Holcim, Inc. Site

Toxics Cleanup Program **September 2015**

Public Meeting will Explain Proposed Cleanup Plan, Consent Decree, and SEPA DNS Documents that will Guide Cleanup at Site

The Washington State Department of Ecology invites you to a public meeting to learn more about the proposed cleanup plan for the Holcim, Inc. site. The Draft Cleanup Action Plan provides details about Ecology's selected cleanup alternatives and how cleanup will be conducted. The Consent Decree is the legal document used to implement the cleanup action plan after public comments are considered. The State Environmental Policy Act Checklist (SEPA) considers potential environmental impacts prior to beginning the cleanup. The Determination of Non-Significance (DNS) indicates the proposed actions will not have a probable significant adverse impact on the environment.

View of CKD deposit on City of Spokane Valley property

The site is made up of approximately 24 acres. The largest portion of the site is owned by Holcim (US), Inc. The remaining portions of the site are owned by the City of Spokane Valley, and the Neighborhood, Inc. Coyote Rock Development. The Centennial Trail runs adjacent to a portion of the site on property owned by the City. The site also lies along the Spokane River and above the Rathdrum Prairie-Spokane Valley Aquifer. The Site is located at 12207 East Empire Avenue in the City of Spokane Valley, Spokane County, Washington (see Figure 1 Map).

You are Invited to:

- **Attend** a public meeting at CenterPlace Regional Event Center, 2426 N. Discovery Place, Room 109, Spokane Valley, Washington. **The meeting is on September 23, 2015 and begins at 7:00 p.m.**
- **Review** the Draft Cleanup Action Plan (DCAP), Consent Decree, and SEPA DNS Documents at the locations listed in the box on the right.
- **Send** your comments to Ecology for consideration. Comments will be accepted **September 3 through October 29, 2015**. See the shaded box at the right for review locations and where to submit comments.

Comments Accepted

September 3, 2015 through October 19, 2015

For **ADA** accommodations or documents in an alternate format call Jeremy Schmidt 509/329-3484, 711 (relay service), or 877-833-6341 (TTY).

Para asistencia en Español
Gregory Bohn 509/454-4174

Если вам нужна помощь на русском, звоните Larissa Braaten 509/710-7552

Submit Comments to Site Manager
Jeremy Schmidt, P.E.
WA Department of Ecology
Toxics Cleanup Program
4601 N. Monroe, Spokane WA 99205
509/329-3484
jeremy.schmidt@ecy.wa.gov

Document Review Locations

Argonne Branch Spokane County Library
4322 N. Argonne Road
Spokane, WA 99212 or
509/893-8260

WA Department of Ecology
Kari Johnson, Public Disclosure
4601 N. Monroe
Spokane, WA 99205
Call for an appointment 509/329-3415

Facility Site ID No. 52126416
Cleanup Site ID No. 4580

Why Cleanup is Necessary

Holcim and its predecessor companies operated a cement manufacturing plant on the property from 1910 to 1967. Cement kiln dust (CKD) was generated and deposited on the site during the period when cement was manufactured.

- Current dangerous waste rules in WA State indicate wastes with a pH greater than 12.5 are considered dangerous waste. **Certain areas of the site contain CKD with pH levels that exceed 12.5 and need to be addressed.**

- Analysis of CKD at the site showed some was very alkaline with a pH greater than 12.5 which means it was very corrosive and considered a dangerous waste if disturbed. Some CKD on the Holcim portion of the site also contained arsenic, cadmium, and lead at levels that did not meet state standards. Arsenic and lead were found in groundwater at levels that exceeded state standards.

- Ecology conducted an assessment of the site and ranked it a 1. A rank of 1 represents the greatest threat to human health and the environment and a rank of 5 the least threat. The site's close proximity to the river and aquifer contributed to the high ranking of the site.

- The Irvin Water District operates a drinking water well southwest of the site which contributed to the site's ranking a 1. However, groundwater monitoring has shown there are no site-related impacts to that well. Groundwater at the site flows away from the Spokane River.

Draft Cleanup Action Plan

The potentially liable persons (PLPs) Holcim (US), Inc., and the City of Spokane Valley completed a Remedial Investigation and Feasibility Study Report in 2013. The Remedial Investigation and Feasibility Study were made available for public review in early 2014, and a public meeting was held in February of 2014. The Feasibility Study Report evaluated five alternatives for cleanup at the site. The PLPs recommended Alternative 5 for site cleanup. The following is a brief summary of the five alternatives that were evaluated.

