Kennedy Jenks

14 May 2024

Ms. Sandra Treccani
Site Manager
Washington State Department Ecology
4601 North Monroe Street
Spokane, Washington 99205

Subject: Cap Integrity Monitoring
BNSF Railway Company, Hillyard Dross Cap
Spokane, Washington
KJ 2496114*00

Dear Ms. Treccani:

This letter provides the results of compliance monitoring and maintenance activities conducted in 2024 at the BNSF Railway Company (BNSF) Hillyard Dross Cap site (Site), located at the southwestern intersection of Wellesley Avenue and Ferrall Street in Spokane, Washington. The Site is also referred to as the Aluminum Recycling Corporation Site in the Washington State Department of Ecology (Ecology) Consent Decree No. 01202037-9 (Ecology 2001).

The dross encapsulation cell (cap) and associated stormwater system were constructed between 2001 and 2003. The dross cap consists of a low permeability, 40-millimeter-thick, high-density polyethylene (HDPE) geomembrane placed over the graded and prepared dross and soil surface. The geomembrane is overlain by 18 to 30 inches of rounded gravel that acts as a drain to shed water off the geomembrane. A woven, permeable HDPE geotextile fabric is placed above the gravel and covered with approximately 18 inches of topsoil. The topsoil was hydroseeded upon installation.

Stormwater from the dross cap is directed to a channel along the perimeter of the cap, which drains either directly to the stormwater retention pond or to a sump located in the western portion of the Site. Stormwater that drains to the sump is pumped to the retention pond. Secondary overflow from the retention pond is routed to an onsite drywell.

Compliance monitoring and maintenance activities in 2024 consisted of annual remedial component system checks and maintenance performed consistent with the approved O&M Plan. The annual inspection was completed on 4 April 2024 and included assessment of the following: (1) the dross cap; (2) the stormwater conveyance, evaporation, and disposal system; and (3) other physical facilities such as access roads, setbacks, and fencing.

No erosion or settlement of the dross cap was observed during the inspection. Grasses and forbs were abundant on and surrounding the dross encapsulation cell during the growing season and were dormant during dry months, as is normal.

Stormwater conveyance, evaporation, and disposal system components were observed in good condition during the inspection. The evaporation pond that collects Site stormwater is located directly northeast of the dross encapsulation cell. Water level elevations measured in the pond are referenced to the North American Vertical Datum of 1988. Post-construction evaporation pond water level elevations are presented in Attachment A. The evaporation pond was not observed to be discharging to the overflow sump and drywell on 4 April 2024.

Other physical features such as access roads and setbacks appeared to be in good condition at the time of the inspection. The following conditions were noted during the annual inspection completed on 4 April 2024:

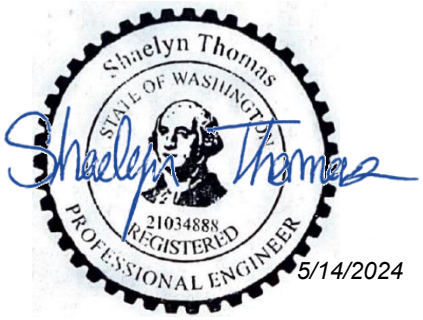
- Fence posts in the northeastern corner of the fence surrounding the dross cap were leaning, but the fence panels were stable and not in need of repair.
- Site entrance gate remains difficult to operate; additional repairs will be performed.
- Sapling trees were observed to be growing along the eastern perimeter of the stormwater retention pond. The saplings were removed using hand tools on 13 May 2024.

Site photograph logs from the field inspection and maintenance activities have been included as Attachment B.

The next compliance monitoring event is scheduled to occur during the second quarter of 2025. Please contact us at (503) 423-4033 if you have questions or concerns about the cap integrity monitoring.

Very truly yours,

Kennedy/Jenks Consultants, Inc.



Shaelyn Thomas, P.E.
Project Manager

cc: Shane DeGross, BNSF Railway Company

Attachments:
Attachment A – Summary of Evaporation Pond Water Levels
Attachment B – Site Photographs

Attachment A

Summary of Evaporation Pond Water Levels

Attachment A: Summary of Evaporation Pond Water Levels

Date Measured	Water Level Elevation[a] (feet)
8/26/2003	2,035.85
9/25/2003	2,035.64
10/30/2003	2,035.50
11/26/2003	2,035.60
12/22/2003	2,036.64
1/28/2004	2,038.77
02/20/04[b]	2,039.18
3/16/2004	2,039.08
4/19/2004	2,038.64
5/20/2004	2,038.10
6/16/2004	2,038.81
7/26/2004	2,037.98
8/23/2004	2,037.73
9/13/2004	2,037.48
10/15/2004	2,037.52
11/8/2004	2,037.48
12/15/2004	2,038.52
01/28/05[b]	2,039.12
2/16/2005	2,039.06
3/10/2005	2,039.00
4/20/2005	2,039.02
5/14/2005	2,038.93
6/9/2005	2,039.02
7/14/2005	2,038.77
8/15/2005	2,037.77
9/27/2005	2,036.85
10/21/2005	2,037.85
11/3/2006	2,038.02
12/16/2006	2,037.85
01/17/06[b]	2,039.10
02/03/06[b]	2,039.10
03/17/06[b]	2,039.10
04/14/06[b]	2,039.10
05/03/06[b]	2,039.10
6/7/2006	2,038.18
7/6/2006	2,038.85
8/31/2006	2,038.85
9/13/2006	2,038.77
10/30/2006	NM
11/13/2006	2,038.89
12/4/2006	2,038.93
01/04/07[b]	2,039.14
02/02/07[c]	NM

