



Commonwealth of Virginia

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May 9, 2024

Mr. Tom Stinson
Steel Dynamics Roanoke Bar Division
102 Westside Boulevard NW
Roanoke, VA
Tom.stinson@steeldynamics.com

VIA ELECTRONIC MAIL

RE: **Long Term Stewardship Report**
Steel Dynamics Roanoke Bar Division
EPA ID VAD003122553

Dear Mr. Stinson:

The Virginia Department of Environmental Quality, Office of Remediation Programs (VDEQ) has prepared the attached report following the Long-Term Stewardship evaluation performed on February 7 at the Steel Dynamics Roanoke Bar site located in Roanoke, Virginia. The evaluation found no outstanding items with compliance of engineering and institutional controls as defined within the 2019 Uniform Environmental Covenant Act (UECA)-compliant covenant.

You may contact me to discuss any questions. I can be reached at 804-584-3143 or by e-mail at stephanie.houston@deq.virginia.gov.

Respectfully,

A handwritten signature in black ink, appearing to read "Stephanie Houston".

Stephanie Houston
Corrective Action Project Manager



ECC: Tara Mason – VDEQ-CO
Nikki Herschler, Brock Malcolm – VDEQ-BRRO
Kristin Koroncai – USEPA Region III
Jacqueline Morrison – USEPA Region III
Charles Williams – Gentry Locke

Attachments



**Long-Term Stewardship Assessment Report
Steel Dynamics Roanoke Bar Division
(Roanoke Electric Steel Corporation)
EPA ID VAD003122553**

Prepared by: Stephanie Houston

Date: May 9, 2024

Remedy Review Summary

The Long-Term Stewardship Assessment showed that engineering and institutional controls selected and defined within the 2019 UECA covenant are implemented and remain intact and undamaged.

Introduction:

Long-term stewardship (LTS) refers to the activities necessary to ensure that engineering controls (ECs) are maintained and that institutional controls (ICs) continue to be observed. The purpose of the EPA Region 3 LTS program is to periodically assess the efficacy of the implemented remedies (i.e., ECs and ICs) and to update the community on the status of the RCRA Corrective Action facilities. The assessment is conducted in two-fold, which consists of a record review and a field inspection, to ensure that the remedies are implemented and maintained in accordance to the final decision.

The RCRA Corrective Action Program has identified key elements of effective Long-Term Stewardship for Corrective Action cleanups. The LTS Report took into consideration the following elements while preparing this report:

Element 1 – Legal Authorities

Element 2 – Information Regarding Engineering and Institutional Controls

Element 3 – Long-Term Facility Oversight, Monitoring, and Maintenance

Element 4 – Recordkeeping and Tracking

Element 5 – Meaningful Engagement and Consultation

Element 6 – Funding

Element 7 – Enforcement

Element 8 – Enforceable Mechanisms

Element 9 – Dedicated Resources

Site Background:

The Steel Dynamics Roanoke Bar Division property (“Facility”), formerly Roanoke Electric Steel Corporation (RES), is located at 102 Westside Boulevard, Roanoke, Virginia, 24017 and is approximately 63 acres. In 1955, RES was founded to provide steel products to manufacturers and distributors in the metal industry. In 2006, RES changed its name to Steel Dynamics Roanoke. The Facility produces steel billets and high quality finished steel products, such as angles, channels, rounds, and flat bars. All finished steel products are made from a feedstock of scrap metal and alloys. Prior to 1955, the site was used as farmland. Surrounding land uses include residential properties to the north and west, and Norfolk Southern Railroad line and rail yard to the south and east. The Facility and surrounding properties are served by public utilities, including municipally supplied water provided by the Roanoke City Water Department. The Facility operates one non-potable well at the Facility, which is not required to be permitted by the Virginia Department of Health or other regulatory agencies. The well is used solely for process cooling purposes, and all discharge is routed through the permitted wastewater treatment facility.

