UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

ENFORCEMENT &
COMPLIANCE ASSURANCE
DIVISION

Clean Air Act - Section 112(r) Risk Management Program and EPCRA 312 – Tier II Facility Inspection Report

FACILITY INFORMATION:

Name:	Mill Creek Water Treatment Plant
Physical Address:	581 Mill Creek Road, Walla Walla, WA 99362
Phone Number:	(509) 522-3775
Latitude/Longitude:	46.086111, -118.255278
RMP Facility ID#	1000 0070 1233
FRS ID#:	110000709911
EJ Concerns:	Yes, greater than 80%

CONTACT INFORMATION (RMP Implementation):

Name:	Mr. Tom Krebs
Phone Number:	(509) 522-3775
E-mail:	tkrebs@wallawallawa.gov

EMERGENCY CONTACT INFORMATION:

Name:	Mr. Tom Krebs
Phone (24-hr):	(509) 520-6059
E-mail:	tkrebs@wallawallawa.gov

TRIP DETAILS:

Inspection Date:	May 16, 2023
Inspection Time:	09:00 through 14:00
Inspectors:	Peter Phillips, US EPA Region 10 SEE Grantee, Lead RMP Inspector Terry Garcia, US EPA Region 10 SEE Grantee, RMP Inspector Edward Johannes, US EPA Region 10 SEE Grantee, RMP Inspector

DATE AND PROGRAM LEVELS OF SUBMITTED RMP:

Initial Submission Date:	June 16, 1999
Date of Latest Update:	May 23, 2019

Process (Program 1, 2, 3) as reported in RMP:

Process ID	Description	Process Chemical ID	NAICS Code	Program Level	Chemical Name CAS Number	Quantity (lbs)
1000054682	Water Treatment	1000066555	221310	3	Chlorine (7782-50-5)	17,500

PURPOSE:

The purpose of this inspection was to determine whether this facility is in compliance with Section 112(r) of the Clean Air Act and Title 40 Code of Federal Regulations (CFR) Part 68, Chemical Accident

Prevention Provisions.

- The facility has been previously inspected in the past 5 years: No ☒ Yes ☐
- The facility is High Risk: No ☒ Yes ☐
- Joint EPCRA inspection: No ☐ Yes ☒

CAA TITLE V AIR PERMIT:
Does the facility have a CAA Title V Permit? No ☒ Yes ☐

RELEASE/ACCIDENT HISTORY:
Did the facility have a reportable release in the past 5 years? No ☒ Yes ☐

EPCRA TIER II REPORTING:
Did the facility submit the [Enter Year] Tier II report to the SERC? No ☐ Yes ☒
If Yes, Date the Tier II was submitted: January 2023

Did the facility submit a Tier II to the LEPC and local fire department? No ☐ Yes ☒
If Yes, Date the Tier II was submitted: January 2023

INSPECTION ENTRY:
Peter Phillips led the inspection entry. The inspection team met with Mr. Tom Krebs (Facility Manager) at the Mill Creek WTP facility in Walla Walla, Washington. The team arrived at the facility at 09:00 and was joined by the following facility personnel:

Name	Title
Frank Nicholson	Utility Engineer
Kirk Brown	Lead Operator
Adam Wenger	Operator II

Was a state/county/or local emergency representative present? No ☒ Yes ☐
The facility is a first responder: No ☒ Yes ☐
If No, Responding Agency Walla Walla Fire Department

The inspection team was escorted to a conference room located in the facility's office building. Introductions were made by Peter Phillips, who provided a summary of the risk management program (RMP) and explained the purpose of the visit. Each team member presented his/her credentials.

EPA then requested an explanation of the facility's operations and any additional safety measures that should be taken during the site tour. Mr. Krebs gave a brief description of the facility, operations, and personal protective equipment required for the tour.

Prior to the inspection, EPA sent a certified notice of inspection letter to the facility informing them of the CAA Section 112(r)(6)(L) requirement that facility employees and employee representatives (such as a union representative) have the right to participate in the RMP inspection, and that a copy of the letter must be provided to the employee representative(s) and the letter posted in a manner accessible to employees in the facility.

