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July 2, 2001

Anchorage

Mr. Dean Yasuda
Washington Department of Ecology
Northwest Regional Office
3190 - 160th Ave. SE
Bellevue, WA 98008-5452

Boston

Chicago

Re: Request For a Contained-in Determination
Excess Stormwater Treatment and On-site Discharge
J.H. Baxter Facility
Arlington, Washington
7026-03

Denver

Dear Mr. Yasuda:

Fairbanks

On behalf of J.H. Baxter (Baxter), we are submitting this request for a contained-in determination regarding excess stormwater that may be collected and treated at Baxter's Arlington, Washington, wood treating facility. This request is submitted in general accordance with Ecology's Contained-in Policy Memorandum dated February 19, 1993.

Jersey City

The Baxter Arlington site is cooperating with EPA Region 10 under an Administrative Order on Consent (Order), Docket No. RCRA-10-2001-0086. The Order details requirements for a site investigation, corrective measures study, and corrective action implementation to address pentachlorophenol (PCP) contamination in soil, stormwater, and groundwater. In addition, the Order provides for the collection of Excess Stormwater and operation of an interim Excess Stormwater Management System (ESMS). The Order specifies, among other things, that treated Excess Stormwater be discharged "...in a location and manner least likely to impact the existing contaminated groundwater plume." Excess Stormwater is generally defined as stormwater that:

Juneau

Long Beach

- Floods or endangers the facility operation;
- Threatens to overtop existing ditches and swales; or
- Threatens to flow off site.

Portland

The ESMS is an interim system that will continue in operation until a final system is installed in accordance with the Order and the stormwater permit issued by Ecology (State Waste Discharge Permit No. ST-7425). In addition to treating "excess" stormwater, Baxter will

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conduct pilot testing using the ESMS to provide valuable information for the design of the final stormwater system. The following sections present details regarding stormwater characteristics, the treatment process, and the ESMS.

STORMWATER CHARACTERISTICS

Two primary parcels are located at the site. Parcel A is the location of the wood treatment operation and is used for storage of treated poles. Parcel B is used to prepare untreated poles for treatment and for storage of untreated poles. Parcel B has not been used for storage of treated poles. The ESMS will collect excess stormwater from Parcel A, (excluding any rainwater that falls on the drip pad) and possibly from the Treated Pole Storage Area (Figure 1).

PCP concentrations in stormwater in Parcel A range from 0.8 to 960 ug/L with an average of 291 ug/L. PCP concentrations in Parcel B are considerably lower with an average of 27 ug/L and a range of 0.7 to 73 ug/L. Because of the very high suspended solids associated with stormwater from the site, we believe that at least 50 percent of the PCP detected in stormwater is associated with particulates and not associated with a dissolved fraction.

Dioxin/furan analysis has been conducted on stormwater samples since 1997. Unfiltered stormwater samples from Parcel A contain dioxins (Total Toxic Equivalent Quotient [TEQ]) ranging between 0.00026 and 9.97 ng/L (parts per trillion [ppt]). Unfiltered stormwater samples from the untreated pole yard (Parcel B) contain dioxin TEQs ranging between 0.05 and 1.19 ppt. Considering the hydrophobic nature of these compounds, it is likely that these data are not representative of dissolved dioxin concentrations. Dioxin analysis on filtered stormwater samples from Parcel A range from below the detection limit to 0.4 ppt, indicating that most of the dioxins in stormwater are associated with particulates.

Oil and grease are occasionally detected in site stormwater at relatively low concentrations. Two of 121 stormwater samples have exceeded the permit limit of 10 mg/L total oil and grease in Parcel A. Two samples from Parcel B have exceeded the 10 mg/L stormwater permit limit. Isolated detections of polycyclic aromatic hydrocarbons (PAHs) in stormwater samples collected in Parcels A and B have had total PAH concentrations ranging from 0.2 to 34 ug/L.

STORMWATER DESIGNATION

Potential sources of PCP to stormwater are associated with areas where wood treatment operations and treated pole storage have occurred at the site. PCP may have been transported from Parcel A to Parcel B from vehicle traffic and equipment crossover, or via stormwater.

