UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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Seattle, WA 98101

Five-Year Review

Spokane Junkyard and Associated Properties Superfund Site

Spokane, Washington

September 29, 2006

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1 Purpose of the Five-Year Review

Region 10 of the Environmental Protection Agency (EPA) has conducted a Five-Year Review of the **Spokane Junkyard Superfund Site** (the Site), and prepared this report consistent with the requirements of Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended in Section 300.430(f)(4)(ii) of the National Contingency Plan (NCP).

This review is required because a removal action took place at the site, hazardous substances remain at the site, which do not allow unrestricted use and uncontrolled exposure, and no remedial action has or will take place. The purpose of a Five-Year Review is to ensure that a remedy remains protective of public health and the environment and is functioning as designed.

This Five-Year Review was conducted pursuant to the Office of Solid Waste and Emergency Response Directive 9355.7-03B-P, 2001. The start of the non critical removal action in August 1996 triggered the CERCLA Section 121(c) requirements for a Five-Year Review.

2 Site Location and Description

The Spokane Junkyard and Associated Properties Site is located in the Hillyard area, a light commercial and residential area in Spokane. The Site covers approximately 16 acres and includes a former junkyard, the former Spokane Metals facility, and two other parcels of land, one owned by Carl Carbon and the other by the Wall estate.

Spokane Metals operated a metal recycling facility at the Site from the 1940's until the early 1980's. The metal recycling operations, which included salvaging transformers and batteries, spread out onto the other properties at the Site contaminating them with PCBs and lead. The junkyard accumulated a wide variety of surplus materials including asbestos, paint waste, and various liquid and solid wastes. Poor storage practices of these materials also resulted in site contamination.

3 Site History

3.1 Discovery

In 1987, after an explosive fire destroyed the junkyard, EPA commenced a removal action on the junkyard property. Sampling conducted during the removal action revealed the presence of high concentrations of lead and PCBs on the Wall, Carbon and Spokane Metals properties. These properties then became the focus of the removal. During 1988 and 1989,

asbestos and approximately 8000 cubic yards of contaminated soil were removed from these properties. Following the removal action, the site was hydro seeded and fenced. Removal activities lasted from 1987 through 1989. See Figure 1 for a map of the site.

3.2 Site Investigations

The site was listed on the Superfund National Priorities List (NPL) in June 1994. EPA installed groundwater monitoring wells on the site in the summer of 1994, and also began negotiating with a number of the companies who sent materials to the site in an attempt to have them investigate and complete cleanup of the site.

In the spring of 1995, three of the site generators, Kaiser Aluminum, Avista and Inland Power and Light signed a Consent Order with the EPA in which they agreed to conduct a Site Investigation and then either a Remedial Investigation Feasibility Study (RI/FS) or an Engineering Evaluation/Cost Analysis (EE/CA) depending on site conditions. The Site Investigation was completed in the summer of 1995, and an EE/CA was completed in the fall of 1995. A brief summary of the investigation is provided below:

3.2.1 Physical Location

The site is located between a residential area to the east and an industrial area to the west. An elementary school is located across the street from the site. Based on the 1990 census, there are approximately 4000 people living within 1/4 mile of the site.

Sensitive populations in the neighborhood appear to be children. Approximately 1/3 of the neighborhood population is under the age of 18 years old.

3.2.2 Site Characteristics (at the time of the Investigation)

The site had been abandoned, and fenced by EPA. Until July 1996, when the junk and buildings were removed by the PRPs, junk piles covered the junkyard and Spokane Metals properties. Abandoned buildings on the site had previously been used for unauthorized activities. Frequent dangerous access by children had occurred. Junk on the site had been set on fire resulting in a hazardous incident response from the local fire department.

The main contaminants at the site were lead and polychlorinated biphenyls (PCBs). Risks from ingestion of these are highest in children. Health effects from lead ingestion include nerve and brain damage. Ingestion of PCBs may cause cancer as well as liver and thyroid diseases.

Results of the 1995 Site Investigation showed lead in the surface soils over most of the site. The highest concentrations found were on the Spokane Metals property where levels were as high as 30,000 parts per million (ppm). For comparison, EPA's guidance suggests that 400 ppm is a conservative standard for residential areas. The lead concentrations were mainly limited to the top 2 feet of soil.

