

U.S. EPA Region 8 NPDES Inspection Report

National Database Information	
Inspection Date: August 11, 2022	Inspection Type: Compliance Evaluation Inspection
Entry / Exit Time: 09:30 AM / 11:30 AM	NPDES ID: MTU000096
Major / Non-Major Facility: Non-Major	Program Sector(s): Domestic Wastewater Treatment
NAICS Code: 221320 (Sewage Treatment Facilities)	Inspection ID: 202208_MTU000096
Inspector and affiliation: Akash Johnson / U.S. EPA Region 8	

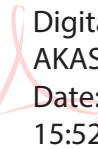
Facility Location Information	
Site/Facility Name & Location: Wyola WWTF Wyola (Big Horn County), Montana 45.133097, -107.391904	Email Report to: Chris Dillon, Head Operator Apsaalooke Water and Wastewater Authority chris.dillon@crow-nsn.gov

Contact Information	
	Name(s)/Title
Facility Contacts	Chris Dillon / Head Operator / Apsaalooke Water and Wastewater Authority (not present)
	James Bell Rock Jr. / Operator / Apsaalooke Water and Wastewater Authority (present)
	Antone Lopez / Operator / Apsaalooke Water and Wastewater Authority (present)
	Clay Spotted / Operator / Apsaalooke Water and Wastewater Authority (present)
	Joanie Rowland / Director / Apsaalooke Nation Housing Authority (present)
	Lesley Kabotie / Wyola District Housing Commissioner / Apsaalooke Nation Housing Authority (present)
	Lee Felicia / Facilities Maintenance / Apsaalooke Nation Housing Authority (present)
	John Caplett / Facilities Maintenance / Apsaalooke Nation Housing Authority (present)
	Benji Bear Below / Facilities Maintenance / Apsaalooke Nation Housing Authority (present)
	Rick Birdinground / Facilities Maintenance / Apsaalooke Nation Housing Authority (present)

Indian Health Service Contacts	Jason Schneider / Tribal Utility Consultant / Indian Health Service (present)
Tribal Government Contacts	Marvin “Wes” Stops, Jr. / Director / Crow Tribe Environmental Protection Program (not present)
	Harold Male Bear / Wyola District Representative / Crow Tribe Legislative Branch (present)
Person/Company meeting definition of “Owner”	To be determined (see report narrative for additional information)
Person/Company meeting definition of “Operator”	To be determined (see report narrative for additional information)

Permit / Facility Information	
Permit on site and available: N/A – unpermitted	Permit Application Date: N/A – unpermitted
Permit Effective Date: N/A – unpermitted	Permit Expiration Date: N/A – unpermitted
Facility Latitude and Longitude: 45.133097, -107.391904 (lagoon)	
Receiving Water(s): N/A – non-discharging	
Weather Conditions: Partly cloudy	
Inspector’s sources of information: ANHA representatives, AWWWA representatives, Crow Tribe representatives, IHS representatives, EPA records and databases, ANHA records, IHS records and databases, Google Maps aerial imagery, and inspection observations	

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

Report Review and Signature		
Lead Inspector Name/Signature/Final Date	Draft Date	Contact Information
AKASH JOHNSON  Digitally signed by AKASH JOHNSON Date: 2023.04.27 15:52:54 -06'00'	April 17, 2023	U.S. EPA Region 8 Denver, Colorado johnson.akash@epa.gov (303) 312-6067
NPDES and Wetlands Enforcement Section		
Reviewer Name	Review Date	Contact Information
Stephanie Passarelli	April 26, 2023	U.S. EPA Region 8 Denver, Colorado passarelli.stephanie@epa.gov (303) 312-6803
NPDES and Wetlands Enforcement Section		
Supervisor Reviewer Name/Signature/Approval Date		Contact Information
EMILIO LLAMOZAS  Digitally signed by EMILIO LLAMOZAS Date: 2023.04.27 14:39:02 -06'00'		U.S. EPA Region 8 Denver, Colorado llamozas.emilio@epa.gov (303) 312-6407
NPDES and Wetlands Enforcement Section Supervisor		

