NPDES Inspection Report – Wastewater

National Database Information	
Inspection Date: July 14, 2021	Inspection Type: CEI - Wastewater Treatment Facility
Entry/Exit Time: 10:40 am / 12:26 pm	NPDES ID Number: COG587101
NAICS Code: 221320	Inspection ID: 202107_COG587101
Lead inspector and affiliation: Emilio Llamozas / EPA Region 8	
Inspector and affiliation: Stephanie Meyers / EPA Region 8	

Facility Location Information (*Name/Location/ Mailing Address*)	
Site/Facility Name & Location: Towaoc Lagoon 2 BIA 201 Road Towaoc, Colorado 81334	Mail Report to: Lee Trabaudo Public Works Director ltrabaudo@utemountain.org

Contact Information	
	Name(s)/Title
Facility Contacts: *(indicate primary lead and present during inspection)*	Starme Wall / Utility Manager / Ute Mountain Ute Tribe / primary lead during the inspection
	Jake Dance / Lead Plumber / Ute Mountain Ute Tribe / present during part of the inspection
	Lee Trabaudo / Public Works Director / Ute Mountain Ute Tribe / present during closing conference
	Scott Clow / Environmental Programs Director / Ute Mountain Ute Tribe / present during inspection
	Tony James / Brownfields Coordinator / Ute Mountain Ute Tribe / present during inspection
Person/Company meeting definition of "Operator"	Ute Mountain Ute Tribe
Authorized Official(s) (Per NOI)	Lee Trabaudo / Public Works Director / Ute Mountain Ute Tribe

Permit Information		
Is the permit on site and available? No	Lagoon Category: No Discharge	Monitoring Frequency: N/A
Effective Date: April 5, 2016	Expiration Date: December 31, 2020 (Administratively Continued)	Is the Facility under a compliance schedule? No
Is correct contact information indicated on ICIS? No	Indicate correct contact information: Lee Trabaudo, Public Works Director 970-749-6129	
Receiving Water(s): Unnamed tributary to Navajo Wash		
Discharge point location (longitude, latitude): There are three outfalls at the facility as indicated below: Outfall from Cell 2 – Southeast corner of cell 2, according to the March 31, 2016 notice of intent. Outfall from Cell 4 – East side of cell 4 (photo 69). Outfall from Cell 5 – Southeast corner of cell 5 (photo 71). Lat. 37.18380º N, Long. -108.70178º W		
Regulatory Inspector's source of information: Notice of Intent for the permit, permit, facility representatives and facility observations.		

Areas Evaluated During Inspection		
Permit	**Self-Monitoring Program**	Pretreatment
Records	Compliance Schedule	Pollution Prevention
Facility Site Review	Laboratory	Stormwater
Effluent/Receiving Waters	**Operations and Maintenance**	Combined Sewer Overflow
Flow Measurement	Sludge Handling/Disposal	**Sanitary Sewer Overflow**

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
Emilio Llamozas	**U.S. EPA Region 8** **1595 Wynkoop Street** **8ENF-W-NW** **Denver, Colorado 80202** **303-312-6407**	**8/16/2021**
Reviewer Name	Address/Phone Number	Date
Stephanie Meyers	**U.S. EPA Region 8** **1595 Wynkoop Street** **8ENF-W-NW** **Denver, Colorado 80202** **303-312-6938**	**8/17/2021**
Supervisor Signature/Name	Address/Phone Number	Date
MICHAEL BOEGLIN Digitally signed by MICHAEL BOEGLIN Date: 2021.08.26 08:17:19 -06'00' **Micheal Boeglin**	**U.S. EPA Region 8** **1595 Wynkoop Street** **8ENF-W-NW** **Denver, Colorado 80202** **303-312-6250**	**8/26/2021**

Inspection Narrative and Site Description

The inspection was conducted at the Towaoc Lagoon 2 (facility) located on the Ute Mountain Ute Reservation, in Towaoc, Colorado to evaluate compliance with its National Pollutant Discharge Elimination System (NPDES) permit. The EPA is responsible for implementing the NPDES program in Indian Country within the State of Colorado. The inspection was announced a few weeks prior to the inspection, to coordinate logistics for the inspection. On July 14, 2021, U.S. Environmental Protection Agency (EPA) inspectors Emilio Llamozas and Stephanie Meyers met with Starme Wall and Jake Dance with the Ute Mountain Ute Public Works and Scott Clow and Tony James with the Ute Mountain Ute Environmental Department. The EPA inspectors presented their credentials and had an opening conference to explain the purpose of the inspection. The inspectors proceeded to inspect the facility and asked questions to the facility representatives to help the inspectors evaluate compliance with the facility's permit. Throughout the inspection, the inspectors noted their observations in a checklist. Photographs taken during the inspection are included in the attached photo log.