Results of the 1995 Site Investigation showed PCBs sporadically in the surface soil

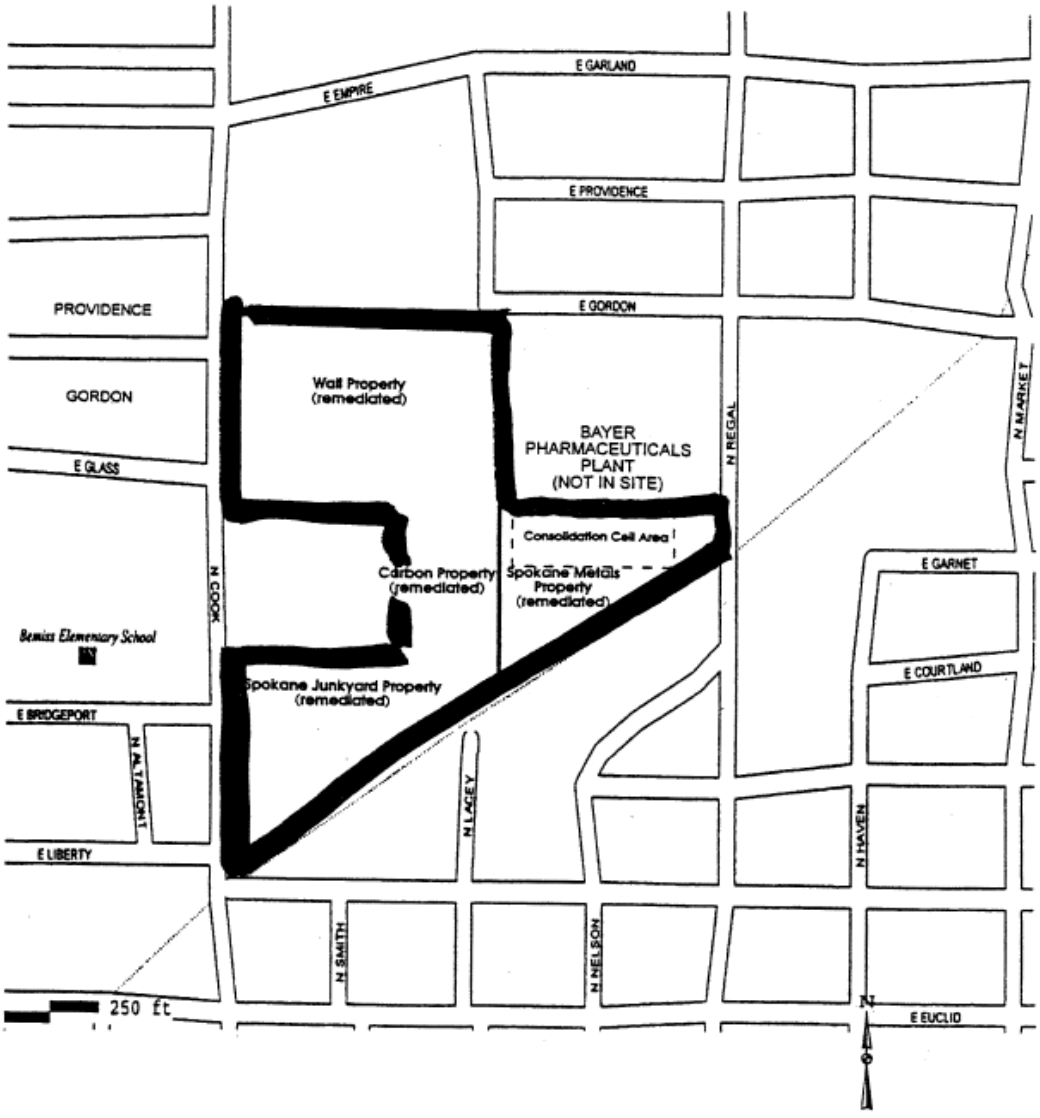

Figure 1

Site Map

ALTA Geosciences, Inc.

VICINITY.CDR

throughout the site. All samples were less than 250 ppm and most were less than 50 ppm. In one location PCB contamination was found as deep as 4 feet.

Groundwater was sampled in the summer of 1994 and the summer of 1995. Groundwater was found at approximately 150 feet below the ground surface. No site related contaminants were found in the groundwater.

3.2.3 Volumes of Contaminants

Based on the results of the EE/CA, approximately 12,000 cubic yards of site material exceed the selected cleanup level of 1 ppm PCBs and 360 ppm for lead (the cleanup level for the site is based on the Washington Model Toxic Control Act, an ARAR). These levels were selected to be protective of public health and the environment under a residential scenario.

3.3 Remedy Implementation

A non-Time Critical Removal Action performed under an administrative order on consent was performed between August and December 1996.

Contaminated soil on the property which exceeded 1 ppm for PCBs and 360 ppm for lead was excavated.

Excavated soil with lead exceeding 5000 ppm lead (considered to be the "worst material") was treated through stabilization to prevent it from leaching into the ground, and to give it a concrete-like hardness.

Both the treated and untreated soil were consolidated in a cell (an engineered hole) on the Spokane Metals property. The treated material was placed on top of the untreated soil to act as a barrier in the unlikely event that someone was able to dig down to the contaminated material. The cell was covered by a geomembrane and 6 feet of clean soil fill. Figure 1 shows the location of the containment area, and Figure 2 shows a schematic of the containment cell. Following the completion of the removal the entire site was graded and planted in native grass seed.