Baxter is not aware of any listed hazardous waste sources of PCP to the stormwater. Baxter maintains that stormwater from areas of its plant other than the drip pad is not a hazardous waste based on EPA's guidance on this issue, including the agency's statement in the preamble to the Wood Preserving; Identification and Listing of Hazardous Waste Final Rule issued December 6, 1990. See 55 Fed. Reg. 50,449, 50,458 (Dec. 6, 1990) ("listings do not apply to precipitation run-off from treated wood in storage yards without drip pads where the owner or operator has complied with the no drippage requirement."). However, Baxter acknowledges that Region 10 has taken a different position on this matter with regard to stormwater in areas other than the process area at Baxter's Arlington plant. Baxter believes that EPA's interpretation is incorrect; however, this issue is not likely to be resolved prior to this winter when Baxter needs to have the ESMS operational. In the interim, EPA has advised Baxter to obtain a determination that the treated stormwater does not contain a hazardous waste. Baxter submits this request in compliance with EPA's advice. However, this request is not an acknowledgement by Baxter that EPA's articulated interpretation is correct.

As discussed above, the maximum PCP detection in stormwater is less than 1 mg/L. Based on these data, untreated stormwater from the Baxter site would not fail the characteristics or state-only criteria.

EXCESS STORMWATER MANAGEMENT SYSTEM DESIGN

Baxter submitted an Excess Stormwater Management Work Plan to EPA Region 10 for review and approval on May 29, 2001. This Work Plan contains details on the conceptual design, installation, and operation of the ESMS. Figure 1 shows the general configuration of the ESMS collection and treatment system. In general the system is designed to store up to 250,000 gallons of stormwater collected as necessary from Parcel A, which has been prone to flooding in the past. Baxter does not believe it will be necessary to collect stormwater from Parcel B, except possibly in a small area at the northeast boundary of Parcel B (see Main Treatment Area Drainage Basin on Figure 1).

Details of the final design will be resolved after EPA approves the ESMS Work Plan. In general, the system consists of stormwater collection, untreated stormwater storage, suspended solids removal using polymer-enhanced settling, and polishing of the final effluent using granular activated carbon (GAC). The treatment system is based on a designed flow of 50 gallons per minute (gpm). The Order specifies an effluent limit of no more than 1 ug/L PCP prior to discharge. Initially, treated effluent will be collected in three 16,000-gallon tanks and batch tested prior to discharge. Once the system can be shown to meet the PCP effluent limit in the Order, the discharge will be continuous with bimonthly sampling and analysis to ensure compliance with the Order.

Figure 1 identifies three possible locations for discharge of the treated stormwater. This discharge will either be into a surface infiltration swale or a near-surface infiltration gallery constructed for that purpose.

TREATED STORMWATER WILL NOT CONTAIN HAZARDOUS WASTE

Ecology's Contained-in Policy states, in general, that environmental media, such as stormwater, no longer contains hazardous or dangerous waste when the constituent concentrations in the media no longer pose a threat to human health and the environment. Ecology typically uses the Model Toxics Control Act (MTCA) Method B cleanup levels determine if environmental media are contaminated by a hazardous waste (Ecology 1993). The Model B unrestricted groundwater cleanup level for PCP is 1 ug/L, which is based on the drinking water MCL following procedures in WAC 173-340-720(4)(b). (MTCA Regulations, February 12, 2001) This constituent concentration will be achieved prior to discharge to ground and is protective of human health and the environment.

Therefore Baxter requests a Contained-In Determination that stormwater treated by this system is not a hazardous waste, regardless of whether the influent water is considered a hazardous waste.

We would appreciate your prompt consideration of our request. If you have any questions or need additional information please contact the undersigned.

Sincerely,

HART CROWSER, INC.

