



Katie Hobbs
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Karen Peters
Director

Aquifer Protection Permit Field Inspection Report

This checklist is provided as a tool for permit holders and ADEQ staff to have a consistent understanding of the major compliance expectations under this permit. This checklist is designed to be easy to read and follow. It is intended only to address the permit requirements that ADEQ feels are the most important to protect human health and the environment. This list does not include every permit condition and permit holders should ensure they understand the full requirements of their permit. This list does not supplant or supersede any legal requirement and is not binding on the permit holder or ADEQ staff.

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| Facility Name: Pine Creek Canyon Domestic WWTS Place ID: 278 | Inspection No: 428816 Inspection Date/Time: August 16, 2023 10:00AM |
| Inventory/Permit #: 102949 Current LTF#: 28565 | Inspector(s): Xan McMacken |
| Facility Address: AZ260 & Anasazi Way City, State, Zip: Pine, AZ 85544 County: Gila | Inspector Phone: 602-921-0835 Inspector Email: McMacken.Xan@azdeq.gov |
| Permittee/Responsible Party: Pine Creek Canyon Domestic Water Improvement District Contact: Pat Carpenter Mailing Address: P.O. Box 190 City, State, Zip: Pine, AZ 85544 Phone: 928-606-0498 Email: pataqualitywater@gmail.com | WWTP Population Served: 268 (107 metered homes x2.5) Treatment Plant Grade: 2 Collection System Grade: 1 |
| Operator/ID: Jim Bossert / OP025312 Phone: 928-606-7512 Email: caddpharm@yahoo.com Op. Cert. Grade(s): 2W, 3C Op. Cert. Expiration: 11/30/2024 | Compliance Summary: Certified Operator: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Physical Facilities: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Monitoring and Reporting: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |

Results of Inspection:

- No alleged deficiencies were noted during the course of the inspection. No ADEQ action will result from this inspection.
- Alleged deficiencies were noted during the course of the inspection and all deficiencies were corrected by the close of business on the final day of inspection. No ADEQ action will result from this inspection.
- Alleged deficiencies were noted during the course of the inspection. Additional correspondence regarding this inspection may be forthcoming.
 - If applicable, ADEQ documents its initial determination that the alleged deficiencies are:
 - Committed intentionally.
 - Not correctable within a reasonable period of time as determined by the agency.
 - Evidence of a pattern of noncompliance as demonstrated by alleged deficiencies previously identified in an inspection report or other written notice at the same premises.
 - A significant risk to any person, the public health, safety or welfare or the environment.

Inspection Report Issued: Via hardcopy at facility **Facility Initial:** **ADEQ Initial:** *XM*

General Notes: Arrived on-site on August 16, 2023 at 10:00AM and met with operators Pat Carpenter and Jim Bossert. The NOIR was read and signed by Mr. Carpenter. The inspection began with a walkthrough of the facility starting at the equalization basin and ending at the percolation pond. Post-walkthrough, on-site paperwork was reviewed in the facility office. Following paperwork review, the inspection report was finalized and reviewed with Mr. Bossert and Mr. Carpenter including summary of the inspection, recommendations, and next steps. The inspection concluded at 11:00AM.

PHOTOGRAPHS TAKEN DURING INSPECTIONS ARE AVAILABLE IN THE PHOTO LOG

Requirements: C: Compliance, NC: Non-Compliance, P: Pending, N/A: Not Applicable

| Documentation: | Requirement met? | Comments |
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| Non-submittals or exceedances within the last six quarters of SMRF reporting. | <input type="checkbox"/> C <input checked="" type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | At the time of the File Review conducted on 8/14/23 – the following deficiencies were found for the last 6 quarters: DL Exceedance – Total Nitrate as N – 11.6 – 5/26/22 DL Exceedance – Total Nitrogen as N – 12.8 – 5/26/22 <i>Methanol ran out for above exceedances. Mr. Bossert showed inspector storage of extra methanol.</i> Late Submittal – SMRF – Due 7/30, Submitted 8/1/23 <i>Informed Mr. Carpenter that ADEQ is regulating late submittals more stringently.</i> |
| The required notifications provided for violation of any permit condition, discharge limit, or exceedance of an alert level. <i>(list notifications in Comments)</i> | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | 5 and 30-day contingency reports submitted. |
| Increased the frequency of monitoring for parameters requiring accelerated monitoring. <i>(list parameters in Comments)</i> | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | N/A |
| SMRFs and monitoring requirements were discussed with the facility. | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Person in charge of SMRF reporting: Spencer Ropte. <i>Inner Basin Environmental is contracted for SMRF reporting. Mr. Carpenter stated that he will let Spencer know to submit reports before the due date.</i> |
| Facility has any outstanding or overdue compliance schedule items. (Section 3.0 in the permit) | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | A copy of the emergency response plan shall be submitted to ADEQ Aquifer Protection Permit Compliance, within 30 days from the effective date of this permit. The plan shall include the information as referenced in PART II.C.2.c. <i>Mr. Carpenter will send inspector a copy of the ERP, which was dated January, 2023, for records purposes.</i> |
| A copy of the current signed permit on-site. | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | <i>A physical copy of the current signed permit was present onsite.</i> |
| A copy of the operations and maintenance manual on-site. | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | <i>A physical copy of the O&M manual was present onsite.</i> |
| A copy of the approved contingency/emergency response plan on-site. | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | <i>A physical copy of the ERP, which was dated 1/2023, and had current emergency contacts, was present onsite.</i> |
| Unauthorized discharge of suspected hazardous, toxic, or non-hazardous materials. If so list corrective actions taken. (Section 2.6.5) | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | <i>None known – no spills.</i> |
| Facility Description and Operational Monitoring Requirements | Requirement met? | Comments |
| Log book of the inspections and measurements required by this permit updated and current. | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | <i>Inspector recommended adding a weekly note for berm integrity – no visible erosion in the log book. All other items were present in the log book.</i> |
| Facility treatment processes match what is in the current permit. | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> Equalization basin <input checked="" type="checkbox"/> Nitrification and Denitrification reactors <input checked="" type="checkbox"/> UV disinfection <input checked="" type="checkbox"/> Percolation pond <input checked="" type="checkbox"/> Evaporation pond <input checked="" type="checkbox"/> Sludge holding tank 40,460 GPD authorized. |