The Facility is designated as a Land Disposal Facility (LDF). The Facility first submitted an application for hazardous waste storage of K061 in November 1980. The facility submitted to the Virginia Department of Health – Bureau of Hazardous Waste Management (“BHW”) an application for a new hazardous waste treatment facility on November 8, 1983 and then a closure plan for the waste piles on July 16, 1984. The Facility petitioned the EPA on September 14, 1984 to delist the K061 waste as it intended to treat the waste through a chemical fixation process; this petition was granted March 22, 1989. The waste pile closure plan was approved by BHW on August 16, 1985. The Facility submitted to the Virginia Department of Waste Management (VDWM), who administered environmental regulations, closure certifications of the waste piles dated June 19, 1986. VDWM required the Facility to submit a Part B Post-closure Permit Application or alternatively, an equivalency petition for closure of the waste piles. Additional communications followed, but a Part B Post-Closure Permit Application was not submitted to VDWM by the Facility. The Facility is still designated as a LDF even though a waste pile does not exist.

In 1989, the EPA performed a RCRA Facility Assessment, which led to the determination that there was a release of hazardous waste into the environment from the facility. As a result, in 1999, EPA issued an Administrative Order on Consent (CO) under Section 3008(h) of RCRA, 42 U.S.C. §6928 to Roanoke Electric Steel Corporation which requires that the Facility perform a RCRA Facility Investigation (RFI), a Corrective Measurement Study (CMS), and any interim measures at the Facility necessary to protect human health and the environment. All work requirements under the Consent Order have been met.

The RFI report released in July 2014 concluded that, based on the human health risk assessment, potential cancer risks and non-cancer hazard indices were acceptable for inhalation of indoor air for all receptors, and also for the non-drinking water pathways for potential residential receptors. With respect to direct contact with soil by on-site facility workers or construction workers, potential cancer risks were acceptable. Non-cancer hazard indices were marginally above the

benchmark. Potentially unacceptable risks were associated with the use of groundwater as a drinking water source; however, current groundwater use prohibitions under the authority of the City of Roanoke and suggested institutional controls for the Facility satisfied EPA's priority for protecting human health. Because the treatment of K061 dust is performed in an enclosed treatment system, the RFI noted that there is no longer a threat of a continuing potential source of manganese to groundwater. No corrective measures were therefore warranted except for land and groundwater use controls. The ecological risk assessment concluded that ecological risks are negligible, and therefore, there is no need for remediation on the basis of ecological risk.

The CMS report was released in November 2014 and concluded that the remedy satisfied the three corrective action criteria. The Statement of Basis was issued on June 18, 2015, and the Final Decision and Response to comments (FDRTC) was released August 13, 2015. Remedies are defined in the UECA covenant and described in Element 2.

Current Site Status:

The facility remains an active facility.

Element 1: Legal Authorities

The Final Remedy Decision was issued under the authority of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. Sections 6901 and 6992k. Institutional controls defined within the remedy for the facility were implemented through the UECA-compliant Environmental Covenant recorded on April 17, 2019. The UECA serves as the authority for enforcing the final remedy at the Facility. EPA is listed as the Agency in the Covenant.

Element 2: Information Regarding Engineering and Institutional Controls

The following controls were described in the UECA covenant recorded on April 17, 2019 as part of the CA remedy and are Facility-Wide with some limitations applicable to specific areas.

Associated Area	Restriction
Entire Facility	1. The Property use shall be restricted to commercial and/or industrial purposes and shall not include residential purposes unless it is demonstrated to EPA, in consultation with the Virginia Department of Environmental Quality ("DEQ"), that such use will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy, and EPA, in consultation with DEQ, provides prior written approval for such use. 2. Groundwater at the Property shall not be used for any purpose other than for the facility's operation and maintenance and in addition for monitoring activities. 3. No new wells shall be installed on Property unless it is demonstrated to

Associated Area	Restriction
	EPA, in consultation with DEQ, that such wells are necessary to implement the final remedy. 4. The Property shall not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the remedy.
Locations 1 (Baghouse Area) Location 2 (Easement Right-of-Way) Location 3 (Cherry Hill Parcel)	1. All earth moving activities including excavation, drilling and construction activities, in known contaminated areas at the Property, described as Locations 1, 2 and 3, in Exhibit A, where any contaminants remain in soils above EPA Region III's Screening levels for Industrial Soils or in groundwater above their maximum contaminant levels (MCLs) or EPA Region III's Tap Water Regional Screening Levels shall be conducted in accordance with the Materials Management Plan (MMP) approved by the EPA.

