



December 30, 20014

Project 0087700012

Mr. Ed Jones
Washington State Department of Ecology
Northwest Regional Office
3190-160th Avenue Southeast
Bellevue, Washington 98008-5452

**Subject: Five-Year Review Assessment of the Effectiveness of Institutional
and Other Controls as Part of Cleanup**
Stericycle Georgetown Facility
Seattle, Washington

Dear Ed:

AMEC Environment & Infrastructure, Inc. (AMEC), prepared this letter on behalf of Burlington Environmental LLC, a wholly-owned subsidiary of PSC Environmental Services LLC, which is a wholly owned subsidiary of Stericycle Environmental Solutions, Inc. (Stericycle), for the Georgetown facility located in Seattle, Washington (the site). In accordance with Agreed Order No. DE 7347 and Stericycle Georgetown Facility's Resource Conservation and Recovery Act (RCRA) Part B permit, Stericycle is required to assess the effectiveness of all institutional and other controls related to the site cleanup. This assessment is part of the Washington State Department of Ecology (Ecology) five-year review planned for May 2015, and is presented in this letter.

Stericycle has implemented the cleanup consistent with the Ecology-approved Engineering Design Report. The soil excavation and soil vapor extraction (SVE) portions of the cleanup on both Stericycle and Union Pacific Railroad (UPRR) property have been completed. The in situ biological enhancement will be implemented in 2015 and the contingent remedy for 1,4-dioxane is also expected to be implemented in 2015. Natural attenuation processes will continue to reduce contaminant concentrations throughout the cleanup area, including in the Argo Yard area. Groundwater will ultimately meet the project cleanup levels; however, recalcitrant soil contaminants (specifically polychlorinated biphenyls [PCBs]), are anticipated to persist.

Active cleanup has been essentially completed for Argo Yard. Following excavation, Stericycle performed post-excavation sampling of Argo Yard soils. Overall concentrations of constituents of concern (COCs) in the post-excavation samples are much lower than the concentrations detected in the pre-excavation sampling. Concentrations above site cleanup levels still exist within the excavated area for various COCs, but the overall contaminant levels are much reduced. However, PCBs were found at high concentrations in the post excavation samples, including levels above 10 parts per million (10,000 micrograms per kilogram) total PCBs. The high PCB detections from the post-excavation samples were from scattered locations throughout the excavation, indicating that PCB concentrations are sporadic, rather than consistent. SVE has been completed in this area. Remaining groundwater impacts from contaminants are expected to naturally attenuate and will be monitored.

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UPRR has agreed to a combination of administrative controls, institutional controls, and communications for the Stericycle-affected portion of Argo Yard. These controls are necessary to restrict groundwater recovery within the Argo Yard Area, limit the potential for exposure to COC-affected soils, protect future indoor receptors from vapor intrusion, and maintain the effectiveness and protectiveness of the implemented action.

Administrative controls such as access restrictions and worker communications have been in place for the Stericycle site since the start of the cleanup. Institutional controls (ICs) are in place for both the neighboring Stone, Drew, and Ashe and Aronson properties. In Argo Yard, ICs and UPRR worker notifications/communications are necessary to prevent future worker exposure given the presence of total PCBs above 10 milligrams per kilogram, which is the industrial cleanup level established in the Model Toxics Control Act. Worker communications have been in place since the start of cleanup in Argo Yard.

Current ICs will be included in a restrictive covenant on the property. Controls specific to the UPRR Argo Yard are currently under negotiation with UPRR. The ICs associated with the Stericycle facility, as identified in the Engineering Design Report, include:

1. Prohibiting activities on the site that may interfere with the cleanup action, operation and maintenance, monitoring, or other measures necessary to assure the integrity of the cleanup action and continued protection of human health and the environment.
Such activities would include those that complete exposure pathways to remaining contaminated media (soil or groundwater). An example would be if capping was removed and a utility trench was dug in the Barrier Wall Area, where contaminated soil and groundwater are expected to remain.
2. Prohibiting activities that may result in the release of a hazardous substance that was contained as a part of the cleanup action.
Such activities would primarily include those that damage the barrier wall or cause a failure in the maintenance of an inward gradient around the barrier wall.
3. Requiring notice to Ecology of the owner's intent to convey any interest in the property and requiring the owner to include notice of this restrictive covenant in any instrument conveying interest of the property.
4. Requiring the land owner to restrict leases to uses and activities consistent with the restrictive covenant and notify all lessees of the restrictions on the use of the property.
5. Requiring notice and approval by Ecology of any proposal to use the property in a manner that is inconsistent with the restrictive covenant.
Such use could include redevelopment of the site, or building of new structures on the site.
6. Granting Ecology and its designated representatives the right to enter the property at reasonable times for the purpose of evaluating compliance with the Cleanup Action Plan and other required plans, including the right to take samples, inspect any remedial actions, and inspect records.

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7. Prohibiting activities related to pumping of groundwater to the surface for drinking or other uses (such as lawn watering), where site groundwater chemical concentrations exceed potable cleanup standards.
8. Maintenance of asphalt and concrete surface cover.

Specific controls on UPRR-owned Argo Yard and property owned by Stericycle and SAD Properties, LLC, outside the barrier wall but east of the conditional point of compliance where COC-impacted groundwater and/or soil remain include:

1. Prohibition on the pumping of groundwater to the surface for drinking or other uses (such as lawn watering), where site groundwater chemical concentrations exceed potable cleanup standards;
2. Evaluation of vapor intrusion pathway in the event of any future construction of enclosed spaces (buildings);
3. Protection of workers performing work in the subsurface who may be exposed to remaining soil or groundwater contamination; and
4. Proper management of any potentially contaminated excavated soil or groundwater removed as part of future construction projects.

Specific controls on property owned by multiple owners (private and governmental) outside the barrier wall and west of the conditional point of compliance where COC-impacted groundwater remains include annual public notice of project status and continued operation of the vapor intrusion and mitigation program. Controls will also include:

- Annual notifications to property owners and tenants in this area, identifying site areas where groundwater contamination exceeds potable cleanup standards, reminding these individuals that production wells in the area are prohibited (where this is the case, and per which authorities), and alerting the individuals to the potential adverse health effects of using this groundwater for drinking or other purposes (such as lawn watering); and
- Annual notifications to utility entities serving this area, identifying site areas where groundwater contamination exceeds potable cleanup standards, and alerting the entities to the potential adverse health effects of contacting this groundwater or inhaling vapors resulting from contamination.

Per the Agreed Order, Stericycle will finalize language with Ecology and record restrictive covenants for Stericycle property within 10 days of completion of the in situ bioremediation (ISB) program in the Stericycle Area. ISB is expected to commence in 2015 and complete prior to the next five-year review.



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We trust this information provides the information Ecology needs for future decision-making in regard to Argo Yard controls. If you need further information, please contact Bill Beck at Stericycle or Tasya Gray at AMEC.

Sincerely yours,
AMEC Environment & Infrastructure, Inc.

A handwritten signature in black ink that reads "Natasya AS Gray". The signature is written in a cursive, flowing style.

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cc: Bill Beck, Stericycle