



July 20, 2023

SENT VIA EMAIL TO: <u>Eescdcopv.enrd@usdoi.gov</u>

David Rosskam U.S. Department of Justice Ben Franklin Station P.O. Box 7611 Washington, DC 20044-7611

Re: J.R. Simplot Rock Springs Consent Decree Semi-Annual Periodic Report No. 10

Dear Mr. Rosskam:

Pursuant to the Consent Decree (U.S. v. J.R. Simplot Company), Section VII, paragraph 42, attached is the Semi-Annual Periodic Report No. 10 for the period January through June 2023.

Please let us know if you have any questions or if a conference call is needed. I can be reached at (208) 780-7365 or (208) 867-1645.

Sincerely,

Alan L. Prouty

Vice President, Environmental & Regulatory Affairs

CC: EES Case Management Unit Environmental & Natural Resources Division by mail

Linda Jacobson, RCRA Enforcement Branch, Enforcement and Compliance Assurance Division, US EPA Region 8 by mail Thomas Perry, J.R. Simplot Company

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Consent Decree Semi-Annual (Periodic) Report January - June 2023 Periodic Report No. 010

Rock Springs, WY



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Certification Statement

RE: January 1, 2023 through June 30, 2023

Semi-Annual (Periodic) Progress Report No. 010

Rock Springs, Wyoming

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties of submitting false information, including the possibility of fine and imprisonment for knowing violations.

07/20/2023

Alan L. Prouty
Vice President, Environmental & Regulatory Affairs



Introduction

J.R. Simplot Company (Simplot) has prepared this semi-annual progress report for the Rock Springs Facility consistent with Section VII, Paragraph 42 on page 34 of the Consent Decree (CD), *U.S. v. J.R. Simplot Company, et al.*, 20-cv-00125-NDF (D. Wyo.). This semi-annual progress report presents actions taken to comply with the CD between the dates of January 1, 2023 to June 30, 2023. This is report number 010.

i. Status of Construction or Compliance Measures

Construction of the replacement for T-104 sulfuric acid storage tank, the first phase project for Bevill recovery projects has been completed and the tank has been in service since April 2023. Piping installations from various sumps to the 44% clarifier started in June 2023 and will continue into August 2023.

The Acid Value Recovery System has civil work in progress with current work on concrete. Completion of civil work for this system is estimated to be completed by August 2023. The erection of recovery tanks will begin in July 2023.

The detailed engineering phase of the capital design and construction process which started in October 2021 has continued throughout the first half of 2023.

Simplot, EPA, and DOJ reached agreement on the first non-material modifications of the Consent Decree in January 2023, signed by Simplot on May 9, 2023. The modifications added the tank farm Collection Tank as a non-segregable area and removed the lime slaker relocation as one of the compliance projects specified in Appendix 6.

The fourth semi-annual groundwater monitoring report for the second half of 2022 was officially submitted to the EPA for review on April 26, 2023. Groundwater sampling for the first half of 2023 was conducted on June 5-7, 2023 and the results report will be submitted in the second half of 2023.

The site Sump and Pad Management Program implementation has continued. The ninth and tenth quarterly sump inspections under this program were completed in February and June of 2023.

This is the tenth required report and the second report on the semi-annual frequency.

ii. Completion of Milestones

The third official Bevill performance criteria review was conducted in March 2023 and the fourth in June 2023. Both reviews validated compliance with the performance criteria established during the review period in the first half of 2023. The reviews did find some minor areas for improvement and action items were developed to address all discovered issues. The official criteria write-up from both the March and June reviews have been finalized and filed.



An additional Bevill Best Management Practices program review was conducted June 1, 2023, due to having three reportable releases within semi-segregable areas in the second quarter of 2023. The review did identify some areas for continuous improvement to further bolster the program and action items were developed to address these minor findings. Most of the released material would have been automatically captured in the acid value recovery tanks once installed so no major program changes were identified at this time.

The second annual progress review meeting between EPA, WY DEQ, and J.R. Simplot personnel will take place in the Fall of 2023.

iii. Problems Encountered or Anticipated, Together with Implemented or Proposed Solutions

Weekly inspections of the GS-2787 repulp sump were conducted during the first half of 2023. Additional repairs were completed on the primary liner of this sump in May of 2023. This repair appears to have been successful as the secondary containment has not reached high enough water level to sample. We are currently evaluating three other sumps for potential leaks.

iv. Status of Permit Applications

No permit applications to note for this time period.

v. Status of Plans for Closure and Long-Term Care; and Status of Permit Application, as Applicable, for Closure or Long-Term Care

No plans for closure or long-term care.

vi. Operation and Maintenance Difficulties or Concerns

No major operations or maintenance difficulties or concerns were identified during the last half of the year. A critical condition at the gypsum stack did occur and as described below is still being addressed.

vii. Status of Financial Assurance

Financial assurance in place per requirements in the CD and Appendix 2.



viii. Reports to State Agencies Concerning Matters Enumerated

Letters were sent on January 24, 2023, April 14, 2023, May 3, 2023, and May 25, 2023 to Ms. Jacobson detailing four reportable spills which occurred on January 23, 2023, April 11, 2023, April 27, 2023, and May 20, 2023, respectively. These letters were also forwarded to WDEQ for state reporting. Letters were also sent on June 7, 2023 and June 27, 2023 to Ms. Jacobson clarifying circumstances of two non-reportable spills which occurred on May 25, 2023, and June 21, 2023, respectively. These letters were also forward to WDEQ for follow up clarification.