The Towaoc Lagoon 2 is one of two wastewater treatment facilities that serve the community of Towaoc in the Ute Mountain Ute reservation. The two wastewater treatment facilities serve approximately 1,545 residents and approximately 100 guests at the casino. The second facility called the Towaoc Lagoon 1 is located west of the Towaoc Lagoon 2. Both facilities are owned and operated by the Ute Mountain Ute Tribe (Tribe). The Tribe alternates the use of the two facilities. At the time of the inspection, the Towaoc Lagoon 2 was receiving approximately 80 percent of the total wastewater generated by the community of Towaoc. The other 20 percent was sent to the Towaoc Lagoon 1, which included wastewater generated at tribal Government offices, the health center, older homes located on South Ute Trail Road and new homes located near Rodeo Drive. Service connections in Towaoc include approximately 100 homes, a casino, a gas station, tribal government offices, and a health center. All residences and businesses are connected to both systems with the exception of the casino and the adjacent gas station, which are connected to Towaoc Lagoon 2.

The wastewater flows into the cells via gravity flow (photo 61) or via the lift station (photo 59). The influent meter on the gravity flow wastewater was not working at the time of the inspection. The inspectors inspected the only lift station in the collection system (photo 59). The lift station has two pumps; however, one of the pumps is not operating and the second pump does not automatically operate so it has to be manually turned on a daily basis. One of the facility representatives indicated that the lift station overflowed the week prior to the EPA inspection. The operator indicated that they are planning to replace both lift station pumps in the near future. The trash basket in the Towaoc Lagoon 2 lift station was full of debris and needed to be cleaned out (photo 59).

Lift Station Name	Latitude	Longitude
Towaoc Lagoon 2 Lift Station	37.18303º N	-108.70387º W

The inspectors then went to inspect the lagoon cells. The facility is a five cell lagoon system that serves the community of Towaoc. Wastewater flow enters cell 1 for treatment (photo 63), and then is routed to cell 2 (photos 64 and 65). The Notice of Intent (NOI) indicated that cell 2 has an outfall, but the inspectors were not able to see it due to the thick vegetation around cell 2.

Wastewater can flow directly into cell 3 (photos 66 and 67) which flows to cell 4 (photos 68 and 69), which in turn flows to cell 5 (photo 70). Effluent can be discharged from cell 4 (photo 69) or cell 5

(photo 71). The outfall from cell 5 discharges to a stormwater retention basin (photo 60) before it would flow into the unnamed tributary to Navajo Wash. The facility is permitted as a no discharge facility, under the Lagoon General Permit for the Ute Mountain Ute Reservation. Any discharge from the facility is expected to be under emergency circumstances. In June 2019, the facility had an unauthorized release.

In 2010, cell 5 was added to the facility and cells 3, 4 and 5 were lined (cell 3 is not lined at the bottom). The liner in cell 4 was repaired in 2013.

Cell ID	Area (Square Feet)	Operating Depth (feet)	Operating Volume (MG)
Cell 1	93,623	4	2.8
Cell 2	93,623	4	2.8
Cell 3	327,066	6	15.4
Cell 4	310,063	6	13.9
Cell 5	408,637	6	18.3
Total	-	-	53.2

The inspectors and facility representatives drove around the interior of the lagoon enclosure to evaluate berm integrity and the facility's discharge status. Vegetation had reached a height more than six inches on the berms of cell 1 and cell 2 (photos 63-65). There was also vegetation growing inside cell 2 (photos 64 and 65). There was vegetation over six inches in height around the berms for cells 3, 4 and 5 (photos 66-70).

At the end of the day, the inspectors returned to the main office and held a closing conference with Mr. Trabaudo where they discussed preliminary findings. A facility representative indicated that inspections of the lagoons were only being conducted on a quarterly basis instead of the required weekly inspection schedule. EPA requested the inspection reports records for the past 5 years, but has not received the records to this date. On July 28, 2021, the EPA sent an email to Mr. Trabaudo with the preliminary findings from the inspection.

Findings, Corrective Actions and Recommendations

Finding #1: The facility is a no discharge lagoon and had an unauthorized release in June 2019.
The facility is classified as a no discharge lagoon and had an unauthorized release in June 2019. Two discharge samples were collected on June 6, 2019 of the June 2019 unauthorized release. The first sample was collected at 11:20 am and had a total suspended solids (TSS) concentration of 95 mg/L. The second sample was collected at 11:25 am and had a TSS concentration of 15 mg/L. The TSS average concentration for the June 6, 2019 unauthorized release was 55 mg/L and the highest pH reading was 9.1, which would exceed the TSS and pH effluent limits for discharge lagoons under the lagoon general permit.

Permit requirement:
Part 4.1 of the permit states, "No Discharge Requirement: Effective immediately and lasting through the life of this permit, there shall be no discharge except in accordance with the bypass provisions of this permit. If an unauthorized release occurs or is expected to occur, the permittee shall take the appropriate measures to minimize the discharge of pollutants (see Part 6.7)."

Corrective Action:
Ensure that there is no discharge from the Towaoc Lagoon 2. If the facility plans to discharge in the future it is recommended that the facility apply for a discharge permit. Provide the EPA, the Ute Mountain Ute Tribe's Environmental Department (Tribe) and Indian Health Service (IHS) with a description of the corrective actions taken to address this finding.

Finding #2: The June 2019 unauthorized release from the facility was not reported to the EPA.
In June 2019, the Towaoc Lagoon 2 had an unauthorized release from cell 5 that was not reported to the EPA by the first workday following the day the facility became aware of the unauthorized release. The EPA became aware of the June 2019 unauthorized release during the July 14, 2021 inspection.