Element 3 – Long-Term Facility Oversight, Monitoring and Maintenance

The UECA Covenant requires that, by the end of March 2019, and every five (5) years thereafter, the then current owner of the Property shall submit to the Agency, DEQ, and any Holder, written documentation stating whether or not the activity and use limitations in this environmental covenant are being observed. The Facility submitted the 5-year UECA letter on March 21, 2024 reporting that activity and use limitations are being observed. The next report is due March 31, 2029. In addition, within one (1) month after any of the events listed in Section 5(b) of the Environmental Covenant, the then current owner of the Property shall submit to the Agency, DEQ, and any Holder written documentation describing the event.

A portion of the Facility along Peters Creek, which bisects the property, is located within a Regulatory Floodway (Zone AE) with adjacent portions designated as a Zone AE Hazard Area and nearby portions designated as a 1% Annual Chance Flood Hazard Area or 0.2% Annual Chance Flood Hazard Area as indicated on [FEMA's National Flood Hazard Layer \(NFHL\) Viewer](#). Remedies are therefore possibly susceptible to climate impacts based on these flood criteria.

Element 4 – Recordkeeping and Tracking

The UECA covenant and Final Remedy provide visual representation of the activity and use limitations.

Mapping: The EPA Facility website figure has been updated with a Geospatial PDF showing the use restriction boundaries. The map was field-verified, and no issues were noted. Earth-moving land use limitations apply to Locations 1 (Baghouse Area), 2 (Easement Right-of-Way), and 3 (Cherry Hill Parcel). All other land use limitations apply to the Entire Facility.

Element 5 – Meaningful Engagement and Consultation

The Facility has active operations, and it has no off-site impacts. The Statement of Basis (SB) was publicly noticed on June 18, 2015 in The Franklin News Post newspaper and other outlets in accordance with EPA Public participation guidance. EPA received no comments on its proposed remedy for the Facility; the Final Remedy therefore did not change from the remedy proposed in the SB.

Element 6 – Funding

The Statement of Basis noted that the proposed remedy did not require any further engineering actions to remediate soil or groundwater contamination and that the costs of implementing institutional controls will be di minimis. Financial Assurance for Corrective Action was therefore not required for the Facility.

Element 7 – Enforcement

EPA, without limitation, reserves its right to take administrative enforcement action under RCRA or other federal law for violations. The UECA covenant provides additional enforceability for the Grantor and the Agency.

Element 8 – Enforceable Mechanisms

Corrective Action remedies are enforceable through an UECA-compliant Environmental Covenant recorded on April 17, 2019.

Element 9 – Dedicated Resources

The Performance Partnership Grant Workplan provides for Long-Term Stewardship activities. The Programmatic goal is to evaluate 20% of facilities with remedies older than 10 years.

Long-term Stewardship Site Visit: On February 8, 2024

DEQ conducted a LTS site visit to discuss and assess the status of the implemented remedies at the site. A field report is included with this letter. The following notes were included in the field report:

- 3 wells (MW-1-NS, MW-2-NS, MW-3-NS) on Norfolk-Southern property are to be abandoned in 2 weeks, and the Facility will move to annual monitoring instead of semi-annual monitoring.
- The Facility confirmed that no waste piles are placed on the surface.
- A thin portion of land adjacent to the railroad was leased by the Facility from Norfolk-Southern at the time the 2019 UECA covenant was recorded and to which use limitations apply. During the site visit, the question was raised whether this area was still leased