Report Narrative

1.0 Introduction

On Thursday, August 11, 2022, I, U.S. Environmental Protection Agency (EPA) inspector Akash Johnson, conducted a compliance evaluation inspection of the Wyola wastewater treatment facility (WWTF; facility). The facility serves the unincorporated community of Wyola, Montana. Both Wyola and the facility are located within the exterior boundaries of the Crow Reservation (Reservation). The inspection was attended by the facility representatives identified as “present” on pages 1-2 of this report. The inspection was coordinated with the Apsaalooke Water and Wastewater Authority (AWWWA), Apsaalooke Nation Housing Authority (ANHA; also known as the “Crow Tribal Housing Authority” or the “Authority”), Crow Tribe Environmental Protection Program, and Indian Health Service (IHS) several weeks in advance, and an inspection notification letter was sent to the Crow Tribe on July 6, 2022. The purpose of the inspection was to evaluate compliance with applicable Clean Water Act requirements. Throughout the inspection, I took notes on discussions and observations in a bound inspection checklist. Photographs taken during the inspection are included in the enclosed photo log.

As of this report issuance, the EPA is in receipt of a limited and likely incomplete set of records pertaining to historical planning, design, construction, ownership, and operatorship of the facility. Historical information included throughout this report is based in-part on my review and interpretation of these limited records, and discussions with AWWWA, ANHA, Crow Tribe, and IHS representatives spanning several years, including prior to, during, and following the inspection.

2.0 Relevant Records

Notable records I reviewed pursuant to this inspection include, but are not limited to:

- Memorandum of Agreement (MOA) between the IHS, ANHA, Town of Lodge Grass, Wyola Nonprofit Water Users Corporation, and the Crow Tribe for IHS Project No. BI 82-251, last signed February 1, 1985 (1985 MOA)
- Engineering Drawings titled, “Wyola Sewage Lagoon,” Sheets 1-4 of 4, IHS Project No. BI 82-251, prepared by the IHS, drawn date March 1, 1985; stamped “Preliminary Plan” and hand-notated (1985 Lagoon Plans)
- Transfer Agreement between the IHS, ANHA, and Crow Tribe for Partial Transfer No. 1 of IHS Project No. BI 82-251, last signed March 14, 1986 (1986 TA)
- Engineering Drawing titled, “Wyola Sewer Profile ‘As-Built,’” Sheet 1 of 2, IHS Project No. BI[sic]82-251, prepared by the IHS, drawn date August 30, 1996 (1996 Sewer As-Built)
- Inspection Report for the EPA’s September 12, 2017 compliance evaluation inspection of the facility, prepared by the EPA, May 23, 2018
- Inspection Report for the EPA’s September 11, 2019 compliance evaluation inspection (2019 Inspection) of the facility, prepared by the EPA, November 1, 2019
- Map of Wyola ANHA homes titled “Wyola Cluster Site,” prepared by the ANHA, undated (shared with the EPA on June 4, 2020)
- Project Summary for IHS Project No. BI 20-P08, “Crow Wyola: Lift Station Improvements,” prepared by the IHS, June 30, 2020 (2020 Project Summary)
- Letter from the ANHA to Wyola residents Re: proper sewer use, prepared by the ANHA, September 17, 2020
- MOA between the IHS, ANHA, and Crow Tribe for IHS Project No. BI 20-P08, last signed September 21, 2020 (2020 MOA)

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- Technical Memorandum Re: Wyola Sanitary Sewer and Water Systems, prepared by Morrison-Maierle for Big Horn County, May 16, 2022 (2022 Tech Memo)

3.0 Facility Overview and Background Information

3.1 Facility Description

The facility comprises a collection system, lift station, and facultative lagoon. Based on my review of available records, the facility was originally constructed around 1985 as part of IHS Project No. BI 82-251, funded jointly by the ANHA and the IHS, through which the IHS managed engineering and construction of water and sewer infrastructure to serve ANHA homes being constructed in several communities across the Reservation.

Sewage from the entire collection system gravity-flows to the lift station, located in the northwest corner of the lagoon enclosure, from which it is pumped to the lagoon. The collection system is discussed further in Sections 3.2 and 3.5 and the lift station is discussed further in Sections 3.5 and 3.6.