The facility is unionized: No ☐ Yes ☒
If Yes, Name of Union IBEW 1191

An employee representative present during the facility visit: No ☐ Yes ☒
If Yes, Name/Title Adam Wenger, Operator II

GENERAL INFORMATION:

The Mill Creek WTP facility is regulated under the Risk Management Program as a Program Level 3 process. The City of Walla Walla owns and operates the Mill Creek WTP facility. The chlorine water treatment injection process was constructed in 1986 and converted to a vacuum feed process in 2001. The facility collects surface water from a 36-square mile area forming the "Mill Creek Watershed". The Mill Creek WTP is capable of producing 24 million gallons of water daily that meets or exceeds Environmental Protection Agency and Department of Health Drinking Water Standards. The water from the Mill Creek Watershed, first passes through a hydropower generator producing 13,500 megawatts of electricity annually and then is treated at the WTP for residential, commercial, and industrial use. The chlorine storage and chlorination system are in Building G. The control room is located in the Main Office Building to regulate the amount of chlorine gas used for water treatment. There are seven full-time employees on site. Six of the employees are trained operators. The hours of operation are Monday thru Friday 8:00 a.m. to 4:30 p.m. with an operator on call during the weekend.

The Mill Creek WTP utilizes a combined gravity flow and pump treatment process for drinking water. Chlorine is used as the primary (pre-chlorination) and residual (post-chlorination) disinfectant. One-ton containers and 150-pound cylinders of chlorine are received and stored at Building G. A maximum of eight one-ton containers can be stored on site. The eight 150-pound cylinders of chlorine are taken offsite to treat water at three well locations. The Mill Creek WTP reported in their June 16, 2014, RMP a maximum inventory of 17,500 pounds exceeding a threshold quantity of 2,500 pounds for chlorine. In Building G, a two-ton rated cylinder hoist moves the full and empty one-ton containers onto support saddles. The chlorine is supplied by Oxarc Inc. Empty One-ton containers and 150-pound cylinders are returned to the supplier after use. Four one-ton cylinders are used every six to seven weeks. In Building G, chlorine detectors are located in the storage/supply room and chlorination room. Chlorine detectors are set to alarm at 4 ppm (parts per million). The alarms consist of an audible warning with red flashing strobes. The alarm actives a Supervisory Control and Data Acquisition (SCADA) auto dialer that alerts the control room and/or the standby employee. The chlorine detectors and alarm are tested monthly. The storage/supply room has two floor level exhaust fans (Photos 13 and 14) with four ceiling intake registers (Photo 8). The chlorination room has one floor level exhaust fan and two ceiling air intakes (Photos 13, 14, and 24). In Building G, a backup generator is located in the chlorination room if utility power is lost (Photo 27).

The facility is not a First Responder, and relies on the Walla Walla fire department for response in the event of major chlorine release.

The Mill Creek WTP has completed the following major facility upgrades in 2019: (1) Replaced chlorine gas piping; (2) Installed automatic shutoff valves; (3) Installed new alarms and security cameras; (4) Installed a chlorine scrubber for the storage/supply room; and (5) Replaced ozone filtration system with UV.

ON-SITE OBSERVATIONS:

The facility tour was conducted from approximately 09:15 hours to 09:45 hours. The inspection team was escorted by Mr. Tom Krebs, Mr. Frank Nicholson, Mr. Kirk Brown, and Mr. Adam Wenger. The inspection team observed the chlorine container storage/supply room, the chlorination room and the control room.