Permit requirement:
Part 4.1 of the permit states, "No Discharge Requirement: Effective immediately and lasting through the life of this permit, there shall be no discharge except in accordance with the bypass provisions of this permit. If an unauthorized release occurs or is expected to occur, the permittee shall take the appropriate measures to minimize the discharge of pollutants (see Part 6.7)."

Part 5.8.2 of the permit states, "The following occurrences of noncompliance shall be reported by telephone to the EPA, Region 8, NPDES Enforcement Unit at (800) 227-8917 (8:00 a.m. - 4:30 p.m. Mountain Time) and the applicable Tribe (see Appendix A for list of Tribes and telephone numbers) (8:00 a.m. - 4:30 p.m. local time) by the first workday following the day the permittee became aware of the circumstances:

5.8.2.1. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part 6.7, Bypass of Treatment Facilities.);

5.8.2.2. Any unauthorized release, including sanitary sewer overflows;

5.8.2.3. Any upset which exceeds any effluent limitation in the permit (See Part 6.8, Upset Conditions.); or,

5.8.2.4. Any violation of a discharge limitation for any of the pollutants listed in the permit to be reported within 24 hours."

Part 5.8.3 of the permit states, "A written submission shall also be provided to the EPA and to the applicable Tribe within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
5.8.3.1. A description of the noncompliance and its cause;
5.8.3.2. The period of noncompliance, including exact dates and times;
5.8.3.3. The estimated time noncompliance is expected to continue if it has not been corrected; and,
5.8.3.4. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
The written submission shall be submitted to the following addresses:
Original to: U.S. EPA, Region 8
Policy, Information Management & Environmental Justice Program (8ENF-PJ)
Attention: Director
1595 Wynkoop Street
Denver, Colorado 80202-1129

Copy to: Applicable Tribe (see Appendix A for list of Tribes)"

Corrective Action:
Ensure that the EPA and Tribe are notified of any unauthorized release and that the follow-up written report be submitted to the EPA and the Tribe. Provide the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding.

Finding 3: The June 6, 2019 unauthorized release was not sampled for biochemical oxygen demand.
The June 2019, unauthorized release was sampled on June 6, 2019; however, the wastewater was not sampled for biochemical oxygen demand (BOD) as required by the permit.

Permit Requirement:
Part 4.2 of the Permit states, "Self-Monitoring Requirements: If an unauthorized release is discovered or expected to occur, the discharge shall be monitored as shown below:

Effluent Characteristic	Frequency	Sample Type a/
Total Flow, gpm c/	b/	Instantaneous
5-day Biochemical Oxygen Demand (BOD_5), mg/L	b/	Grab
pH, standard units	b/	Grab
Total Suspended Solids (TSS), mg/L	b/	Grab
Total Ammonia Nitrogen (as N), mg/L	b/	Grab
Total Nitrogen (N), mg/L	b/	Grab
Total Phosphorus (P), mg/L	b/	Grab
Oil and grease, Visual d/	b/	Observation
Oil and Grease, mg/L d/	d/	Grab

a/ See Definitions, Part 8, for definition of terms.
b/ The discharge shall be monitored three times per week for the first week of discharge (sample taken and flow rate measured), including once as soon as practical after the unauthorized release is discovered or when an expected unauthorized release begins, and at weekly intervals thereafter until the unauthorized release stops. If the discharge lasts less than one week in duration, monitoring shall be performed at the beginning, middle, and end of the discharge event. The permittee shall report the monitoring results using the format on the last page of this permit in accordance with the instructions in Part 5.4.2. A photocopy of the page of Part 9 may be used.
c/ If it is not possible to measure the rate of discharge, the rate of discharge shall be estimated. In addition, the permittee shall monitor the duration and approximate volume of each discharge.
d/ In the event that an oil sheen or floating oil is observed in the discharge, a grab sample shall be taken immediately and analyzed in accordance with the requirements of 40 C.F.R. Part 136. If no grab sample was taken because no visible sheen was observed, enter "No Visible sheen observed, so no grab sample required." or similar verbiage when reporting the monitoring data."

Corrective Action:
Ensure that unauthorized releases are sampled for all required pollutants including BOD. Provide the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding.

Finding #4: Failure to meet the holding times for pH.
The June 6, 2019, pH samples of the unauthorized release were not analyzed within 15 minutes of collection of the samples. 40 C.F.R. 136 requires pH samples to be analyzed within 15 minutes of collection.

Permit Requirement:
Part 5.2 of the Permit states, "Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this permit."

40 C.F.R. Part 136 requires that pH samples be analyzed within 15 minutes of collection.

Corrective Action:
Ensure that pH samples are sampled within 15 minutes of collection in accordance with the test procedures approved under 40 C.F.R. Part 136. Provide the EPA, Tribe and IHS with a description of how the facility will sample unauthorized releases for pH to meet the 15-minute holding time.

Finding #5: Failure to sample for Total Suspended Solids with an method approved under 40 C.F.R. 136.
The June 6, 2019, TSS samples of the unauthorized release were analyzed with method EPA 160.2, which is not an approved method under 40 C.F.R. 136 for TSS. The TSS methods (Gravimetric 103-105 post washing of residue) approved under 40 C.F.R 136 include 2540 D-2015, D5907-13 and I-3765-85.