The lagoon was designed to be single-cell submerged-baffle system. A baffle berm, lower in elevation than the perimeter berms, runs north-south through the center of the cell, creating what is referred to in the 1985 Lagoon Plans as the “Starter Cell,” set within the western portion of the larger cell, presumably intended to retain settleable solids from the influent. Influent enters the lagoon via above-grade vertical force main piping protruding from the center of the Starter Cell floor. According to the 1985 Lagoon Plans, the influent force main comprises 4 inch diameter PVC pipe, and there is a 6 inch diameter PVC outlet pipe in northern portion of the east exterior berm. Based on my review of the 1985 Lagoon Plans, I was not able to determine whether any cell liner material was installed during construction of the lagoon. Based all information known to me, water levels in the lagoon have rarely, if ever, surpassed the height of height of the baffle berm, and the lagoon has never discharged.

3.2 Users Served

The facility serves primarily, if not exclusively, ANHA single family residential dwellings. In past conversations with facility representatives, including during the subject inspection, there has been debate and uncertainty regarding whether the Wyola School and other non-ANHA residential users are connected to the sewer or septic. The 1986 TA specifies sixteen sewer connections were transferred from the IHS upon construction completion. The current number of sewer connections is believed to be approximately the same as when constructed, although a user inventory has not been completed in at least several years, and it possible some connections could have been added or removed. Over the past several years, there have been discussions amongst community stakeholders regarding potential future development in Wyola and expansion of the sewer service area, discussed further in Section 3.6.

3.3 Septage

In the past, hauled septage has been accepted at the lagoon; however, during the subject inspection, facility representatives indicated this practice had been discontinued several months or years prior because, when haulers could not unlock the gate to the lagoon enclosure, they would sometimes cut the chain link fence to access the lagoon and not repair it, allowing animals to subsequently enter the lagoon enclosure and passing the undue burden of fence repair on to facility operators. To my knowledge, no facility use ordinance or other mechanism is in-place to regulate disposal of hauled septage at the facility.

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3.4 Billing and Collection

To my knowledge, fees are not collected from facility users on any regular basis and no sewer billing or collection mechanisms are in-place in Wyola. The 2020 MOA outlines a proposed arrangement for future collection of user fees, discussed further in Section 3.6.

3.5 History of Facility Ownership, Operatorship, Lift Station, and Sanitary Sewer Overflows

Paragraphs 1 and 2 of the 1986 TA indicate ownership and operatorship responsibility of the facility was transferred from the IHS to the ANHA upon construction completion, stating:

1. “The [IHS] hereby transfers, assigns, and conveys to the [ANHA], without a money consideration, all of the right, title, and interest of the [IHS] in all community facilities and appurtenances thereto constructed, including all materials, supplies, and equipment provided for and incorporated in such facilities. These facilities include, but are not limited to:
 - (1) Community sewer system including but not limited to: 1,796 [linear feet] LF of 8 inch [polyvinyl chloride] PVC sewer main, 160 LF of 16 [inch] steel encasement pipe, [seven] manholes, [sixteen] individual sewer service connections, and a duplex pump lift station complete with control valves and valve manhole.
 - (2) Community sewage lagoon consisting of two cells totaling 3.5 acres, and including but not limited to: 330 LF of 4 [inch] PVC force main, 6 [inch] PVC transfer structure, and related fencing and signs.
2. The [ANHA] hereby accepts such transfer under the terms and conditions set forth in the aforesaid agreement and agrees to operate, maintain and repair such community facilities as the property of the [ANHA] so as to keep the facilities in effective and operating condition.”

At some point between the 1986 TA and June 2020 (estimated around 1994 by some facility representatives), Crow Tribe operators, eventually under the AWWWA (a Crow Tribe entity created in 2004), took over operation of the facility.

Beginning in June 2014, if not earlier, and continuing into 2020, the lift station experienced recurring failures, during which sewer overflows (SSOs) would occur from the first manhole upgradient of the lift station (the “Highway Manhole”). IHS and AWWWA representatives have indicated the lift station failures occurred for a number of reasons, including mechanical, electrical, and power supply issues.

As stated in Section 3.1, sewage from the entire collection system gravity-flows to the lift station. During a lift station outage, little or no sewage reaches the lagoon. I have not verified whether the lift station wet well features an overflow conveyance that may direct some sewage from the wet well into the lagoon, or if all sewage is prevented from reaching the lagoon during a lift station outage; however, even if an overflow conveyance exists, it appears the majority of sewage fails to reach the lagoon during lift station failures, because a considerable amount sewage typically overflows from the Highway Manhole and facility representatives have indicated the lagoon generally dries-up during prolonged lift station outages. Lift station outages and SSOs from the Highway Manhole sometimes continued for months to years at a time.