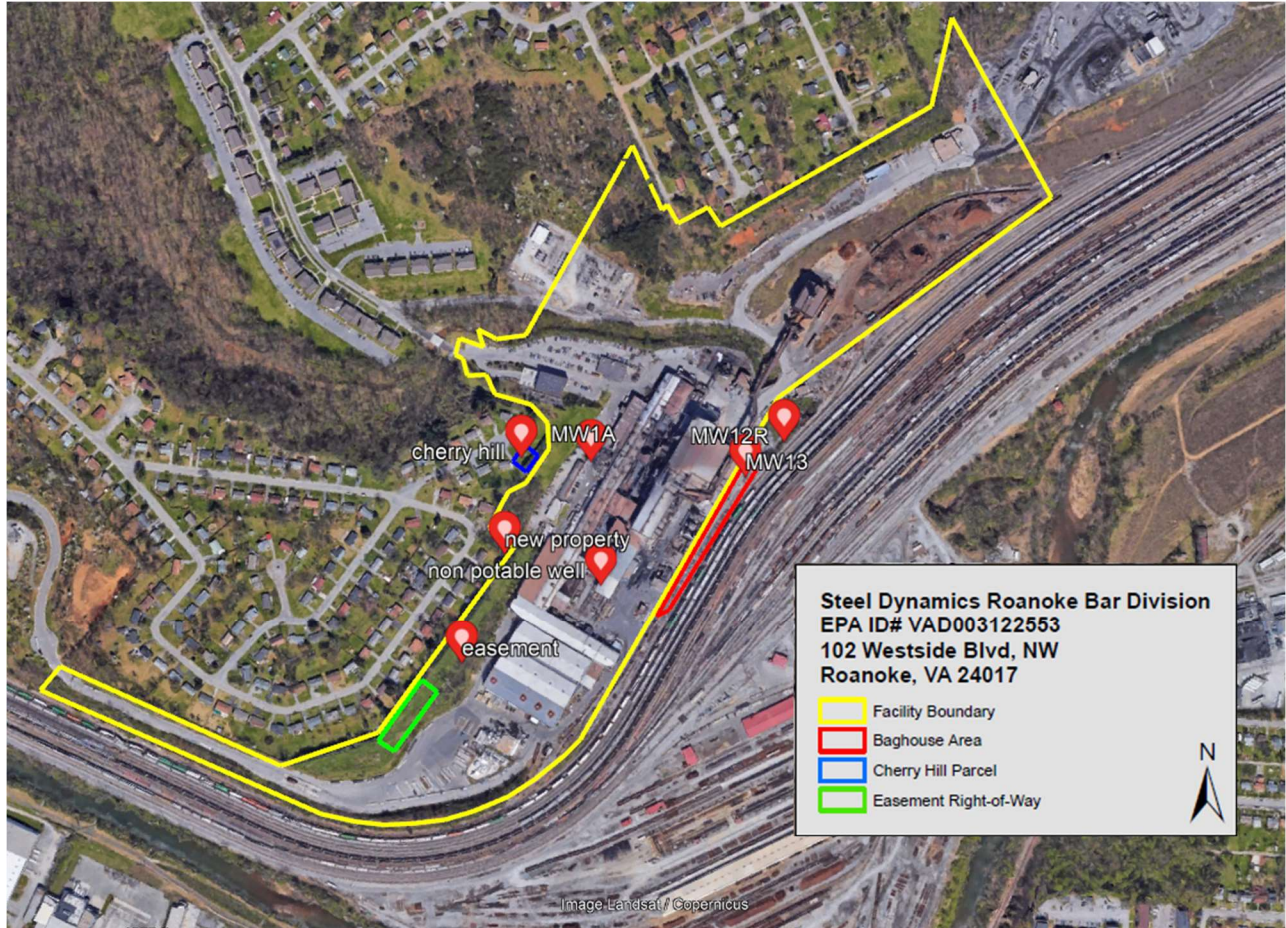
from Norfolk-Southern. A follow-up e-mail from Mr. Tom Stinson, Environmental Engineer for the Facility, dated February 29, 2024, confirmed that the 1.65-acre stretch of property is still being leased from Norfolk-Southern and included an attachment of the lease agreement. The lease terms began on May 20, 2020, and end on May 19, 2029.

- The Facility purchased a parcel near the Cherry Hill lot (see map below) to be used for parking if flooding occurs.

Follow-up Activities:

No follow-up activities are required for this LTS evaluation.

DEQ Long Term Stewardship Facility Map
Steel Dynamics Roanoke Bar Division – Roanoke, Virginia



Steel Dynamics Roanoke Bar Division
2024 Long Term Stewardship Inspection

Select Site Photos

Photos by: Stephanie Houston

February 7, 2024

MW-1A



At MW-1A. Monitoring well not labeled with well number.