Permit Requirement:
Part 5.2 of the Permit states, "Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this permit."

The TSS methods (Gravimetric 103-105 post washing of residue) approved under 40 C.F.R 136 include 2540 D-2015, D5907-13 and I-3765-85.

Corrective Action:
Ensure that TSS samples are sampled in accordance with the test methods approved under 40 C.F.R. Part 136. Provide the EPA, Tribe and IHS with a description of how the facility will ensure that the appropriate TSS method will be used in future sampling.

Finding #6: The lift station pumps were not operating correctly and causing sanitary sewer overflows.
The lift station has two pumps; however, one of the pumps is not operating and the second pump does not automatically operate so it has to be manually turned on a daily basis (photo 59). One of the facility representatives indicated that the lift station overflowed the week prior to the EPA inspection. The operator indicated that they are planning to replace both lift station pumps in the near future.

Permit requirements:
Part 4.1 of the permit states, "No Discharge Requirement: Effective immediately and lasting through the life of this permit, there shall be no discharge except in accordance with the bypass provisions of this permit. If an unauthorized release occurs or is expected to occur, the permittee shall take the appropriate measures to minimize the discharge of pollutants (see Part 6.7)."

Part 6.5 of the permit states, "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance."

Corrective Action:
Fix the facility lift station pumps. Properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) including the lift station pumps, which are installed or used by the permittee to achieve compliance with the conditions of the permit. Provide the EPA, the Tribe and IHS with photos and a description of the corrective actions taken to address this finding.

Finding #7: The lift station trash basket was full of debris.
The trash basket in the Towaoc Lagoon 2 lift station was full of debris and needed to be cleaned out (photo 59).

Permit requirements:
Part 6.5 of the permit states, "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance."

Corrective Action:
Remove debris from the Towaoc Lagoon 2 lift station trash basket. Properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) including the lift station, which are installed or used by the permittee to achieve compliance with the conditions of the permit. Provide the EPA, the Tribe and IHS with photos and a description of the corrective actions taken to address this finding.

Finding #8: The influent meter was not operational.
The influent meter was not working at the time of the inspection (photo 61).

Permit requirements:
Part 6.5 of the permit states, "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance."

Corrective Action:
Fix the influent flow meter. Properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) including the influent flow meter, which are installed or used by the permittee to achieve compliance with the conditions of the permit. Provide the EPA, the Tribe and IHS with photos and a description of the corrective actions taken to address this finding.

Finding #9: The gate for the northwest entrance to cell 1 was missing and the fence was broken on the northwest corner.

The northwest corner of cell 1 did not have a gate to close the lagoon and the northwest corner of the fence was broken (photo 62).

Permit requirements:

Part 6.5 of the permit states, "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance."

Corrective Action:

Install the missing gate in the northwest corner of the fence for cell 1 and fix the broken fence on the northwest corner of cell 1. Properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) including gates and fences, which are installed or used by the permittee to achieve compliance with the conditions of the permit. Provide the EPA, the Tribe and IHS with photos and a description of the corrective actions taken to address this finding.

Finding #10: There was vegetation and trees growing in and around the berms of all the cells.

There was heavy vegetation over six inches in height and trees growing in and around the berms for cells 1 and 2 that needed to be cut (photos 63-65). There was also vegetation growing inside cell 2 (photos 64-65). There was vegetation over six inches in height around the berms for cells 3, 4 and 5 that needed to be cut (photos 66-70).

Permit Requirement:

Part 6.5 of the General Permit (Permit) states, "Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance. In addition to the operation and maintenance items in the manual for the lagoon system, the permittee shall do the following maintenance:

6.5.1. Take necessary action to promptly correct the problem of leakage through the dikes;
6.5.2. Take necessary action to promptly remove burrowing animals from the dikes;
6.5.3. Promptly repair damage to dikes caused by burrowing animals and/or erosion;
6.5.4. Remove rooted plants, including weeds, from the water on a regular basis or as needed; and
6.5.5. Keep the dikes mowed on a regular basis during the growing season or as needed (e.g., keep growth below 6" in height)."

Corrective Action:
Remove the overgrown vegetation and trees growing around cells 1, 2, 3, 4 and 5. Submit to the EPA, the Tribe and IHS photos of the cells after the vegetation and trees have been removed.

Finding #11: There was evidence of an overflow from cell 3 to cell 4.
There was evidence of an overflow from cell 3 to cell 4 on the southeast corner of cell 3 (photo 67). Overflows from one cell to another should not occur because it compromises the integrity of the berm between the cells.

Permit Requirement:
Part 4.1 of the permit states, "No Discharge Requirement: Effective immediately and lasting through the life of this permit, there shall be no discharge except in accordance with the bypass provisions of this permit. If an unauthorized release occurs or is expected to occur, the permittee shall take the appropriate measures to minimize the discharge of pollutants (see Part 6.7)."

