

Linton, Ron

From: Scott Schierman (USA - Casper) <Scott.Schierman@uranium1.com>
Sent: Wednesday, August 08, 2018 10:27 PM
To: Linton, Ron
Subject: [External_Sender] Spill Report for spill at Module 5-2 Manhole (Electronic Submittal Only)
Attachments: NRC Release Report for Module 5-2 Manhole 8.8.18.pdf

Ron

Please find the spill report for the leak that occurred at the manhole across from Module 5-2 in Mine Unit 5.

If you have any questions please contact.

Regards,

Scott Schierman | HSE Manager
Uranium One Americas, Inc. (U1 Americas)
907 N Poplar | Suite 260 | Casper, WY 82601 | USA
Office: [307. 234.8235 ext 330](tel:307.234.8235) | Cell: [307.840.1157](tel:307.840.1157)
scott.schierman@uranium1.com
www.Uranium1.com



This email, including any attachments, is confidential and may be privileged. Please check any attachments for viruses before opening them. If you are not the intended recipient, then any disclosure, copying, distribution or use of this email or any attachment, other than to or by the sender, is prohibited. If you received this email in error, please notify us immediately by returning it to the sender and delete this copy from your system.

August 1, 2018

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Mr. Ron Linton, Project Manager
Decommissioning & Uranium Recovery Licensing Directorate
Division of Waste Management & Environmental Protection
Office of Federal and State Materials &
Environmental Management Programs
11545 Rockville Pike
Rockville, MD 20852-2738

**Subject: License SUA-1341, Docket No. 40-8502
Willow Creek Project
August 1, 2018
Manhole across from Module 52
Christensen Ranch Mine Unit 5**

Dear Mr. Linton:

In accordance with License Conditions 12.2 and 9.2 of the referenced license, this correspondence serves as the written notification for a release of approximately 11,800 gallons of the recovery fluids from Mine Unit 5 (no Oxygen, Carbon Dioxide, or Bi-Carb was being added to the water at the time of this spill) The spill was discovered on August 1, 2018 at 1830 hours and reported to the environmental department on August 1, 2018 at approximately 1930 hours. This area is entirely within the permit area and MU-5 Controlled Area. The release was reported via voice message to the NRC Project Manager, Ron Linton and WDEQ on August 3, 2018.

The details of the spill are included on the attached Spill Report Summary along with a map of the surface spill location. Note that there were no significant impacts to the public, environment, wildlife or livestock as a result of this incident.

Please contact me should you have any questions regarding this report.

Sincerely,



Scott Schierman
HSE Manager

Uranium One USA, Inc. - Willow Creek Project
Spill Report Summary
Manhole next to Module 5-2 (Recovery) Fluid Releases

Date and Estimated Time (beginning & end)

From: (unknown date), (unknown time)

To: August 1, 2018, 6:30 p.m.

Location

Christensen Ranch Mine Unit 5

Module 5-2

Section 17, Township 45N, Range 76W

Johnson County, Wyoming

(See attached map for detailed location)

Spill Type

ISR recovery fluid from the previously reclaimed Mine Unit 5 wellfield. Well were running in Module 5-2 to maintain a cone of depression for Mine Unit 5 wellfield.

Estimated Volume Released and Probable Cause

Spilled: Approximately 11,800 gallons of recovery fluid was released from the manhole located across from Module 5-2. Upon discovery and investigation of the trunkline in the manhole it was determined a hole had developed in the 12 inch tee which was the source of the recovery fluid release. The hole in the tee was approximately 1" in diameter hole on the bottom side of the tee. The leak detect device did not operate properly to notify operation of the leak in the manhole. Upon discovery and investigation of the manhole approximately 4,700 gallons of recovery fluid was pumped from the manhole and taken to the Christensen Ranch evaporation ponds. The leak detection radio transmittal system failed to operate properly and notify the Christensen Ranch satellite control room panel of the leak. The radio system was reset and the system alarmed to the control panel properly at the Christensen Ranch satellite control room. The 12" tee has been replaced and the system has been placed back into operation without incident.

Estimated Volume Recovered

Approximately 4,700 gallons of recovery solutions were recovered from the manhole.

Spill Analysis Results

A sample of the 11,800 gallons of recovery fluid released was obtained on August 1, 2018. The results were as follows:

U₃O₈ 5.3 ppm

Impacts

The release followed the existing grade, approximately 170' to the west of an ephemeral draw located near Module 5-2 in Mine Unit 5. The approximate surface area of the impacted was 8,770 square feet. No wildlife or livestock were impacted, nor did the spill reach surface water or the subsidiary to any waterways. No significant erosion resulted from the release.

Soil Surveys & Analysis Results

No soil samples were collected at the time this report was issued.

Remediation Actions

Uranium One has replaced the failed 12" tee and the system has been placed back into service without further incident.

Explanation of the Root Cause

The root cause for this spill was determined to be the corrosion of the 12" tee resulting in a small hole that allowed water to escape. A contributing component for the spill is the leak detect device, which failed to alarm employees to the solution release.

Corrective Actions

Uranium One replace the 12" tee. System put back into operations with no further issue. Leak detection system was repaired and is currently operational. Uranium One continues to periodically check leak detect devices throughout the wellfield for operational status.

Agency Reporting

WDEQ: Luke McMahan - Permit Coordinator; August 3, 2018 (phone call, message)
Written Report to follow

NRC: Ron Linton - Project Manager; August 3, 2018 (phone call, message)
Written Report to follow

Attachement: Google Earth Photo of Manhole spill area next Module 5-2.