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| Facility being maintained according to the Operations and Maintenance Manual. | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Mr. Carpenter stated that if he operated the facility according to the O&M plan (Santec) it wouldn't run properly, especially since their flows max out at around 8,000 GPD. The facility is being maintained according to the O&M plan, though. |
| On-site flow meters properly maintained, calibrated or verified according to the O&M. | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Niagara magnetic flowmeter, replaced recently due to a defect covered through the warranty. |
| Treatment plant components are in good working order (Individually listed below from Section 2.1 in permit). | | |
| Equalization basin | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Flow equalization basin appeared to be in good working condition. |
| Nitrification and Denitrification reactors, secondary clarifier | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Two reactors were being used that had aeration and anoxic zones for nitrification. Smell was earthy, color was brown. No historical overtopping was observed. Denitrification tank and clarifier in a split tank. |
| UV disinfection | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | UV bulb replaced in August, 2021. Mr. Carpenter stated that the bulbs are good for about three years. |
| Percolation pond | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Percolation pond did not have any foul odor. Level was normal with plenty of freeboard. Berms were intact. |
| Evaporation pond | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Evaporation pond not in use. Minimal growth within but some small trees on the berm. |
| Sludge holding tank | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Sludge holding tank was being agitated with blowers. Smell was earthy. Color dark brown. Allowed to settle, water decanted back to reactor 1. |
| Pump Integrity – Good working condition – Daily | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | All pumps that were in operation were running as expected, with no excess noise or vibration. |
| Treatment Plant Components – Good working condition – Daily | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | All treatment plant components were operating as expected, as required by BADCT. |
| Berm Integrity – No visible erosion – Weekly | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | There was no visible erosion of the berms. Inspector recommends clearing small trees that have grown in the evaporation pond and berm. |
| Freeboard in Percolation Pond: Minimum 3 ft. – Daily | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | Much greater than three feet of freeboard in percolation pond. |
| Freeboard in Evaporation Pond: Minimum 3 ft. – Daily | <input checked="" type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input type="checkbox"/> N/A | No fluid in evaporation pond. Operators stated that the evaporation pond is available for use but has never been used. |
| Compliance Monitoring | Requirement met? | Comments |
| POC #1 – Southeast corner of property boundary Loc: 34° 23' 32" N 111° 27' 28" W • Location verified? • Does the well appear to be in working order? | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | Groundwater monitoring is not required. Conceptual monitoring well. |
| Field Methods – Facility is using applicable on-site calibrations and quality assurance for BOD, T, pH, and turbidity? | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | Testing conducted by Inner Basin Environmental out of Flagstaff, AZ. No field methods used for sampling or testing for APP permit requirements. |
| Facility has a written QA manual for all analysis done on-site. | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | |
| ADHS approved methods used for all analyses. | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | |
| Is the lab ADHS certified? What is the certification number and expiration date? | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | |
| Facility has a method detection limit study for lab methods? | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | |

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| Standard Operating Procedures (SOPs) for each method | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | |
| On-site calibration and baseline reagents within expiration dates. | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | |
| Facility has bench log sheets. | <input type="checkbox"/> C <input type="checkbox"/> NC <input type="checkbox"/> P <input checked="" type="checkbox"/> N/A | |

ALLEGED DEFICIENCIES, RECOMMENDATIONS AND COMMENTS:

Alleged Deficiencies:

During the August 16, 2023 inspection, the inspector did not find any potential deficiencies.

Recommendations:

The ADEQ inspector recommends that small trees be removed to preserve berm integrity for the evaporation pond.

Comments:

None