Approximately 10,000 tons of soil were excavated and consolidated without treatment. A total of 2600 tons of soil was treated.

Soil sampling conducted after the remedy was completed confirmed that the cleanup was successful and the site was left below residential standards for lead and PCBs. The entire site was remediated to residential standards to allow redevelopment.
A post removal risk assessment determined that the site risks were below the 10-4 threshold requiring a remedial action. No record of decision or remedial action was required, and the site was deleted from the National Priorities List in September 1997.

Property use restrictions were placed on the Spokane Metals property to prevent activities which could disturb the containment cell. At the time of remedy completion, yearly inspections of the cell were required because there was currently no site use. In

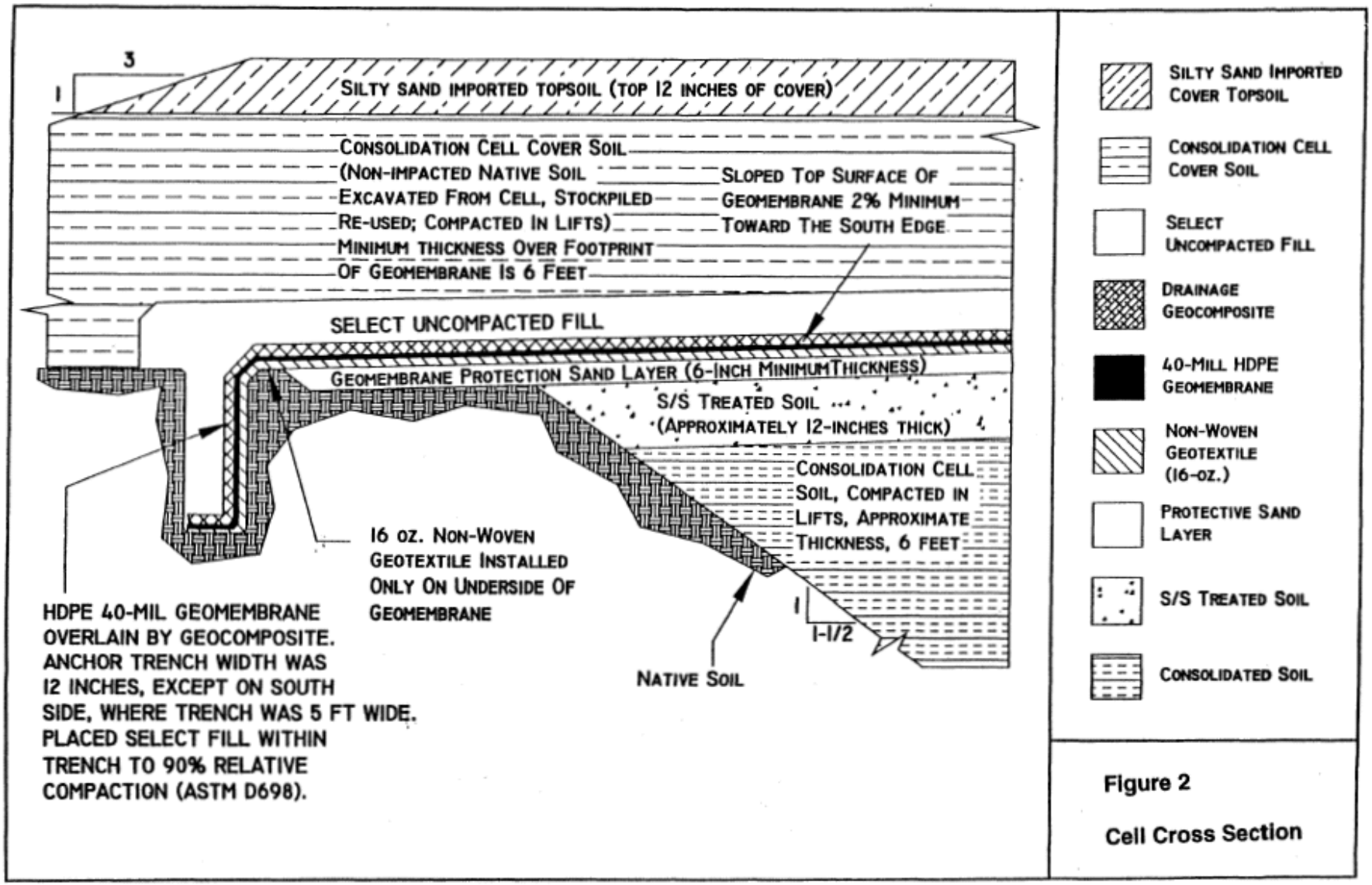

Figure 2

Cell Cross Section

addition, 5 year reviews were required because waste was left on the site.