Part 6.5 of the General Permit (Permit) states, "Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance. In addition to the operation and maintenance items in the manual for the lagoon system, the permittee shall do the following maintenance:
6.5.1. Take necessary action to promptly correct the problem of leakage through the dikes;
6.5.2. Take necessary action to promptly remove burrowing animals from the dikes;
6.5.3. Promptly repair damage to dikes caused by burrowing animals and/or erosion;
6.5.4. Remove rooted plants, including weeds, from the water on a regular basis or as needed; and
6.5.5. Keep the dikes mowed on a regular basis during the growing season or as needed (e.g., keep growth below 6" in height)."

Corrective Action:
Ensure that lagoon cells are properly maintained and operated so they don't overflow. Properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) including lagoon cells, which are installed or used by the permittee to achieve compliance with the conditions of the permit. Provide the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding.

Finding #12: The sewer main along Mike Wash Road was partially blocked.
A facility representative indicated that there is some blockage from accumulated dirt in the sewer main along Mike Wash Road. This sewer main needs to be jetted to clear the blockage to ensure proper flow in the sewer main.

Permit requirements:
Part 6.5 of the permit states, "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the

permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance."

Part 6.6 of the permit states, "Collected screenings, grit, solids, sludge (including sewage sludge), or other pollutants removed in the course of treatment shall be buried or disposed in a manner consistent with all applicable federal and tribal regulations (e.g., 40 C.F.R. Part 257, 40 C.F.R. Part 258, 40 C.F.R. Part 503). Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the United States."

Corrective Action:
Remove blockage from the sewer main along Mike Wash Road. Properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) including sewer mains, which are installed or used by the permittee to achieve compliance with the conditions of this permit. Ensure that any sludge collected from the sewer main be disposed of in a manner consistent with all applicable federal and tribal regulations. Provide the EPA, the Tribe and IHS with photos and a description of the corrective actions taken to address this finding.

Finding #13: The facility did not have a copy of the Lagoon general permit on site.
A copy of the Lagoon general permit was not kept on site.

Permit requirements:
Part 5.7 of the permit states, "Data collected on site, data used to prepare the DMR, copies of DMRs, a copy of this NPDES permit, and the notice of intent for permit coverage, must be maintained on site."

Corrective Action:
Ensure that a copy of the Lagoon General permit is maintained on site. Provide the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding.

Finding #14: Inspection reports of the lagoon cells were not provided during the inspection and were not being conducted on a weekly basis.
A facility representative indicated that inspections of the lagoons were only being conducted on a quarterly basis instead of the required weekly inspection schedule. EPA requested the inspection reports records for the past 5 years, but has not received the records to this date.

Permit requirement:
Part 4.3.1 of the permit states, "On at least a weekly basis, unless otherwise modified by written approval from the EPA, the permittee shall inspect its wastewater treatment facility. The permittee shall maintain a notebook recording all information obtained during the inspection. At a minimum, the notebook shall include the following:
4.3.1.1. Name of facility and permit number;
4.3.1.2. Date and time of the inspection;
4.3.1.3. Name of the inspector(s);
4.3.1.4. The facility's discharge status;

4.3.1.5. The flow rate of the discharge if occurring;
4.3.1.6. If a discharge is occurring, has occurred since the previous inspection, and/or if a discharge is likely to occur before the next inspection. (Note: If a discharge has occurred or is likely to occur before the next inspection, perform the appropriate monitoring and reporting requirements in Parts 3.2 and 5.4 of this permit if not already done.);
4.3.1.7. Is there is any leakage through the dikes;
4.3.1.8. Are there are any animal burrows in the dike;
4.3.1.9. Is there any erosion of the dikes (e.g., rills, cracks or other structural indications of erosion);
4.3.1.10. Are there are any rooted plants, including weeds growing in the water;
4.3.1.11. Does the vegetation growth on the dikes needs mowing (e.g. greater than 6" tall);
4.3.1.12. List the date scheduled for operation and maintenance procedures to be undertaken at the wastewater treatment facility.
4.3.1.13. Identification of operational problems and/or maintenance problems;
4.3.1.14. Recommendations, as appropriate, to remedy identified problems;
4.3.1.15. A brief description of any actions taken with regard to problems identified; and,
4.3.1.16. Other information, as appropriate.
The permittee shall maintain the notebook in accordance with required record-keeping items listed above and shall make the log available for inspection, upon request, by authorized representatives of the U.S. Environmental Protection Agency or the applicable Tribe (see Part 5.10 of this permit)."

Part 5.7 of the permit states, "The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, inspection records, notifications to the EPA per this permit, and DMRs, for a period of at least five years from the date of the sample, measurement, report, application or submittal. Records of monitoring required by this permit related to sludge use and disposal activities must be kept at least five years (or longer as required by 40 C.F.R. Part 503). This period may be extended by request of the Director at any time. Data collected on site, data used to prepare the DMR, copies of DMRs, a copy of this NPDES permit, and the notice of intent for permit coverage, must be maintained on site."

Corrective Action:
Ensure that inspections are conducted on a weekly basis and documented in accordance with the permit. Ensure that inspection reports are kept in accordance with the recordkeeping requirements of the permit. Provide the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding.