Cleanup Alternatives Evaluated

Alternative 1: CKD (dangerous waste) will be removed from the Holcim and City properties (areas A&B in Figure 2) and transported to an approved disposal facility. Contaminated soil from the Holcim and Neighborhood, Inc. properties (areas C&D in Figure 2) will be excavated and transported to a landfill facility. Excavated areas will be backfilled. The excavated area on the City property will be covered with 6 inches of topsoil and hydroseeded. Areas where CKD and non-CKD soil is removed may be redeveloped without deed restrictions. The estimated cost is slightly more than $11 million.

Alternative 2: CKD (dangerous waste) will be excavated from the Holcim and City properties (areas A&B in Figure 2). Before removal, CKD will be chemically stabilized by lowering the pH so it is no longer considered dangerous waste.

Contaminated soil will be excavated from the Holcim and Neighborhood, Inc. properties (areas C&D in Figure 2). The stabilized CKD and excavated soil will be transported to a landfill facility. Excavated areas will be backfilled. The excavated area on the City property will be covered with 6 inches of topsoil and hydroseeded. Areas where CKD and non-CKD soil are removed may be redeveloped without deed restrictions. The estimated cost for this option is just under $10 million.

Alternative 3: An engineered cap or cover will be placed on the CKD and contaminated areas at the Holcim, City and Neighborhood, Inc. properties. The cap includes 1 foot of clean fill material made up of 4 inch minus quarry spalls and 4 inches of gravel. Then 6 inches of hydroseeded

topsoil would be added. A restrictive covenant will be placed on the deeds. The estimated cost for this option is $1.6 million.

Alternative 4: CKD would be excavated on the City property and placed where the CKD is located on the Holcim property. An engineered cap or cover would be placed over the CKD on the Holcim property. The cap includes 1 foot of clean fill material made up of 4 inch minus quarry spalls and 4 inches of gravel. Then 6 inches of hydroseeded topsoil would be added. The other contaminated soil at Holcim and Neighborhood, Inc. would be excavated and transported to a Subtitle D Facility. A restrictive covenant would be placed on the deed for the Holcim property. The estimated cost for this option is slightly over $2 million.

Alternative 5: CKD on the City property would be excavated and placed on the Holcim property with Holcim CKD. An engineered cap or cover would be placed on the CKD on the Holcim property. The cap includes 1 foot of clean fill material made up of 4 inch minus quarry spalls and 4 inches of gravel. Then 6 inches of hydroseeded topsoil would be added. A restrictive covenant would be placed on the deed for the Holcim property. The estimated cost for this option is about $2 million.

Ecology's Selects a Cleanup Alternative for Public Review

Ecology evaluated the five alternatives presented by the PLPs in the Feasibility Study Report and selected the best cleanup plan for the site. The selection is based on criteria outlined in the state regulations known as the Model Toxics Control Act (MTCA) and on other applicable regulations and laws.

MTCA provides if two or more alternatives are equal in benefits, Ecology shall select the less costly alternative provided that all minimum requirements for cleanup actions are met.

After evaluating applicable criteria, Ecology selected Alternative 4, with some modifications, as the best option for cleanup at the site. This alternative provides a reliable long-term protection for human health and the environment.

The cleanup action Ecology selected does not become final until Ecology considers public comment as part of the final decision-making. Please submit your comments about this cleanup alternative and the associated documents to Ecology. Your comments are important. If significant changes are made based on public comment an additional comment period will be held.

Selected Cleanup Action: A Modified Alternative 4: CKD would be excavated from the City property and placed where the CKD is located on the Holcim property. Soil that is contaminated but not with CKD would be removed from the Holcim property and disposed off-site. Contaminated soil on the Neighborhood, Inc. property would be removed and placed with the Holcim CKD or disposed off-site. Excavation areas will be filled with clean soil.

The combined Holcim, City and possibly Neighborhood, Inc. CKD-related material would be re-graded to be at least 10 feet away from the property boundary, 200 feet away from the 100-year floodplain of the Spokane River and 200 feet from the Irvin Water District Well.

An engineered cap or cover would be placed over the CKD on the Holcim property. The cap would include a geomembrane with a minimum 30-mil thickness, one foot drainage material, geotextile and two feet of topsoil. Native grasses would be placed on the cap. Potential precipitation runoff would be collected and managed on Holcim's property. A restriction or institutional controls would be placed on the property to protect the cap and restrict how the

property is used. No institutional controls would be on property owned by the City of Spokane Valley and Neighborhood, Inc. after the cleanup was completed.

A long-term monitoring plan will be put in place to ensure protection of the cleanup remedy. This includes quarterly groundwater monitoring for at least 20 years, unless a reduction in monitoring is justified and approved by Ecology. Periodic reviews would be conducted every 5 years to determine the effectiveness of the cleanup remedy.