Chlorine Container Storage/Supply Room:
Placards warning of the hazards of chlorine were visible on the doors (Photo 2). Ten, one-ton chlorine containers and approximately six, 150-pound chlorine cylinders are stored in Building G (Photo 6, and 7). The 150-pound chlorine cylinders were secured by a chain to the wall (Photo 12). Two one-ton containers were empty; four one-ton containers were full; and four one-ton containers on weight scales were in-use with two feeding chlorine and two were empty (Photo 6 and 16). An auto switchover valve controls the flow of chlorine (flow rate is 500 ppm) from the one-ton containers on the weight scales through piping (yellow) to the chlorination room (Photo 17). Four air intake vents on the ceiling and two emergency exhaust fans at floor level are located on the north and south wall (Photos 13 and 14). Chlorine detector located on the wall actives the audible horn, red strobe light, emergency exhaust fans, alarm dialer to on-call personnel, and the control room Supervisory Control and Data Acquisition (SCADA) panel annunciator at 4 ppm (Photo 15). The audible horn and external red strobe light are located on the north and south side of the building (Photo 2). One-ton chlorine containers are moved to and from their holding platforms using a two-ton lifting hoist (Photo 10). Two self-contained breathing apparatuses (SCBA) that can be used to enter the building during a chlorine release are located on the wall outside the chlorine storage room doors (Photo 2). An emergency shower and eyewash station are located outside of the north door of the chlorine storage room (Photo 4). A Chlorine Repair Kit B (yellow) located in the storage room is used for training (Photo 9). A chlorine scrubber (Photos 18 and 19) and emergency automatic shutoff valves (Photo 17) were added to the process in 2019.

Chlorination Room:
The chlorinators control the flow of chlorine at four injector points to treat the water (Photo 20). Chlorine detector located on the wall actives the audible horn, red strobe light, emergency exhaust fans, alarm dialer to on-call personnel, and the control room SCADA panel annunciator at 4 ppm (Photo 23). Two air intake vents on the ceiling and an emergency exhaust fan at floor level are located on the north wall (Photo 24). A hard copy of the Safety Data Sheet (SDS) for chlorine and a daily chlorine feed rate log are accessible in the room (Photo 26).

Electrical Room:
A backup generator located in the electrical control room is used to keep the water treatment system operating during a power failure (Photo 27). A hard copy of the chlorine water treatment system operating procedures is kept on file in the room.

Control Room:
The facility uses a Supervisory Control and Data Acquisition (SCADA) software process control system to operate the chlorine water treatment system. Chlorine sensor monitoring and the chlorine water treatment control is conducted remotely in the Control Room from the water treatment Building G (Photo 1).

Photographs were taken of the treatment process and the chlorine storage area and monitoring areas of the treatment plant building. The Photographs that were taken at the facility are included in Attachment A to this report.

After touring the RMP-covered process areas at the water treatment facility, the inspection team returned to the conference room to review the RMP documentation. Upon completion of the document review, EPA provided a debriefing to Mr. Krebs, Mr. Nicholson, Mr. Brown, and Mr. Wenger.

INFORMATION COLLECTED FROM FACILITY:

1. Site map of the water treatment facility

AREAS OF CONCERNS ADDRESSED IN CLOSING CONFERENCE:

1. Compliance Audits [68.79(d)]: Mill Creek WTP could not provide documentation that they tracked the findings of their 2019 and 2022 Compliance Audits.
2. Contractors [68.87(b)(1)]: Mill Creek WTP did not obtain and evaluate safety and performance criteria for (1) Oxarc (chlorine supply); (2) Correct Equipment (chlorine equipment); and (3) Paul Parrish (hoist maintenance).
3. Contractors [68.87(b)(5)]: Mill Creek WTP did not periodically evaluate the performance and safety for (1) Oxarc (chlorine supply); (2) Correct Equipment (chlorine equipment); and (3) Paul Parrish (hoist maintenance).
4. Management of Change [68.75(a)]: Mill Creek WTP did not initiate a Management of Change for the addition of a chlorine scrubber and automatic shutoff valves for the chlorine cylinders installed in 2019.
5. Risk Management Plan [68.155]: Mill Creek WTP must remove the Worst-Case Scenario (WCS) and their Alternative Release Scenario (ARS) information from their Executive Summary. This sensitive information is prohibited in the Executive Summary and must be deleted in the RMP.

DOCUMENTS REQUESTED NOT INCLUDED IN REPORT:

The following documents were requested during the inspection but are not included in this report. These documents will still be reviewed to determine compliance with Section 112(r) of the Clean Air Act.