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The Highway Manhole is located at approximately latitude 45.1338944, longitude -107.3935250, between the Interstate-90 Frontage Road/Highway 451/Old Highway 87 (highway) to the east and a Burlington Northern Santa Fe (BNSF) railroad track to the west. During previous SSOs, raw sewage would overflow from the Highway Manhole into a barrow ditch located between the highway and the BNSF railroad track, within a Montana Department of Transportation (MDT) right-of-way (ROW), then flow north through the barrow ditch. Based on observations spanning several years made by representatives from MDT, AWWWA, and EPA (including myself, during the 2019 inspection), overflowed sewage from the Highway Manhole generally appeared to remain contained within the barrow ditch, presumably dissipating through infiltration and evaporation. Based on aerial imagery and information provided by the AWWWA and the MDT, the barrow ditch may approach or drain into a slough approximately 1,750 feet north of the Highway Manhole. MDT representatives have provided the EPA photographs from March 2019 indicating mixed snowmelt and sewage in the ditch was present in the ditch approximately 1,750 feet north of the Highway Manhole, in the vicinity of this slough. Based on a review of aerial imagery and information provided by the AWWWA and the MDT, it is unknown if there is any surface connectivity between the barrow ditch, slough, any potential conveyances underneath the BNSF ROW, or any potential conveyances to the nearby Little Bighorn River.

Around March 2019, the lift station failed and the AWWWA and the IHS indicated they would not be able to repair it without contractor support, for which no funding was available. In response, the EPA, IHS, AWWWA, ANHA, Crow Tribe, and community stakeholder groups, including, but not limited to, the Plenty Doors Community Development Corporation, Wyola Development Fund, and Wyola School, convened a workgroup which met routinely over several years to evaluate facility ownership and operator responsibilities and options for obtaining funding to repair the lift station. Throughout 2019, no workgroup participants were aware of the 1985 MOA or 1986 TA; all parties believed the facility was owned by the Crow Tribe, and the AWWWA was presumed responsible for facility operation. In early 2020, IHS representatives came across the 1985 MOA and 1986 TA in IHS records and shared these documents with the workgroup. This was apparently the first time any individuals participating in the workgroup, including ANHA representatives, became aware of any ANHA role in owning or operating the facility.

Around April 2020, the workgroup identified and began to execute a three-phase plan for repairing the lift station. A description of each phase, status, and funding information is as follows:

- **Phase I – short-term repair (complete):** Engage a contractor to install a temporary pump and surface hose mechanism to convey wastewater from the wet well to the lagoon. Phase I was completed May 1, 2020 and was funded by the IHS.
- **Phase II – mid-term repair (complete; current state):** Engage a contractor to clean the wet well, install two new pumps, and perform other repairs necessary to restore the lift station to an operational state. Phase II was completed on July 30, 2020 and was funded by the ANHA, Crow Tribe, AWWWA, and other community stakeholder groups.
- **Phase III – long-term repair (tentatively planned):** IHS Project No. BI 20-P08; engage a contractor to identify, prioritize, and construct long-term capital improvements to the lift station. As of this report issuance, the EPA has contributed \$440,000 towards the existing project, which will be managed by the IHS. The Crow Tribe, AWWWA, ANHA, and other community stakeholders may have some input on the scope of the project, considering, among other factors, future facility ownership and operatorship, operation and maintenance costs and potential

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revenue sources, plans for potential new residential and commercial development in Wyola, and potential collection system expansion to new or existing development in Wyola.

Between implementation of the Phase I and Phase II renovations, in June 2020, at the recommendation of the Crow Tribal Chairman, the ANHA took over operation of the facility. Following completion of the Phase II renovations on July 30, 2020, the lift station has remained generally operable, with the exception of at least one failure and resultant SSO in September 2020. The September 2020 SSO is believed to have been caused at least in-part by foreign solids (e.g. towels, clothes, diapers etc.) entering the collection system. The EPA was notified of the subject SSO on September 14, 2020. On September 17, 2020, the ANHA circulated a letter to Wyola ANHA residents informing them of the issues at the lift station and providing guidance on proper sewer system use. On September 18, 2020, the lift station was repaired, with support from a contractor and the IHS. As of this report issuance, the lift station remains in Phase II status. Some concerns with the current condition of the lift station have been identified by the EPA and facility representatives, discussed further in Finding 2.