At MW-1A facing South. MW-1A is located in a parking area downgradient to Facility buildings.

Cherry Hill



At Southeast end of Cherry Hill facing Northeast. No development on the Cherry Hill parcel.



At East end of Cherry Hill facing East. Cherry Hill parcel is located on a hill to the west of the Facility buildings.

New Property



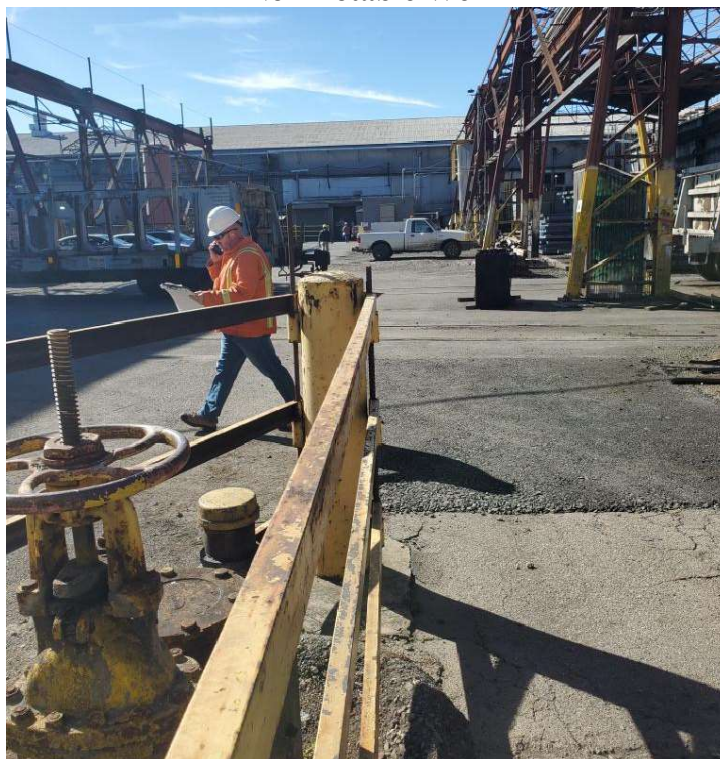
At North end of new property facing Southwest. New parcel acquired by the Facility for use as a parking lot if flooding occurs.

Easement



North of Easement Area. No development has occurred on this area.

Non-Potable Well



At non-potable well facing Southwest. Non-potable well still used for cooling purposes.

MW-12R



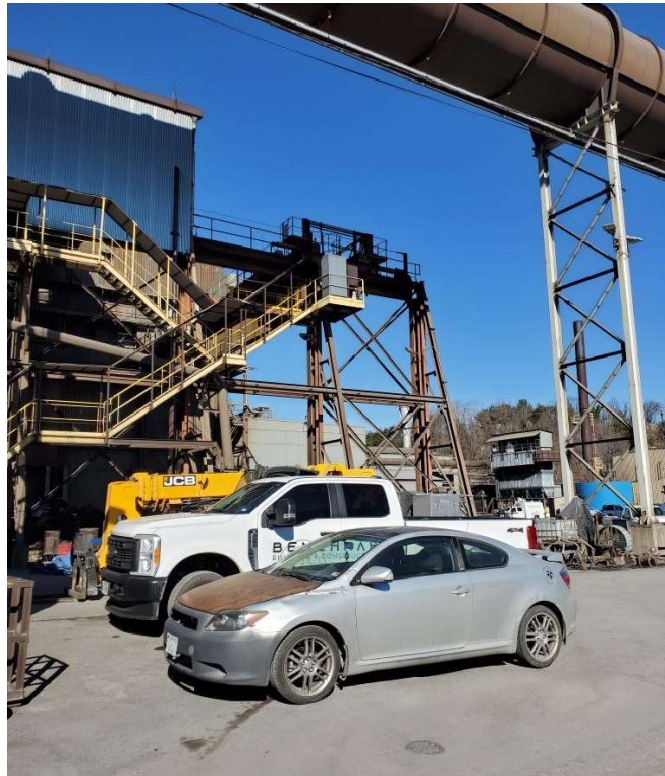
At MW-12R. Monitoring well not labeled with well number.