1. Tracking information for both the 2019 and 2022 Compliance Audits.
2. Contractor evaluation and performance information for (1) Oxarc (chlorine supply); (2) Correct Equipment (chlorine equipment); and (3) Paul Parrish (hoist maintenance).

The above-requested information was not provided during the two week follow-up period.

INSPECTION REPORT CERTIFICATION:

This is to certify that I, Peter Phillips, was the lead inspector at this facility and that I have verified the accuracy of the observations in this inspection report:

PETER PHILLIPS (Affiliate)

Digitally signed by PETER PHILLIPS (Affiliate)
Date: 2023.10.02 11:31:59 -07'00'

Inspector Signature

JAVIER MORALES

Digitally signed by JAVIER MORALES
Date: 2023.10.02 11:56:42 -07'00'

RMP Coordinator/Approval

ERIN WILLIAMS

Digitally signed by ERIN WILLIAMS
Date: 2023.10.11 11:51:55 -07'00'

EPCRA Coordinator/Approval

MATTHEW QUARTERMAN

Digitally signed by MATTHEW QUARTERMAN
Date: 2023.10.13 15:36:31 -07'00'

Land Enforcement Section Chief/Approval

Attachment A – Photo Log

Site Name: Mill Creek WTP

City, State: Walla Walla, Washington

Photographer: Peter Phillips

File	Date	Time	Description
Photo 1.JPG	5/16/2023	9:08	Chlorine system overview in control room
Photo 2.JPG	5/16/2023	9:28	Overview chlorine storage/supply and the chlorination rooms in Building G
Photo 3.JPG	5/16/2023	9:29	Wind sock in distance
Photo 4.JPG	5/16/2023	9:29	Exhaust vent for chlorine storage room (south wall)
Photo 5.JPG	5/16/2023	9:30	Chlorine room exit door with placarding and panic hardware
Photo 6.JPG	5/16/2023	9:30	Chlorine storage room – 1 ton cylinders
Photo 7.JPG	5/16/2023	9:30	Chlorine storage room – 1 ton cylinders
Photo 8.JPG	5/16/2023	9:31	Ceiling air duct intake (one of four) chlorine storage room
Photo 9.JPG	5/16/2023	9:31	Chlorine container emergency repair kit B
Photo 10.JPG	5/16/2023	9:31	Chlorine cylinder hoist system
Photo 11.JPG	5/16/2023	9:31	Chlorine room inspection logs
Photo 12.JPG	5/16/2023	9:32	150 pound cylinders used in remote sites
Photo 13.JPG	5/16/2023	9:32	Exhaust fan north wall
Photo 14.JPG	5/16/2023	9:32	Exhaust fan south wall
Photo 15.JPG	5/16/2023	9:33	Chlorine leak detector in chlorine storage room
Photo 16.JPG	5/16/2023	9:33	Automatic switchover system, vacuum operated
Photo 17.JPG	5/16/2023	9:34	Automatic shutoff valve
Photo 18.JPG	5/16/2023	9:35	Chlorine scrubber, outside of north wall (activated charcoal)
Photo 19.JPG	5/16/2023	9:36	Emergency chlorine scrubber control system
Photo 20.JPG	5/16/2023	9:37	Chlorinators (four) in chlorination room
Photo 21.JPG	5/16/2023	9:38	Water pumps in chlorination room
Photo 22.JPG	5/16/2023	9:38	Chlorine injection points (end of process)
Photo 23.JPG	5/16/2023	9:39	Chlorine gas detection system in chlorination room
Photo 24.JPG	5/16/2023	9:39	Exhaust fan in chlorination room
Photo 25.JPG	5/16/2023	9:39	Emergency contact information and site plan in chlorination room
Photo 26.JPG	5/16/2023	9:40	Daily inspection log in chlorination room
Photo 27.JPG	5/16/2023	9:40	Emergency standby generator (diesel)
Photo 28.JPG	5/16/2023	9:44	500 gallon diesel fuel tank for standby generator