

Mr. Steve Calanog Federal On-Scene Coordinator United States Environmental Protection Agency Region IX 75 Hawthorne Street San Francisco, CA 94015

Date: January 17, 2023 Our Ref: 30123419

Subject: Temporary Consolidation Waste Pile Regrading Completion Report 2022

Location: Haystack Mines Site; McKinley County, New Mexico

Dear Mr. Calanog,

Arcadis U.S., Inc. 630 Plaza Drive Suite 200 Highlands Ranch Colorado 80129 Phone: 720 344 3500

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On behalf of BNSF Railway Company (BNSF), Arcadis U.S., Inc. (Arcadis) prepared this Temporary Consolidation Waste Pile (Waste Pile) Regrading Completion Report 2022 to document the cover repair work completed at the former Haystack Mines Site in McKinley County, New Mexico (the site). In accordance with the Haystack Mines Administrative Settlement Agreement and Order on Consent for Removal Action (USEPA 2017), an annual inspection confirming fence integrity and erosion control integrity are required. On June 30, 2022, BNSF performed an initial inspection of the Waste Pile in Section 19. The inspection indicated that some erosion of the cover material had occurred since construction was completed in 2021. BNSF determined that the waste pile required regrading and re-seeding in some areas, and construction activities would be performed to mitigate erosion, improve cover stability, and reduce the long-term site management costs.

The field work was conducted at the site on November 15 and 16, 2022, by Arcadis, Pacific West LLC, and Horizon Environmental Services, Inc. All work performed was on Section 19, which is owned by BNSF, and no work was performed on the Navajo Nation. The scope of work performed included the following:

- Regrading of the cover soil within specific areas where erosion had occurred to eliminate erosion rills and restore a uniformly sloped ground surface on the Waste Pile.
- Installation of a broad, shallow drainage swale around the perimeter of the Waste Pile soil cover to promote surface water drainage toward a sediment detention basin constructed at the downstream limit of the perimeter swale, whereby stormwater collected in the basin will discharge to the adjacent undisturbed vegetated area to the northwest of the basin; and,
- Application of a seed/wood hydro-mulch over the top and lower sloped sides of the Waste Pile, the perimeter swale, and the sediment detention basin.

Annual monitoring of the Waste Pile will continue, with the above-stated long-term goal of establishing the Waste Pile as a stable landform.

Photographs showing the Waste Pile before and after field work are provided in Attachment 1.

Mr. Steve Calanog United States Environmental Protection Agency January 17, 2023

Please contact me if you have any questions or comments related to this letter.

Sincerely,

Arcadis U.S., Inc.

ali MA

Ali Harmon, P.E. Project Manager

Email: ali.harmon@arcadis.com

Direct Line: 612.373.0229 Mobile: 515.450.4128

CC.

Tom Jones, BNSF Ryan Russ, Arcadis

Enclosures:

Attachment 1 - Photograph Log

References

USEPA. 2017. Administrative Settlement Agreement and Order on Consent for Removal Action. CERCLA Docket No. 09-2017-02 and CERCLA Docket No. 06-02-17. May 15.

Attachment 1

Photograph Log

Haystack Mines Site Baca/Prewitt Chapter, Navajo Nation McKinley County, New Mexico





Photograph: 1

Description:

Pre-repair work

Location:

Temporary Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/15/2022



Photograph: 2

Description:

Pre-repair work

Location:

Temporary Consolidated

Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/15/2022

Haystack Mines Site Baca/Prewitt Chapter, Navajo Nation McKinley County, New Mexico





Photograph: 3

Description:Pre-repair work

Location: Temporary

Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/15/2022



Photograph: 4

Description:

Erosional rills repaired

Location:

Temporary Consolidated Waste

Pile

Photograph taken by:

Audrey Yorke

Date: 11/15/2022

Haystack Mines Site Baca/Prewitt Chapter, Navajo Nation McKinley County, New Mexico





Photograph: 5

Description:

Perimeter drainage swale

Location:

Temporary Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/15/2022



Photograph: 6

Description:

Perimeter drainage swale

Location:

Temporary Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/16/2022

Haystack Mines Site Baca/Prewitt Chapter, Navajo Nation McKinley County, New Mexico





Photograph: 7

Description:

Drainage swale from Temporary Consolidated Waste Pile to sediment basin

Location:

Temporary Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/16/2022



Photograph: 8

Description:

Hydro-mulch application

Location:

Temporary Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/16/2022

Haystack Mines Site Baca/Prewitt Chapter, Navajo Nation McKinley County, New Mexico





Photograph: 9

Description: Hydro-mulch application

Location: Temporary Consolidated Waste Pile

Photograph taken by: Audrey Yorke

Date: 11/16/2022



Photograph: 10

Description: Hydro-mulch application

Location: Temporary Consolidated Waste Pile

Photograph taken by: Audrey Yorke

Date: 11/16/2022

Haystack Mines Site Baca/Prewitt Chapter, Navajo Nation McKinley County, New Mexico





Photograph: 11

Description:

Hydro-mulch application at sediment

basin

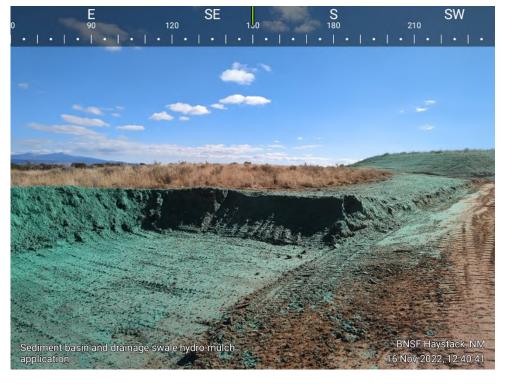
Location:

Sediment basin

Photograph taken by:

Audrey Yorke

Date: 11/16/2022



Photograph: 12

Description:

Hydro-mulch application at sediment

basin

Location:

Sediment basin

Photograph taken by:

Audrey Yorke

Date: 11/16/2022

Haystack Mines Site Baca/Prewitt Chapter, Navajo Nation McKinley County, New Mexico





Photograph: 13

Description:

Hydro-mulch application at perimeter drainage swale

Location:

Temporary Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/16/2022



Photograph: 14

Description:

Hydro-mulch application at perimeter drainage swale

Location:

Temporary Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/16/2022

Haystack Mines Site Baca/Prewitt Chapter, Navajo Nation McKinley County, New Mexico





Photograph: 15

Description:

Leftover clean fill soil staged west of Temporary Consolidated Waste Pile

Location:

Temporary Consolidated Waste Pile

Photograph taken by:

Audrey Yorke

Date: 11/16/2022