

December 20, 2023

Washington State Department of Ecology
Northwest Region Office
P.O. Box 330316
Shoreline, WA 98113-9716

RE: ST0501338 Blue Origin LLC
5-Days Written Report - Silver Exceedance

Dear Water Quality Permit Coordinator:

Enclosed please find response to a reportable event that occurred on December 6, 2023 during the biannual sampling of SP#7(007) for silver. The silver sample result was 0.642 mg/L versus the maximum daily limit 0.47 mg/L. Upon receiving the analytical results from the lab, the Northwest Regional Office (NRO) and City of Arlington WRF were notified on December 15, 2023 at the phone numbers listed in Section S3.F of the permit. Sr EHS Engineer received report number 727445 from NRO after notification was made. A voicemail was left with the City of Arlington point of contact who called back within an hour on the reporting day. There was no report number provided by the City of Arlington.

Follow-Up Report

1. A description of the noncompliance and its cause.

Process wastewater generated from the Xray film processor goes through two silver recovery filters. The onsite procedure is to remove the second inline filter and send back to the supplier for silver recovery. The next step is to move the first in-line filter to the second filter location. A new filter is then installed in the first filter location. On October 18, 2023, a new filter was installed by Seacast Arlington LLC (Seacast). The filter gauge indicated 60-hours of water passed through at the time of the filter change-out. After analytical results were received, further evaluation of the silver recovery unit by the Sr Test Engineer from the Kent Blue Origin site determined that the equipment is insufficient to remove silver from the Xray film processor.

2. The period of noncompliance, including exact dates and times.

The silver sample was taken from December 6th at 9:26am through December 7th at 9:26am to meet permit conditions.

3. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.

After receiving the analytical results for silver on December 15th, EHS notified the operators to stop Xray film processing operations until further notice. On December 18th, EHS Technician and the Sr Test Engineer diverted the Xray film processor wastewater to an IBC Tote for offsite disposal. The site will continue to collect process wastewater until a replacement silver recovery unit is installed.

4. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Corrective actions that will be taken to mitigate silver exceedances include:

- Replacing the silver recovery unit with a Metafix MBX-C Silver Recovery Unit. This will require submitting a modified permit application to the agency for approval.
 - Developing and implementing an operations and maintenance manual for the silver recovery unit. Train operators on the procedure to ensure compliance.
5. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

At this time, there is no overflow prior to the treatment.

If you have questions or comments, please contact me at 253-437-9300, ext. 11679.

Respectfully,



Lana Getubig
Sr EHS Engineer