Beginning at least several months prior to the subject inspection, AWWWA operators resumed attending to the facility, overlapping with ANHA operations, and it was not clear to either party or the EPA which entity was designated responsible for operating the system. During the inspection, AWWWA and ANHA representatives met to discuss and clarify operator responsibilities, and agreed the AWWWA would resume operating in the facility in lieu of the ANHA, discussed further in Section 4.

As of this report issuance, I am not aware of any written agreements or other documentation following the 1986 TA indicating facility ownership and operatorship responsibilities have been formally transferred from the ANHA, with the exception of the 2020 MOA, which is discussed further in Section 3.6.

Rights-of-way, ownership, and Tribal land status of the land parcels on which the facility is located were not evaluated during the inspection.

3.6 Planned Projects

The 2020 Project Summary outlines a tentatively-planned scope of work for IHS Project No. BI 20-P08, the facility Phase III renovations discussed in Section 3.4, as follows:

“This project proposes to renovate the existing facilities to include cleaning and lining of the existing wet well, replacement of submersible pumps, electrical controls and appurtenances in the valve vault. This project will also include the installation of a new bar screen, a new control system, and Operation & Maintenance equipment.”

As project planning progresses, it is possible this scope could be modified.

Paragraphs 17 and 18 of the 2020 MOA outline proposed ownership and operatorship responsibilities for the facility improvements to be constructed under IHS Project No. BI 20-P08, as follows:

17. “That in consideration of the contributions made and the responsibilities undertaken herein by the parties, upon completion of the project, the IHS will transfer all rights, title, and interest to the *[Crow] Tribe* [emphasis added] without charge. This includes all rights-of-way, materials, supplies, and equipment provided therefor and incorporated therein pursuant to this agreement.

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18. That the *Authority* hereby agrees to accept the responsibility to operate and properly and efficiently maintain and repair the “Wyola: Lift Station Improvements”, Project BI 20-P08 so as to keep them in an effective operating condition, provided, the parties shall review, in good faith, at least every two (2) years, the Authority’s obligations hereunder to evaluate the costs and responsibilities to determine the capacity/efficacy of the Authority to meet these obligations. The parties are aware of and encourage efforts to develop community based or Reservation-wide plan(s) and entity(ies) to operate/manage water and sewer services in a sustainable manner. The parties may determine that such efforts, when implemented, are a better way to manage the operation of the facilities herein identified as the “Wyola: Lift Station Improvements”, Project BI 20-P08, and, by amendment hereto, delegate responsibility and authority to operate and maintain these facilities to that entity(ies), if/when established. Alternatively, the parties may determine that maintenance costs or repairs, at some point, exceed the Authority’s ability to meet in the overall context of its primary duties and mission as set forth by Ordinance, and have the [Crow] Tribe reassume operation and maintenance obligations.

Paragraph 23 of the 2020 MOA outlines a proposed arrangement for future collection of user fees, as follows:

23. “That the Authority will establish connection fees and user rates and collect such charges from individuals served by the system identified and repaired herein as are necessary to sustain the operation, maintenance, and repair of the sewerage systems. As an alternative, the [Crow] Tribe may provide this revenue from another dedicated revenue source. As described above, if an alternative means of managing community sewerage systems is established, authority to maintain and operate these systems may be delegated by the [Crow] Tribe to such an entity.”

As of this report, I understand IHS Project No. BI 20-P08 is still in the planning phase and timeframes for design and construction have not been established.

In my conversations with facility representatives and community stakeholder groups, there have been discussions regarding potential new residential and commercial development in Wyola. During these discussions, it has been acknowledged the capacity of the facility (both as it exists and with proposed improvements) would need to be evaluated to determine whether the facility could potentially accommodate additional wastewater from new users, should they be connected to the facility. To my knowledge, as of this report issuance, no significant new development in Wyola is imminent.