Attachment A: Summary of Evaporation Pond Water Levels

Date Measured	Water Level Elevation[a] (feet)
03/06/07[b]	2,039.10
4/7/2007	2,036.87
5/3/2007	2,036.90
6/1/2007	2,038.94
07/03/07[c]	NM
8/1/2007	2,037.70
9/7/2007	2,037.07
10/9/2007	2,037.17
11/19/2007	2,037.24
12/20/2007	2,038.64
1/29/2008	2,039.39
2/6/2008	2,039.31
3/17/2008	2,039.39
04/04/08[b]	2,039.41
5/1/2008	2,039.27
6/16/2008	2,039.03
7/4/2008	2,038.69
8/5/2008	2,037.99
9/10/2008	2,037.59
10/7/2008	2,037.38
11/11/2008	2,037.56
12/5/2008	2,037.59
01/09/09[b]	2,039.57
02/22/09[b]	2,039.49
03/10/09[b]	2,039.55
04/09/09	2,039.39
5/4/2009	2,039.21
6/5/2009	2,038.79
7/10/2009	2,038.28
8/13/2009	2,037.69
9/8/2009	2,037.34
10/5/2009	2,036.65
11/12/2009	2,037.54
12/7/2009	2,037.75
01/19/10[b]	2,039.48
02/17/10[b]	2,039.49
03/08/10[b]	2,039.41
4/22/2010	2,039.32
5/12/2010	2,039.21
6/4/2010	2,039.30
7/30/2010	2,038.88
8/20/2010	2,038.47
9/9/2010	2,038.18

Attachment A: Summary of Evaporation Pond Water Levels

Date Measured	Water Level Elevation[(a)] (feet)
10/11/2010	2,038.07
11/10/2010	2,038.42
12/10/10[(b)]	2,039.59
01/20/11[(b)]	2,039.49
02/17/11[(b)]	2,039.48
03/21/11[(b)]	2,039.49
04/09/11[(b)]	2,039.45
5/11/2011	2,039.39
06/10/11[(b)]	2,039.49
7/8/2011	2,039.09
8/8/2011	2,038.39
9/21/2011	2,037.39
10/12/2011	2,037.90
11/17/2011	2,037.89
12/9/2012	2,037.99
1/11/2012	2,038.29
02/16/12[(b)]	2,039.49
03/14/12[(b)]	2,039.49
04/07/12[(b)]	2,039.49
05/15/12[(b)]	2,039.37
6/12/2012	2,039.18
7/12/2012	2,038.79
8/22/2012	2,039.09
9/14/2012	2,037.51
10/22/2012	2,037.09
November 2012[(b)(d)]	NA
12/12/12[(b)]	2,039.37
01/15/13[(b)]	2,039.27
10/24/2013	2,038.09
11/19/2013	2,038.09
12/18/2013	2,038.15
1/29/2014	2038.69
2/26/2014[(b)]	2,039.29
3/28/2014 [(b)]	2,039.23
4/23/2014	2,039.13
5/28/2014	2,038.84
6/17/2014	2,038.61
7/28/2014	2,038.12
8/21/2014	2,037.39
9/17/2014	2,038.39
10/24/2014	2,038.31
11/25/2014	2,037.52
12/11/2014	2,038.39

Attachment A: Summary of Evaporation Pond Water Levels

Date Measured	Water Level Elevation[(a)] (feet)
1/29/2015	2,039.39
2/20/2015	2,039.36
3/31/2015	2,039.39
4/24/2015	2,039.20
5/22/2015	2,038.89
6/25/2015	2,038.30
7/14/2015	2,037.94
8/10/2015	2,037.44
9/30/2015	2,036.84
10/28/2015	2,036.69
11/23/2015	2,036.78
12/18/2015	2,037.99
1/26/2016	2,039.41
2/25/2016	2,039.37
3/21/2016	2,039.44
4/22/2016	2,039.22
5/27/2016	2,039.01
6/28/2016	2,038.49
7/19/2016	2,038.09
8/18/2016	2,037.59
9/23/2016	2,037.04
10/21/2016	2,037.95
11/14/2016	2,039.39
12/22/2016	2,039.45
1/31/2017	2,039.47
2/27/2017	2,039.53
3/16/2017	2,039.49
4/19/2017	2,039.53
5/17/2017	2,039.43
6/15/2017	2,038.95
6/27/2018	2,038.59
4/23/2019	2,039.48
4/29/2020	2,039.19
4/6/2021	2,039.39
4/29/2022	2,039.19
5/17/2023	2,039.31
4/4/2024	2,039.05

Notes:
(a) Pond water surface elevation relative to NAVD 88. Water level elevation corresponds to the event gauge reading at the pond plus a base elevation of 2,036.59 feet mean sea level (MSL).
(b) Water within the pond was discharging to overflow sump.
(c) Not measured because the pond's staff gauge shifted position, requiring maintenance during subsequent operation and maintenance (O&M) visit.
(d) Water level was within normal range for the time of year. However, a precise water level is not available
NM = not measured.
NA = not available.

Attachment B

Site Photographs

Spokane Environmental Solutions
3810 East Boone Avenue, Suite 101
Spokane, Washington 99202
509.688.5376

Hillyard Dross CAP Inspection

PROJECT IMAGE DOCUMENTATION

April 4, 2024

Spokane Environmental Solutions
3810 East Boone Avenue, Suite 101
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Hillyard Dross CAP Maintenance

PROJECT IMAGE DOCUMENTATION

May 13, 2024