NPDES Inspection Report – Industrial User

Name of industry and location:	**Control authority / Permit No. / Facility ID:**
Western Filament, Inc. 630 Hollingsworth Street Grand Junction, Colorado 81505	City of Grand Junction Permit No. Class II No. 002 NPDES ID: COPU00138 Inspection ID: 202204_COPU00138 NAICS Code: 314994 Rope, cordage, twine and tire fabric mills Latitude: 39.09479˚N, Longitude: -108.58303˚W
Date of visit:	**Time of visit:**
April 12, 2022	9:08 am – 11:30 am

Name(s) / Affiliation of inspector(s):

Emilio Llamozas / U.S. Environmental Protection Agency, Region 8 (lead)
Kristin Ratajczak / U.S. Environmental Protection Agency, Region 8
Eddie Simas / U.S. Environmental Protection Agency, Region 3
Stephen Stortz / City of Grand Junction
Steve Moralez / City of Grand Junction
Jack Beach / City of Grand Junction

Name / Title / Affiliation:

Brant Bear / Engineer Manager / Western Filament, Inc.
Robert Woodruff / Dye House Operator / Western Filament, Inc.

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
Emilio Llamozas	**U.S. EPA Region 8** **1595 Wynkoop Street** **8ENF-W-NW** **Denver, Colorado 80202** **303-312-6407**	**5/24/2022**
Reviewer Name	Address/Phone Number	Date
Kristin Ratajczak	**U.S. EPA Region 8** **1595 Wynkoop Street** **8ENF-W-NW** **Denver, Colorado 80202** **303-312-6310**	**5/25/2022**
Supervisor Signature/Name	Address/Phone Number	Date
Boeglin, Michael Digitally signed by Boeglin, Michael Date: 2022.05.27 08:42:57 -06'00' **Michael Boeglin**	**U.S. EPA Region 8** **1595 Wynkoop Street** **8ENF-W-NW** **Denver, Colorado 80202** **303-312-6250**	**5/27/2022**

Inspection Description:

On April 12, 2022, U.S. Environmental Protection Agency (EPA) inspectors Emilio Llamozas, Kristin Ratajczak and Eddie Simas (jointly referred to as inspectors) and the City of Grand Junction (City) inspectors Stephen Stortz, Steve Moralez and Jack Beach conducted an industrial user inspection of Western Filament, Inc. (Western Filament or facility) in Grand Junction, Colorado as part of a pretreatment compliance inspection (PCI) of the City. The City had identified Western Filament as a Significant Industrial User (SIU), permitted to discharge to the City's sanitary sewer system under Permit Class II No. 002 (permit). The inspection was announced to Western Filament the morning of the inspection.

Upon arriving to the facility at approximately 9:08 am, Mr. Stortz, Mr. Moralez and Mr. Beach introduced the inspectors to Western Filament representative Brant Bear, Engineer Manager. The inspectors began the opening conference by presenting their credentials and explaining the general purpose and procedures of the inspection. During the opening conference, Mr. Bear provided an overview of the facility's operations, focusing on the processes that generate wastewater and the wastewater pretreatment system.

Following the opening conference, Mr. Bear accompanied the group of inspectors on a facility walkthrough, with focus placed on the dyeing process, chemical and hazardous waste storage, pretreatment system and sampling point. To document and record conversation and inspection observations, the inspectors took notes using bound checklists with questions applicable to permitted industrial users. Photographs taken during the inspection are included in the attached photo log.

EPA inspectors conducted a closing conference with Mr. Bear and provided general observations and preliminary findings from the inspection. The EPA and City representatives left the facility at approximately 11:30 am. On April 21, 2022, the EPA inspectors sent an email to Mr. Bear with preliminary findings from the inspection. On May 10, 2022, Western Filament provided a response to the EPA's preliminary findings email.

1. What does this industry produce?

The facility is an industrial braiding mill that produces braided and twisted products for the electrical, automotive, aerospace, and recreational industries. The facility operates Monday through Thursday from 5:00 am to 4:30 pm and Friday through Sunday (12-hour shifts each day). Wastewater from the fiber dyeing process is discharged into the City's sanitary sewer system.

2. How is the industry classified by the POTW?

The City classified Western Filament as a Significant Industrial User (SIU) because the discharge from the facility to the sanitary sewer has a reasonable potential to adversely affect the operation of the Publicly Owned Treatment Works (POTW) due to low pH and potential pollutants in the wastewater.

3. Have there been any significant changes in processes or flow?

Due to the Covid-19 pandemic, the facility outsourced some of the dyeing process to a facility in another state, in 2020 and 2021. The facility is exploring outsourcing the dyeing process in the future. The facility is also looking at automation of the dyeing process to prevent overflows.

4. What raw materials are used?

The facility uses the following materials to produce the different braided ropes: Dyes (powdered and liquid); liquid pigments; dye auxiliaries; coatings; waxes; and rubber and lead filament. Additionally, detergents are used in the equipment cleaning process.

5. What processes are used to make the product(s)? Indicate any wastes generated and destination of wastes.

The process entails braiding and twisting ultra-high molecular weight polyethylene (UHMWPE) fibers. UHMWPE fibers are unwound onto bobbins for production. Western Filament has about 2500 braiding heads in the production area. The UHMWPE fibers are then weaved and braided to the product specifications. The braided UHMWPE fibers are then either coated or dyed depending on the product specifications. Mr. Bear indicated that most of the fibers are coated versus dyed.