Independent of IHS Project No. BI 20-P08, at the request of Big Horn County, the 2022 Tech Memo was prepared to recommend a course of action for applying for and utilizing American Rescue Plan Act (ARPA) funds to potentially help improve water and sewer systems in Pryor. The 2022 Tech Memo recommends a preliminary engineering report (PER) be prepared for the facility and a collection system cleaning, inspection, and evaluation be conducted, and also provides estimated costs and possible funding strategies for these activities. As of this report, I am not aware whether any of the recommendations provided in the 2022 Tech Memo have been implemented. In my conversations with IHS, facility representatives, and community stakeholder groups, it has been acknowledged that development of a PER could help inform the final scope of IHS Project No. BI 20-P08 and future facility improvement projects.

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4.0 Inspection Narrative

The inspection began when I arrived at the lagoon enclosure at approximately 09:30 AM and met with most of the facility representatives identified as “present” on pages 1-2 of this report (some attendees arrived partway through the inspection). I presented my inspector credentials, then we commenced a discussion intending to clarify which entity(ies) had been operating the facility for the preceding several months and which entity(ies) would be responsible for operating the facility moving forward. This discussion was led by ANHA Director Joanie Rowland and AWWWA Operator James Bell Rock Jr.

Both AWWWA and ANHA operators had been attempting to operate the facility over the preceding months, but had not been communicating with one another, resulting in undesirous circumstances including operators being inadvertently locked out of the facility and unclear delineation of operatorship responsibilities. Through the discussion, it was verbally agreed upon by representatives present from both parties that the AWWWA would continue as the sole operator of the facility. AWWWA representatives indicated the AWWWA had adequate resources to assume this responsibility, including a staff operator who resided in Wyola, and some of their operators had historical knowledge of the facility, having operated it previously. I informed both entities the verbal determination of operatorship responsibilities arrived at during the inspection was in-conflict with parts of the 1986 TA and 2020 MOA, and recommended both parties continue to work together with their legal counsel and Crow Tribal leadership to formally clarify, in writing, desired ownership and operatorship responsibilities of the facility, including potential amendments to or supersession of previous TAs and MOAs.

We then commenced with a facility walk-through, beginning with observations of the lift station (Photographs 218-219). The trash basket had become detached from the interior wall of the wet well several years prior and had not been reattached. Facility representatives indicated both pumps were operational in auto-mode, but were running in parallel, rather than in alternating lead-lag configuration. Facility representatives also indicated only the high-level float appeared to trigger the pumps. The lift station pumps did not run while we were observing the lift station, but they turned on while we were observing the lagoon, discussed below.

After the lift station, we proceeded with observations of the lagoon. Most of the cell appeared dry, with some standing water and dense vegetation observed in the Starter Cell around the influent pipe (Photograph 220). In the southeast corner of the cell, some evidence of historical septage dumping activities was visible (Photographs 222 and 224). At one point, the lift station pumps turned on and began pumping sewage into the lagoon, and wastewater was sprayed upwards from the inlet pipe (Photograph 221) 10-30 feet in the air. Facility representatives indicated it was inadvisable to be near the influent pipe when this occurred, as sewage particles could become windblown and escape the footprint of the lagoon cell.

We concluded our site observations at the Highway Manhole (Photograph 225), which was not surcharging.

During the facility walk-through, we also discussed the proposed scope and status of IHS Project No. BI 20-P08, potential new residential and commercial development in Wyola, and the benefits of coordinating between the ANHA, AWWWA, Crow Tribe, IHS, community stakeholder groups, facility users, and the County regarding future development, related infrastructure needs, potential utility revenue sources, and opportunities to leverage ARPA funds or other funding sources to complete a PER and conduct additional planning, engineering, and construction relating to Wyola wastewater infrastructure improvements.

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The inspection concluded at approximately 11:30 AM.

5.0 Post-Inspection Activities and Conclusion

Findings and recommendations identified during the inspection are included in the section below. The EPA expects to remain engaged in ongoing discussions with the AWWWA, Crow Tribe, and IHS regarding wastewater operations at multiple WWTFs operated by the AWWWA across the Reservation. The EPA expects to remain updated on the status of recommendations included in this report through those discussions. As such, no response is requested pursuant to the recommendations included in this report.