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2024 Long Term Stewardship Inspection



At MW-12R facing North. MW-12R is located next to Peters Creek.

MW-13



To the East of MW-13 facing West. Monitoring well not labeled with well number. MW-13 is located next to the baghouse.

Steel Dynamics Roanoke Bar Division
2024 Long Term Stewardship Inspection

Field Checklist

Site visit: 2/8/2024

Time of visit: 9:00 AM

People Present (name/phone/e-mail):

- Tom Stinson, SDI, environmental team
- Robert Wagner, Crawford Environmental
- Charlie Williams, legal
- Jeff Kaiser
- Rob __?__, SDI
- Brock Malcolm, VDEQ BRRO
- Jessie Newman, SDI, environmental team

<u>IC Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
• Have the ICs specified in the remedy been fully implemented? Implementation mechanism in place?	X		
• Do the ICs provide control for the entire extent of contamination (entire site or a specific portion)?	X		
• Are the ICs eliminating or reducing exposure of all potential receptors to known contamination?	X		
• Are the ICs effective and reliable for the activities (current and future) at the property to which the controls are applied?	X		
• Have the risk of potential pathway exposures addressed under Corrective Action changed based on updated screening levels and new technologies?		X	
• Are modifications to the IC implementation mechanism needed? (i.e. UECA Covenant, Permit or Order)		X	
• Are there plans to develop or sell the property?		X	No, particularly not 3 areas
• Have all reporting requirements been met?	X		UECA due by 3/31/2024

<u>Groundwater Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
• Is groundwater onsite used for potable purposes?		X	(RFI, 2006) one non-potable well on property for cooling purposes – located near

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2024 Long Term Stewardship Inspection

			lab, still used
• Is the Facility connected to a public water supply?	X		
• Have any new wells been installed at the facility?		X	Current wells on property are not labeled with well numbers at the well.
• Are the current groundwater flow rate and direction similar as mentioned in the previous studies?	X		
• Groundwater contaminants stable or decreasing in concentration?	X		Recent increase in MW-1A due to low water table, which required bailing and therefore resulted in turbidity.
• Are groundwater monitoring wells still in place (# wells)?	X		3 wells (MW-1-NS, MW-2-NS, MW-3-NS) on Norfolk-Southern property are to be abandoned in 2 weeks.
• Any evidence or reason to re-evaluate the number and location of monitoring points and/or monitoring frequency?	X		3 wells (MW-1-NS, MW-2-NS, MW-3-NS) on Norfolk-Southern property are to be abandoned in 2 weeks, and facility will move to annual monitoring instead of semi-annual monitoring. The Norfolk-Southern wells are to be removed because the wells have not had any exceedances above RSLs during any reported sampling events starting in 6/1/2011. Given that concentrations have been stable or decreasing, monitoring will move to annual instead of semi-annual monitoring.
• For wells where groundwater monitoring is no longer required, have the wells been decommissioned?			3 wells (MW-1-NS, MW-2-NS, MW-3-NS) on Norfolk-Southern property are to be abandoned in 2 weeks.
• Is there evidence of monitored natural attenuation occurring in groundwater?	X		

<u>Surface and Subsurface Soil Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
• Is the facility being used for residential purposes?		X	
• Have there been recent construction or earth-moving activities or plans for such?		X	Not in the 3 areas noted on the UECA where MMP is required (Baghouse Area, Easement

Steel Dynamics Roanoke Bar Division
2024 Long Term Stewardship Inspection

			Right-of-Way, and Cherry Hill Parcel)
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<u>Miscellaneous Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
Is the lease between Norfolk Southern and SDI at Location 1 (Baghouse Area) still active? Any changes to the terms? MW-12?			Mr. Burns question – had leased property, see if still leased or own now
- Any updates to documents (e.g., MMP)? - MMP dated 1/2017 - GWMP dated 4/2017, revised 1/31/2024			

Other Notes

- Waste piles
 - None – nothing placed on surface
 - Now have 90-day waste containment – roll-offs, rail cars
- Extended building 2017/2018 (not into areas where MMP is required)
- Bought parcel near Cherry Hill lot, use for parking if flooding occurs