Dyeing Process

The fibers selected for dyeing are first wound onto perforated stainless steel dye tubes. The perforated tubes are then placed into the dye pots (photo 24). The fibers are rinsed by circulating water between dye pot and the expansion tank. Once the fibers are rinsed thoroughly, they are dyed. The dye is mixed with water to produce the desired color in the mixing pots (photo 23). The dye mix consists of either powder or liquid dye. The dye solution passes through the perforated tubes at a temperature of 225 ºF and high pressure. The dye cycle takes 2 to 3 hours. At the end of the dye cycle, the dye bath is cooled through a heat exchanger to around 150 ºF allowing filaments to continue absorbing dye, before wastewater is routed to the Wastewater Pit for treatment. Dyed filaments are placed in the dryer for approximately 8 hours to remove water from the filaments (photo 29).

Coating Process

In the coating process, fibers are coated with pigments (photos 42-43), rubber (photo 41) or wax (photos 39-40). Coatings are stored in 55-gallon drums stored in chemical storage room (photos 34-37). No floor drains were present in the chemical storage room. The fibers are unspooled as they are dipped in the coating (photos 42-43). Following coating, the fibers are cured in an oven before being re-spooled. Then product is packaged and prepped for distribution. No water is used in the pigment coating process.

For fibers that are coated in wax, the filament is unspooled and dipped in heated wax (photo 39). Water is used as a cooling agent and the fibers are then re-spooled (photo 40). Most of the water used in the waxing coating process is evaporated.

6. Where is water used and what is the source of the water (city, well, river, etc.)?

The facility uses Ute Water in its operations. The average daily flow volume discharged from the facility over the past five years was 2,030 gallons per day (gpd) with a maximum daily flow volume of 5,200 gpd.

7. Describe the processes which discharge wastewater.

Please refer to Sections 5 and 9 of the inspection report for a description of the processes that discharge wastewater.

8. Describe the sample location. Are the CA and industry using the same location?

Western Filament has one outfall permitted to discharge to the City's collection system; Outfall 001, which only includes process wastewater. Outfall 001 is located in the trench drain located in the Wastewater Pit in the Dye Room. The facility batch discharges the 650-gallon Wastewater Pit several times per day to the trench drain (photo 25). The City collects samples of Western Filament's effluent at the same location described above.

9. Describe the treatment system in place.

The wastewater from the dyeing process is batched discharged to the 650-gallon Wastewater Pit (photo 25). Several dye cycles are routed to the Wastewater Pit before it is discharged to the City sewer. All wastewater batches are tested for pH, and adjusted with either acetic acid or sodium carbonate, to lower or raise the pH, respectively, before discharge to sanitary sewer. The facility usually discharges four to five 650-gallon batches from the Wastewater Pit per processing day. The daily maximum batch discharges allowed from the Wastewater Pit is nine batch discharges per day, according to the permit. The permit requires the facility to keep a discharge log for each batch discharge event. The pH and temperature of the wastewater discharged is documented in the discharge log. There are also screens on the dye pit sump to keep debris out of sump pump.

10. What chemicals are maintained at the facility? How are they stored? Is adequate spill prevention in place?

There were several dyes and coating containers stored in the dye room. Some of the containers had secondary containment (photos 26-27); however, secondary containment was not provided for other dyes and coatings containers stored near the wastewater pit in the dye room (photos 28, 30, 31 and 32). Slug discharge potential exists in this area of the facility.

11. Are any hazardous wastes stored or discharged?

The facility disposes of hazardous waste offsite through a third-party contractor. Hazardous waste containers are stored outdoors under a canopy and with secondary containment (photo 38). Paints and coatings are disposed with wastes solvents used to clean the coating system. Used oil is also disposed offsite by a third-party contractor. Hazardous waste manifests for 2020 and 2021 were reviewed by the inspectors during the inspection. Sediment recovered from the Wastewater Pit sump in the Dye Room are disposed as solid waste in the landfill once per year.

FINDINGS AND CORRECTIVE ACTIONS

The following findings were identified during the inspection. The EPA has requested the City work directly with Western Filament to oversee correction of these deficiencies. No response from Western Filament to the EPA is requested at this time.

Finding 1 – There were dyes and coating containers stored without secondary containment near the wastewater pit in the dye room.

There were several dyes and coating containers stored in the dye room. Some of the containers had secondary containment (photos 26-27); however, secondary containment was not provided for some dyes and coatings containers stored near the wastewater pit in the dye room (photos 28, 30, 31 and 32). Slug discharge potential exists in this area of the facility.

On May 10, 2022, Western Filament indicated that they are currently researching adding secondary

containments for the dyes/coatings.

Pretreatment Requirements

Section III.C.4 of the Western Filament permit states, "The Permittee shall develop, submit for approval, and implement a slug/spill discharge control plan or take such other action that may be necessary to control spills and slug discharges."

Section III.C.5 of the Western Filament permit states, "A slug/spill discharge control plan shall provide, at a minimum, the following:
a. Detailed plans (schematics) showing facility layout and plumbing representative of operating procedures;
b. Description of contents and volumes of any process tanks;
c. Description of discharge practices, including nonroutine batch discharges;
d. Listing of stored chemicals, including location and volumes;
e. Procedures for immediately notifying the City of any spill or slug discharge;
f. Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response; and
g. Any other information as required by the City."