3.4 Current Status

Following completion of site cleanup, the entire site was purchased by the Spokane Youth Sports Association (SYSA) for use as sports fields. The development of the site was coordinated with EPA to ensure that the containment cell was protected from uses that would jeopardize its integrity. The area containing the containment cell was paved for use as a parking lot in 2000. The sports fields were completed in 2002. A representative of the PRPs performs a yearly inspection of the paving over the containment cell. The inspection reports for 2004 thru 2006 showed that everything was functioning as intended, and no maintenance has been required.

4 Progress Since the Last Five-Year Review.

The site was remediated to residential standards. All remedial objectives were met. The containment cell has been paved, which prevents any potential excavation of the area. The PRPs under the Order on Consent with EPA are required to perform Operation and Maintenance of the containment cell. In addition, they were required to place proprietary controls on the deed to describe use restrictions on the containment cell area. EPA is in the process of obtaining a copy of the deed to ensure that the controls have been placed and are still in place.

5 Summary of the Five Review

The Five Year Policy Review was conducted according to procedures in OSWER Directive 9355.7-02, Structure and Components of Five-Year Reviews. Activities in this review consisted of:

Review of site-related documents and agreements
Site visit and inspection
Community relations activities
Preparation of the Five-Year Review report

5.1 Documents reviewed for this report include

Action Memorandum, Spokane Junkyard and Associated Properties, EPA, August 1996.

Construction Completion Report, Spokane Junkyard and Associated Properties, EPA, July 1997.

Engineering Evaluation Cost Analysis, Spokane Junkyard and Associated Properties, Alta Geosciences, December 1995.

Operation and Maintenance Plan, Spokane Junkyard and Associated Properties, Alta Geosciences, May 1997.

5.2 Site Conditions

5.2.1 Site Visit - August 9, 2006

The EPA site manager visited the site on August 9, 2006. The site has been developed as the Andrew Rypien Sports Complex. The containment cell is paving and used as the parking lot for the complex. The remainder of the site has been developed into sports fields. The paving on the parking lot was sound. The swale draining the lot was in good shape. No rills or other erosion was present.

5.2.2 Community Relations

Community interest was high during the remediation as the site was an eyesore for years. Once the site was remediated, community interest was focused on redevelopment. No fact sheets have been sent out since remediation by EPA. The site manager has not received any calls from the public concerning the site. The Site Manager spoke with several members of the community who had an interest in the site during remediation. No one had any issues concerning the cleanup.

A notice of the completion of this 5 Year Review will be placed in the Spokane Review, the daily paper in Spokane.

6 Assessment of the Site

The following conclusions support the determination that the remedy is protective of human health and the environment**:**

Question A: Is the remedy functioning as intended in the decision document?

The remedy is functioning as intended. All contaminated soil has been contained in a cell under 6 feet of fill. The site has been remediated to residential standards and has been redeveloped as a sports complex. Residential cleanup is consistent with this site use. A restriction has been placed on the deed outlining the requirements for the containment cell. The cell is now paved for use as a parking lot which is consistent with the allowed usage. There are no deficiencies in the cleanup.

Question B: Are the exposure assumptions, toxicity data, and cleanup levels used at the time of the remedy still valid?

The assumptions made in the remedy remain the same. There have been no changes in the standards, exposure pathways, toxicity and contaminant characteristics, or risk assessment methodologies since the remedy was selected that would call into question the protectiveness of the remedy.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No additional information has been identified that would call into question the protectiveness of the remedy.

Summary of Technical Assessment:

The remedy remains protective. There is no indication that the remedy is not functioning as intended. There have no been any changes in any of the exposure assumptions made in the selection of the remedy. No additional remedial actions are needed at the site. The deed for the property needs to be inspected to ensure that the notice remains in place. Five year reviews should continue to ensure that site use remains the same.

7 Issues

The deed for the site needs to be obtained to ensure that the information pertaining to the containment cell requirements still remains. This does not impact the current effectiveness of the remedy, but could have a future impact if the property use were to change.

8 Recommendations and Follow-up Actions

No additional remedial actions are needed at the site. The deed of the property needs to be inspected to ensure that information pertaining to the containment cell is still filed with the deed. Five year reviews should continue to ensure that the site use remains the same.

Recommendations	Party Responsible	Oversight	Date	Effects on Protectiveness
Review deed information	PRP obtains for EPA	EPA	Completed by December 31, 2006	Current - no Future – possibly if site use changes

9 Statement of Protectiveness

I certify that the remedy selected for this site remains protective of public health and the environment.

10 Next Review

The next Five-Year Review will be conducted within five years of this review.

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Date

Daniel D. Opalski, Director
Office of Environmental Cleanup

Appendix: **Figures**

CONCURRENCES						
Initials:						
Name:	Kevin Rochlin					
Date:						