenite at concentrations less than the Method B cleanup level was disposed of at the Subtitle D landfill in Roosevelt, Washington.

Twenty confirmatory samples were collected from soils after the excavation work was complete. Krenite concentrations in these confirmatory samples ranged from below detection limits to 26.0 mg/kg, well below the Method B cleanup level of 160 mg/kg.

The Independent Remedial Action Report was transmitted to Ecology with a letter from Yakima County Public Works Department dated January 10, 1995. That letter indicated that the report was being submitted outside of Ecology's administrative programs. The next and most recent document in the file was a letter from Ecology to the County providing an update of the SHA ranking. It appears that the Independent Remedial Action Report was not previously reviewed by Ecology.

Based on the information contained within the Independent Remedial Action Report and other file documents, the cleanup of the Krenite release was successful, and no further action is warranted since the site no longer poses a threat to human health or the environment.

Listing of the Site

Based on this opinion, Ecology will remove the Site from the Hazardous Sites List and the Confirmed and Suspected Contaminated Sites List. This process includes public notice and opportunity to comment. Based on the comments received, Ecology will either remove the Site from the applicable lists or withdrawal this opinion.

Limitations

1. This opinion does not settle liability with the state. Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resources damages resulting from the release or releases of hazardous substances at the site. This opinion does not:
 - Change the boundaries of the site.
 - Resolve or alter a person's liability to the state.
 - Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. This opinion does not constitute a determination of substantial equivalence. To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not address whether the actions taken at this site are substantially equivalent. Courts make that determination. See RCW 70.105D080 and WAC 173-340-545.
3. The state, Ecology and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70.105D.030(1)(i).

Karma Suchan
Yakima County Public Services – Solid Waste Division
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If you have any questions about this opinion, please contact me phone at (509) 454-7835 or by email at Frank.Winslow@ecy.wa.gov.

Sincerely,

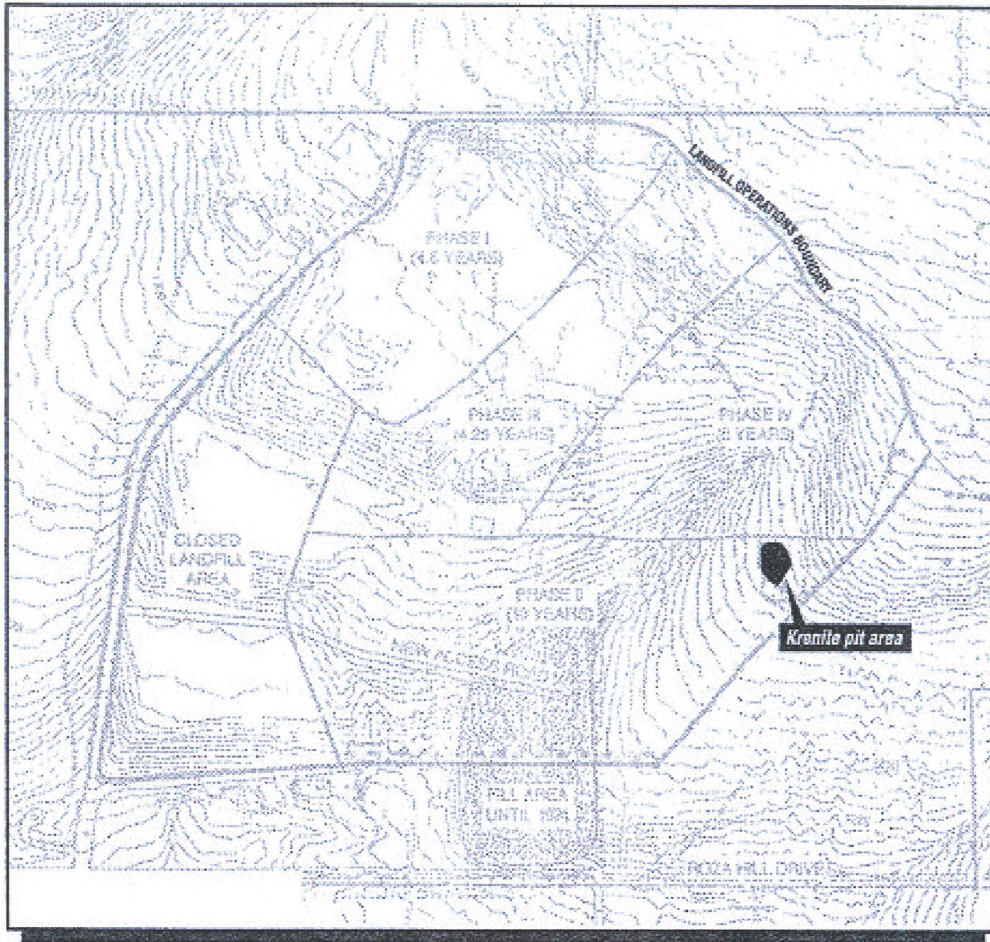



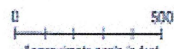
Frank P. Winslow, P.G.
Site Manager
Toxics Cleanup Program
Central Regional Office