William B. Abercrombie

WILLIAM B. ABERCROMBIE
Principal

Lori Herman

LORI J. HERMAN
Principal Hydrogeologist

Attachments:
Figure 1 - Excess Stormwater Management System Layout

cc: Ms. Julie Sellick, Ecology NWRO
Mr. Dave Misko, Ecology NWRO
Ms. Georgia Baxter, J.H. Baxter
Ms. Sara Beth Watson, Steptoe & Johnson
Ms. Kim Ogle, EPA Region 10
Ms. Jennifer MacDonald, EPA Region 10

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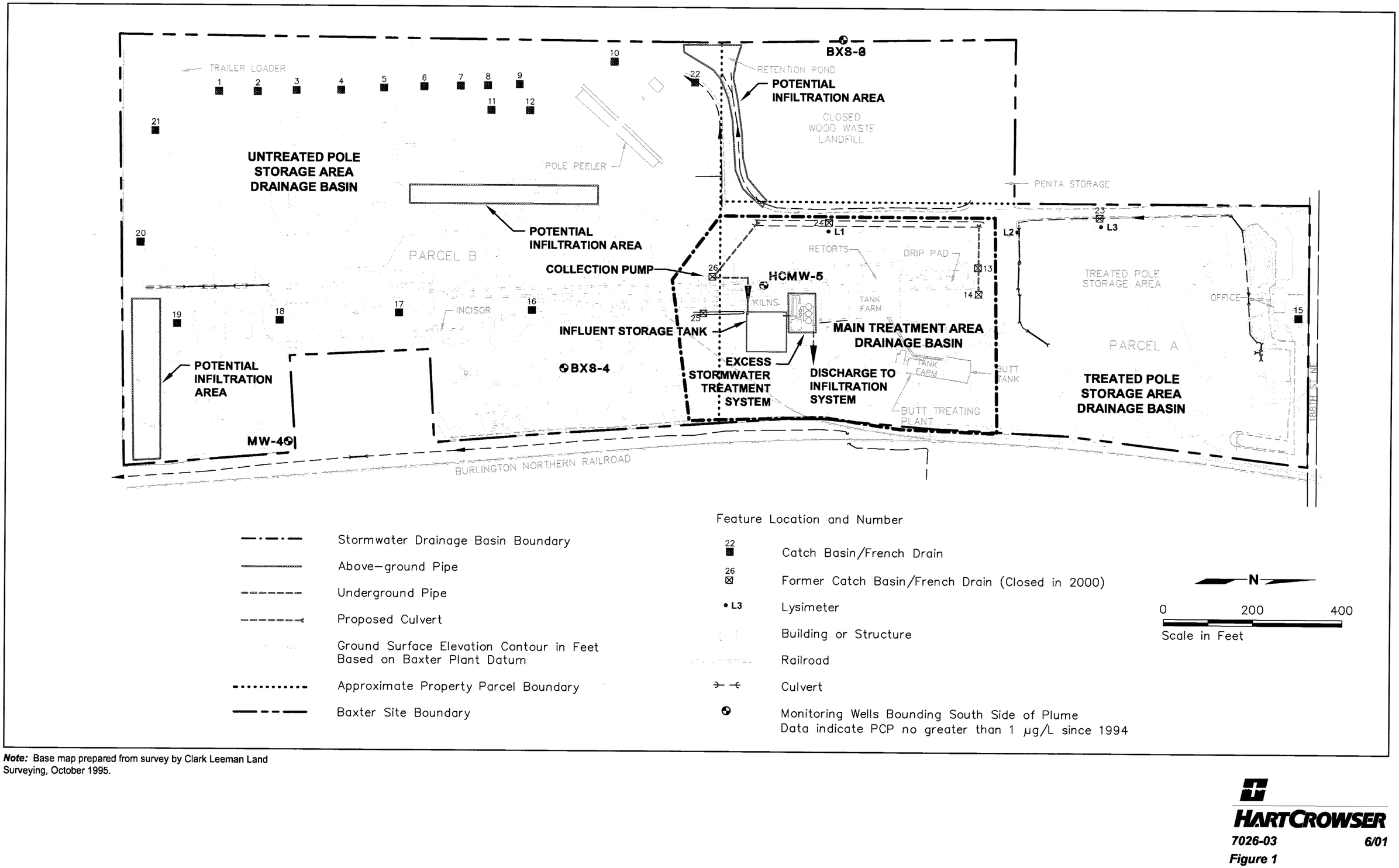
Excess Stormwater Management System Layout



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Note: Base map prepared from survey by Clark Leeman Land Surveying, October 1995.

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7026-03 *6/01*

Figure 1