According to the requirements at 40 C.F.R. §403.8(f)(2)(vi), "if the POTW decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:

(A) Description of discharge practices, including non-routine batch Discharges;
(B) Description of stored chemicals;
(C) Procedures for immediately notifying the POTW of Slug Discharges, including any Discharge that would violate a prohibition under §403.5(b) with procedures for follow-up written notification within five days;
(D) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response."

Corrective Action

Add secondary containment to the dye and coating containers stored in the dye room. Provide photos of the corrective actions to the City. Provide the City with a description of how this corrective action was accomplished.

Finding 2 – One of the dye pots overflowed into the Wastewater Pit during the inspection.

One of the dye pots (photo 23) boiled over, overflowing into the wastewater pit during the inspection. The system currently requires manual control of this system to prevent overflow, though the facility is considering automation.

On May 10, 2022, Western Filament indicated that they are currently working on implementing a temperature controller to prevent accidental boil-over.

Pretreatment Requirements

Section III.C.4 of the Western Filament permit states, "The Permittee shall develop, submit for approval, and implement a slug/spill discharge control plan or take such other action that may be necessary to control spills and slug discharges."

Section III.C.5 of the Western Filament permit states, "A slug/spill discharge control plan shall provide, at a minimum, the following:
a. Detailed plans (schematics) showing facility layout and plumbing representative of operating procedures;
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f. Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response; and
g. Any other information as required by the City."

According to the requirements at 40 C.F.R. §403.8(f)(2)(vi), "if the POTW decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:

(A) Description of discharge practices, including non-routine batch Discharges;
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(C) Procedures for immediately notifying the POTW of Slug Discharges, including any Discharge that would violate a prohibition under §403.5(b) with procedures for follow-up written notification within five days;
(D) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response."

Corrective Action

Ensure that boil-over from the mixing pots does not get discharged to the City without adequate treatment. Provide the City with a description of how this corrective action was accomplished.

Finding 3 – The 2020 and 2021 Western Filament self-monitoring reports did not document the person performing the pH analysis or the pH method for each batch discharged.

The 2020 and 2021 Western Filament self-monitoring reports (SMRs) did not document the person performing the pH analysis or the pH method for each batch discharged from the facility.

On May 10, 2022, Western Filament indicated that the dump logs have been updated to include operator initials.

Pretreatment Requirements
Section II.A.1.f of the Western Filament permit states, "A completed Chain of Custody (COC) form shall accompany all samples submitted to a lab for analysis. The COC shall include: the date; exact place, method and time of sampling; the name of the person collecting the sample; the number, size and bottle type (plastic or glass) for each analyses; the sample type (composite or grab); the date and time the sample was relinquished to and received by the testing laboratory; and the USEPA-approved analytical method required to be used."

Corrective Action
Update the Western Filament dump logs to document the pH method used to analyze the batch discharge samples. Provide the City with a description of how this corrective action was accomplished.

Finding 4 – Western Filament was not calibrating their pH meter as specified in the manufacturer's manual.
Western Filament was not calibrating their pH meter; rather the facility was doing monthly pH checks. If the pH meter was reading below 4.41 for the 4.0 buffer and below 7.71 for the 7.0 buffer, they interpreted the result as acceptable. The facility should calibrate the pH meter based on the frequency specified in the manufacturer's manual for the pH meter.

On May 10, 2022, Western Filament indicated that, "the manufacturer does not specify timeframe between recalibrations. We did find what the manufacturer's tolerance is before needing recalibration. Work instructions and tolerances have been added to the operator work instructions."

Pretreatment Requirements
Section II.A.1.b of the Western Filament permit states, "All pollutant analysis, including sampling techniques, to be submitted as part of a permit application, Permit, Self-Monitoring Report or other analyses required under this Section shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, unless otherwise specified in an applicable Categorical Pretreatment Standard."

Corrective Action
Ensure that the pH meter is calibrated at the tolerance level specified in the pH meter's manufacturer's manual. Provide the City with a description of how this corrective action was accomplished.

Finding 5 –The pH buffers used to perform pH meter checks did not bracket the expected pH results for the wastewater discharged from the facility.
The pH buffers used by Western Filament to check the pH meter were 4 and 7. Some of the pH readings of the batch discharges were higher than 7. The highest reading that EPA identified was on December 28, 2021 at 1500 with a pH reading of 9.4. Approved pH methods identified in 40 CFR Part 136 require that pH buffers used for calibrations bracket the expected pH results.

On May 10, 2022, Western Filament indicated that pH buffer 10.01 has been ordered and will be included in recalibration work instructions.

Pretreatment Requirements

Section II.A.1.b of the Western Filament permit states, “All pollutant analysis, including sampling techniques, to be submitted as part of a permit application, Permit, Self-Monitoring Report or other analyses required under this Section shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, unless otherwise specified in an applicable Categorical Pretreatment Standard.”

Corrective Action

No further action is required based on the May 10, 2022, response from Western Filament indicating that a pH buffer 10.01 has been ordered and will be included in the recalibration work instructions.