Enclosure (1): A - Site Location and Site Plans

Enclosure A

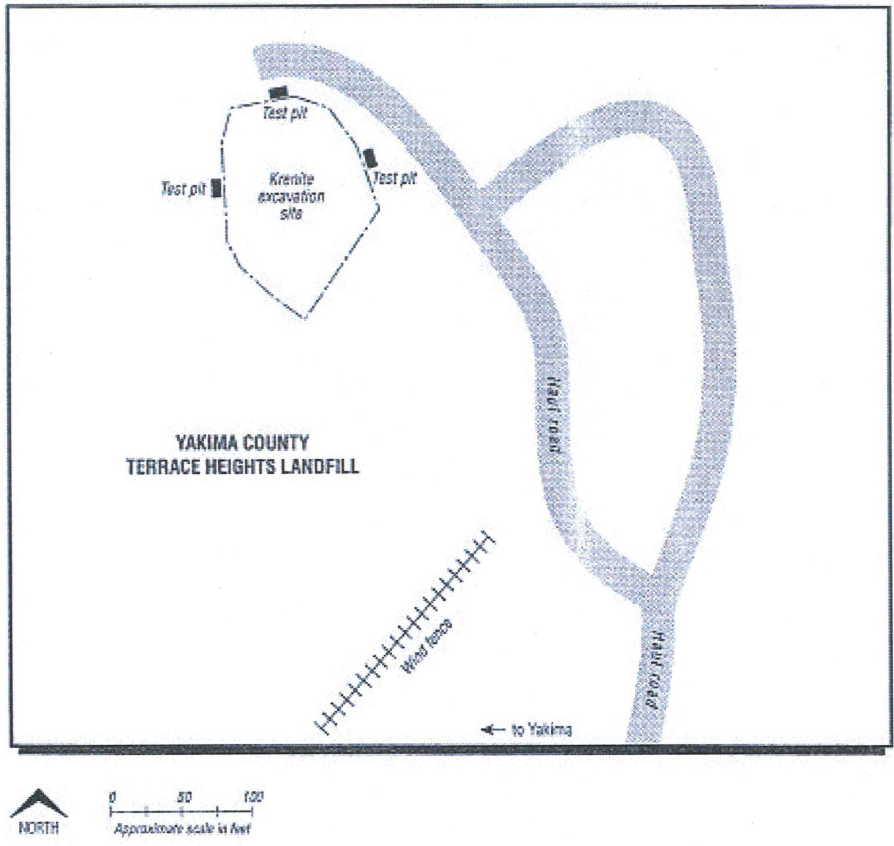
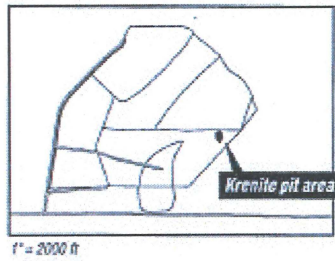
Site Location and Site Plans




 NORTH
 
 0 500
 Approximate scale in feet

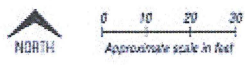
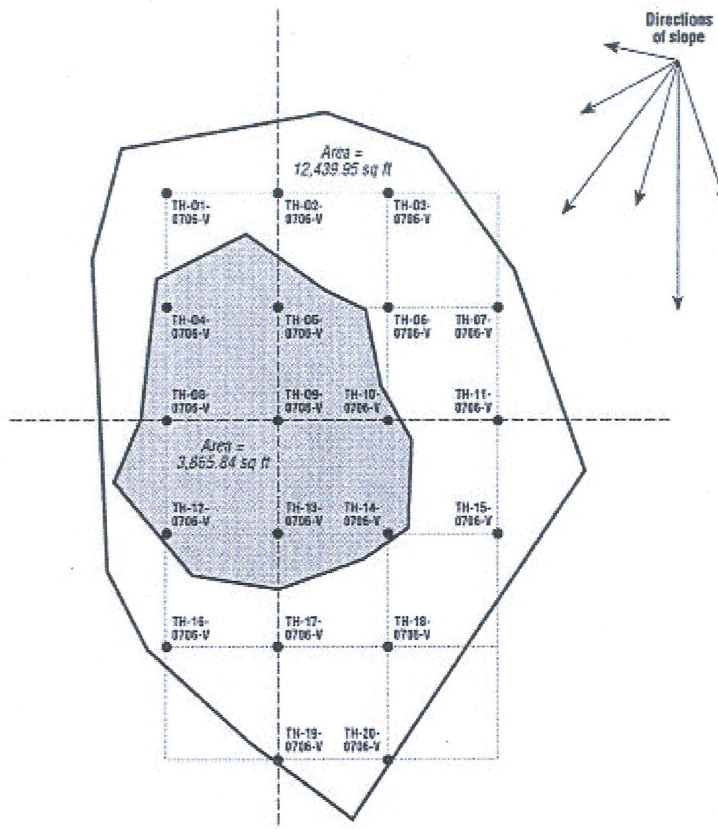
Note: Vertical datum as shown here is Yakima County. Add 324 feet ± to equate to contours shown on USGS Yakima East quadrangle.

Figure 2
Landfill Phasing and Approximate Site Locations



Adapted from information from Yakima County Public Works, 1994

Figure 3
Test Pit Locations



LEGEND

●	Sampling location
—	Sampling grid (25 ft intervals)
▨	Area of contaminated soil
▭	Actual excavation site
TH-05-0706-V	Verification sample number

Adapted from information from Yekima County Public Works, 1994

Figure 4
Excavation Site Plan