Findings and Recommendations

Finding 1:

Facility ownership and operatorship responsibilities are not formally clarified in writing.

During the inspection, it was verbally agreed upon by representatives present from the ANHA and the AWWWA that the AWWWA would continue as the sole operator of the facility. This verbal determination of operatorship responsibilities is in-conflict with parts of the 1986 TA and 2020 MOA, which indicate the ANHA is responsible for operating the facility. Additionally, the 1986 TA indicates the ANHA owns the facility, but the 2020 MOA indicates ownership of facility lift station improvements to be constructed will be transferred to the Crow Tribe.

Recommendation:

The EPA recommends the ANHA, AWWWA, and the Crow Tribe, including their respective legal counsels, formally clarify, in writing, desired ownership and operatorship responsibilities, including financial responsibilities, pertaining to the facility, which includes the collection system, lift station, and lagoon. The IHS may also need to be included in these discussions, as amendments to or supersession of the 1986 TA or 2020 MOA may be necessary.

Finding 2:

During the inspection, several deficiencies were identified at the lift station. Independent of the inspection, over a period spanning several years, facility representatives have identified other concerns with the current (Phase II) configuration of the lift station that were not evaluated during the inspection. A summary of known or suspected lift station deficiencies is as follows:

Identified during the inspection:

- The trash basket had become detached from the interior wall of the wet well several years prior and had not been reattached.
- Facility representatives indicated both pumps were running in parallel, rather than in alternating lead-lag configuration.
- Facility representatives indicated only the high-level float appeared to trigger the pumps.

Concerns raised by facility representatives independent of the inspection:

- Solids bypass pumps are currently installed at the lift station, but grinder pumps may be preferred due to their ability to reduce the size of foreign solids, which may then pass more easily through subsequent force main piping en route to the lagoon.
- One of the pumps (believed to be Pump #2), its seating, or its effluent piping is spraying some wastewater back into the wet well when the pump operating.
- Pipe diameter of the force main between the lift station outlet and lagoon inlet may decrease from 6 inches to 3 inches, potentially increasing the likelihood of clogs (the EPA does not express an engineering opinion on this matter).

Findings and Recommendations
Recommendation: Coordinate with the IHS to ensure the full scope of lift station deficiencies and operator concerns are evaluated and considered during planning for IHS Project No. BI 20-P08.
Finding 3: When sewage is pumped into the lagoon, wastewater sprays upwards from the inlet pipe 10-30 feet in the air, becoming susceptible to wind and potentially escaping the footprint of the lagoon cell. Airborne sewage particles pose a potential health hazard to operators or other humans or animals in the vicinity. Recommendation: Evaluate the construction and operating condition of the force main conveying sewage into the lagoon and consider maintenance or improvements to prevent the spraying of sewage into the air and associated health hazards, and ensure wastewater is being directed into the lagoon as intended.
Finding 4: Based on all information known to me, a comprehensive condition assessment and engineering evaluation of the facility has not been conducted in at least a decade. Recommendation: The EPA recommends preparing a PER or other engineering evaluation of the facility, potentially including, but not limited to, cleaning and inspection of the collection system and lift station, an assessment of collection system piping, lift station performance, and lagoon integrity, and an assessment of current and future users, service areas, and treatment capacity needs, to assess the current condition of all facility components and prioritize any recommended capital improvements.
Finding 5: For at least several years prior to 2020, little or no preventative maintenance was being conducted at the facility. Recommendation: Develop and implement a preventative maintenance program for the facility. The following resources are not all encompassing, but they may assist the AWWWA in developing a preventative maintenance program. The EPA can provide additional resources, including contact information for free technical assistance providers, upon request. • Wastewater Collection System Toolbox: https://www3.epa.gov/region1/sso/toolbox.html • Collection System Operation and Maintenance Fact Sheet: https://www3.epa.gov/npdes/pubs/sewcl.pdf • Condition Assessment of Underground Pipes: https://www3.epa.gov/region1/sso/pdfs/condition-assessment-underground-pipes.pdf

Findings and Recommendations

- Guide for Evaluating Capacity, Management, Operation, and Maintenance Programs at Sanitary Sewer Systems:
https://www3.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf
- Small and Rural Wastewater Systems:
<https://www.epa.gov/small-and-rural-wastewater-systems>