Letters were sent to Ms. Jacobson on June 9, 2023 and June 28, 2023 providing notification and an update, respectively, regarding the phophogypsum stack critical condition that was first identified on June 1, 2023.

Letters were sent on March 7, 2023 and April 17, 2023 to Ms. Barkau with WDEQ documenting notification to WDEQ of groundwater protection standards exceedances, potential naturally occurring circumstances causing some of the exceedances, and a work plan to investigate selenium and nitrate at one of the monitoring wells as part of an alternate (yet to be identified) source demonstration.

Simplot leadership met with the WY DEQ in May 2023 to discuss groundwater conditions and a work plan for further investigation. A follow-up letter to WY DEQ (Ms. Bakrau) was provided on May 26, 2023. WY DEQ approved the work plan on May 30, 2023. Sediment samples were taken around the Simplot property the week of June 5th, 2023.

ix. Description of any Violation of the Requirements of this Consent Decree Reported under Paragraph 41 and an Explanation of the Likely Cause of Such Violation and the Remedial Steps Taken, or to be Taken, to Prevent or Minimize such Violation

Four Consent Decree Paragraph 41 violations occurred during the first half of 2023. All four violations were reportable spills. The first reportable spill (50 gallons of fluorosilicic acid [FSA] sent to the gypsum stack) occurred on January 23, 2023 when a one (1) inch "bleed" broke off the suction side of an FSA product pump. The likely cause of this release was unknown damage to the "bleed" from a previous isolation lock out for maintenance to work on a leaking valve. The CPVC (chlorinated polyvinyl chloride) nipple was likely bumped or twisted when installing an air hose to blow out the line. The remedial step taken to help prevent this violation in the future was upsizing the "bleed" and using a stronger material of construction.

The second reportable spill (44,725 gallons of 28% phosphoric acid sent to the gypsum stack) occurred on April 11, 2023. The cause of this release was that an area operator failed to close a valve that was part of a standard operating procedure for filter table line swapping. Remedial steps taken to help prevent this violation in the future were conducting refresher training for Bevill reporting requirements, checklist additions for valving and reporting, and wash procedure improvements.

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The third reportable spill (2,350 gallons of 68% phosphoric acid sent to the gypsum stack) occurred on April 27, 2023 when a "bleed" on the C-Evap cooler tank was opened, causing acid to flow to the nearby sump. The cause of this release was an operating error by the operator as he took actions to prevent a tank from overflowing with hot acid. It was determined that the area operator failed to verify that a critical valve was opened prior to beginning the C-evaporator start up procedure. When the operator realized his mistake, he opened the missed valve and when the cooler tank level began rising rapidly, made the mistake of opening the "bleed" on the cooler tank. Remedial steps taken to help prevent this violation in the future were to create a training document that requires all operators to not unlock any piece of equipment unless they are fully aware of what setting that equipment should be left in for other production crews/areas involved, clarifying and improving the lock-out/tag-out division of labor requirements between the phosphoric acid and SPA operators and providing further training for this specific operator (who is relatively new to this position) on C-Evap start-up best practices.

The fourth reportable spill (2,500 gallons of 54% phosphoric acid sent to the gypsum stack) occurred on May 20, 2023 when the E-Evaporator discharge expansion joint catastrophically failed. The likely cause of this violation was not having a replacement schedule or robust inspection preventative maintenance program for this expansion joint. Remedial steps taken to help prevent this violation in the future were determining the acceptable lifespan of these expansion joints, as well as establishing a more robust inspection schedule and a replacement schedule. The issue of the D/E Evaporator sump pump not being capable of being shut off from the control board has been resolved. A remedial step to be taken to help prevent reoccurrence is evaluating whether the design specs for this expansion joint are sufficient for the known operating conditions.

Identification of any Confirmed "Critical Condition" as Defined and Reported to EPA Pursuant to Appendix 1.D (Critical Conditions and Temporary Measures)

One critical condition was identified during the first half of 2023.

A phosphogypsum stack critical condition at the Rock Springs, WY site was first identified during routine operator rounds at approximately 8:00 p.m. on June 1, 2023. The original condition identified was a deformed area in the pond liner in the process (decant) pond. The available information at the time led to the assumption that this deformation was caused by a gas bubble. A subsequent examination by phosphogypsum stack personnel and management determined that this would be a critical condition as defined by the Consent Decree at approximately 9:00 a.m. on June 2, 2023.

Further investigations were conducted between June 2-23, 2023. It was determined that the bubble was formed due to sub surface water that has accumulated behind the process pond liner, causing it to stretch tightly over a large area.



Several actions have been taken since the issue was discovered. Initially, the excess gypsum was washed off the liner bubble with the intent of allowing the air to move up the slope of the process pond liner so it could be vented. While this effort was taking place, a small hole was discovered on the liner on the northeast side of the process pond, a considerable distance from the bubble. A sample of this water was taken and was analyzed. The water analysis is not consistent with the process pond water. As the weight of the gypsum scale was removed from the bubble, it did indeed move up the slope as intended. Two holes were cut in through the liner to vent the air. No gas escaped from the bubble, which led Simplot personnel to look for an alternate cause.

A pipe was inserted approximately forty (40) feet into the void between the liner and the ground and this helped determine that the area behind the liner was full of water. More samples of this water were obtained and analyzed and it appears to be the same water as the earlier referenced sample. A vacuum truck has been utilized frequently since June 27, 2023 to pump some of the pooled water from under the process pond liner. As this vacuum truck operation continues, more efficient pumping options are being evaluated to help further pump out this water over the coming weeks. Removal of this subsurface water is the top priority. Several other measures will be implemented in an effort to gather better information about the cause of this critical condition.