State Environmental Policy Act (SEPA) and Determination of Non-Significance (DNS)

The State Environmental Policy Act, known as SEPA, requires government agencies to consider potential environmental impacts of a project before beginning the cleanup. A Determination of Non-Significance indicates the proposed actions will not have a probable significant adverse impact on the environment.

- After review of the environmental checklist and other site-specific information, Ecology determined the actions to address contaminants in soil and groundwater will not have a probable significant adverse impact on the environment.
- The cleanup action will benefit the environment by reducing contaminants in groundwater and soil while also reducing exposure pathways for humans and wildlife.
- Therefore, Ecology has issued a Determination of Non-Significance (DNS) for the cleanup action.

What Happens Now?

Ecology will review and respond to all comments received no later than **October 19, 2015**. If appropriate, the Draft Cleanup Action Plan, Consent Decree, State Environmental Policy Act (SEPA) and Determination of Non-Significance (DNS) may be modified based on public comment. If there are no modifications, these documents become final.

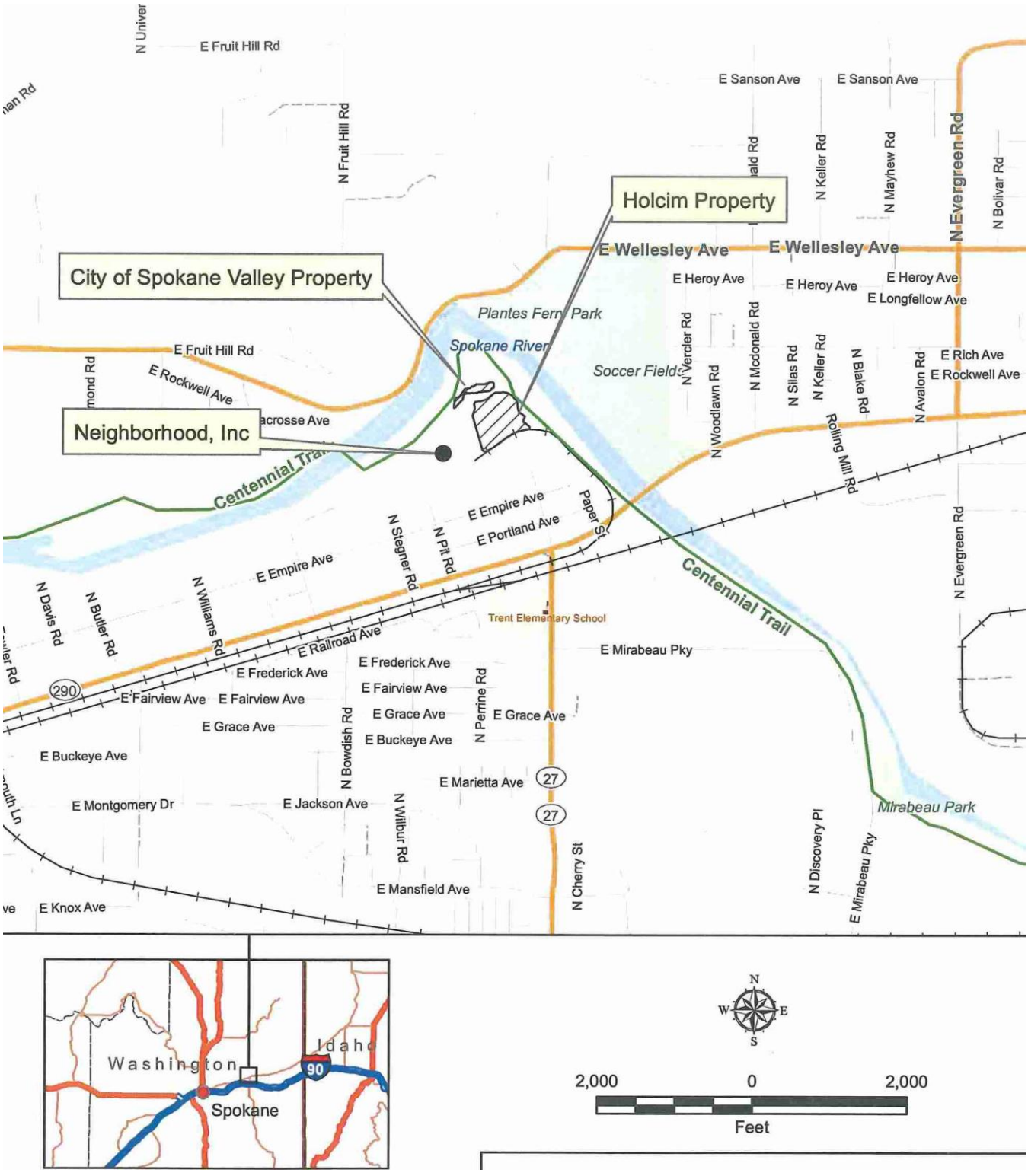
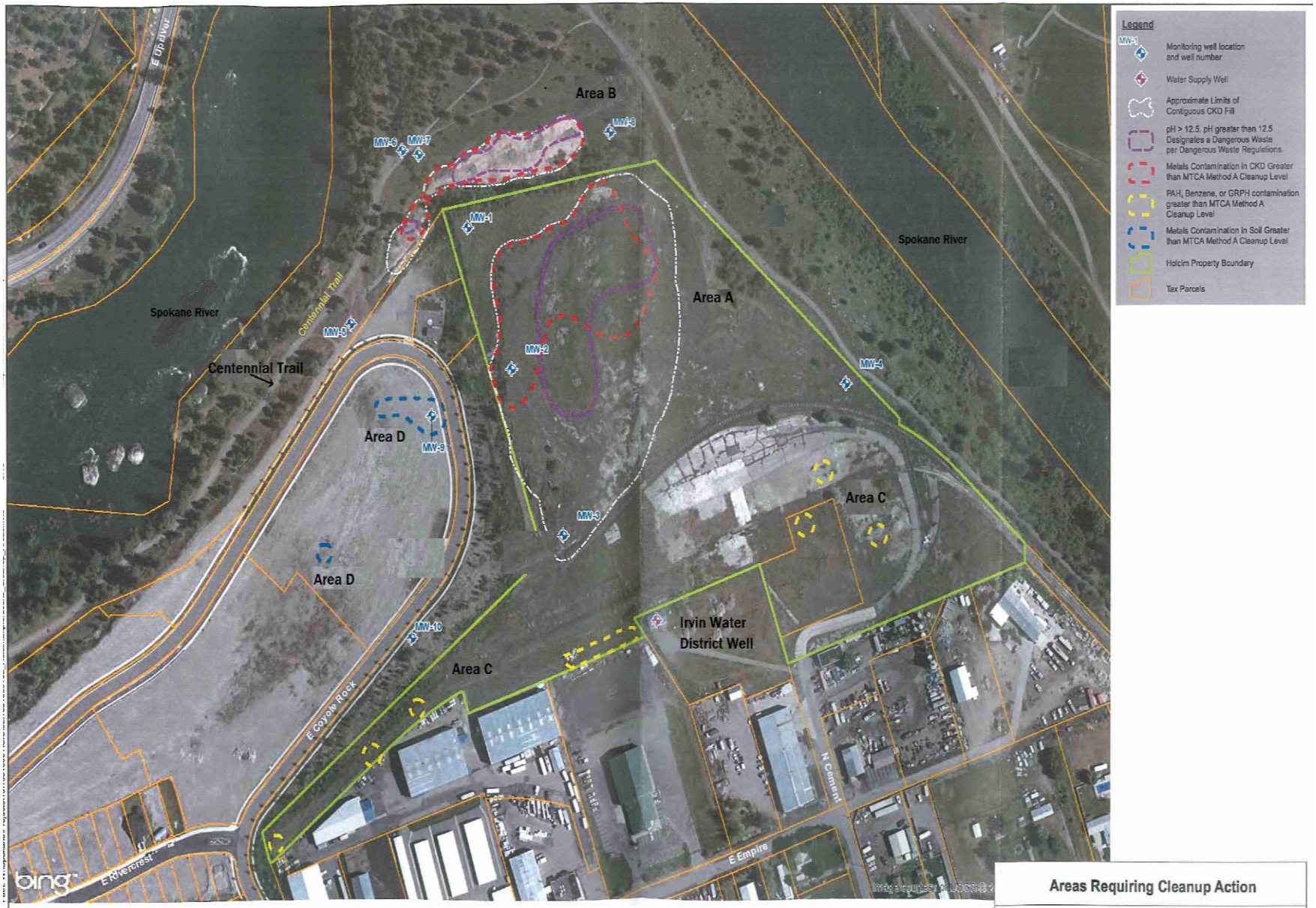


Figure 1 Map adapted from GeoEngineers Site Map

Figure 2



Reference: Aerial photo provided by ESRI Data Online. Tax parcel boundaries provided by Spokane County Tax Assessor's Office, downloaded September 20, 2011.

Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Sample locations along north side of Spokane River are not shown on this map.
4. Metals include one or more of the following: arsenic, cadmium, and lead

200 0 200
Feet

N W E S

Areas Requiring Cleanup Action

Holcim Inc. Site
Spokane Valley, Washington

GeoEngineers

Figure 5