

**FACT SHEET AND STATEMENT OF BASIS
PAYSON CITY WASTEWATER TREATMENT PLANT
MODIFIED PERMIT: DISCHARGE, BIOSOLIDS, & REUSE
UPDES PERMIT NUMBER: UT0020427
UPDES BIOSOLIDS PERMIT NUMBER: UTL-020427
MAJOR MUNICIPAL**

FACILITY CONTACTS

Person Name: Loren Willes
Position: Wastewater Superintendent
Telephone: (801) 649-7305

Permittee: City of Payson
Facility Name: Payson City Wastewater Treatment Plant
Mailing Address: 439 West Utah Ave
Payson City, Utah 84651
Telephone: (801) 465-5277
Actual Address: 1062 North Main St.

DESCRIPTION OF FACILITY

The Payson City Wastewater Treatment Plant (Payson) is located at 1062 North Main, Payson City, Utah, and serves the City of Payson. The State of Utah Storet number is 499541. The population of the City of Payson is approximately 20,000. The design flow of the facility is 5.0 million gallons a day (MGD).

The influent enters the plant, where it is screened for debris, and grit is removed. The flow is then sent to primary clarifiers, trickling filters, secondary clarifiers, and STM Aerotors basins. From there, it flows to final clarifiers, sand filters, and disinfection, and is then discharged through Outfall 001.

Payson is currently completing work on a replacement for the wastewater treatment facility. The new facility will be a Biological Nutrient Removal (BNR) treatment process using an oxidation ditch. This work will replace the existing main process train of primary clarifiers, trickling filters, secondary clarifiers, and STM Aerotor tanks. The work will also include new headworks, tertiary filters, ultraviolet (UV) disinfection, aerated sludge holding, and dewatering screw presses to replace the existing headworks, sand filters, chlorine disinfection system, anaerobic digesters, drying beds, and screw press.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

Since the Permit was issued, the Permittee has substantially completed the construction of the new wastewater treatment plant. They will tie in the sewer lines to the new plant around October 5, 2026. At this point, the new plant will be treating all wastewater for Payson City. The new wastewater treatment facility will take some time to complete startup, commissioning, stabilization, and optimization; thus, the Permittee has requested a six-month extension of the compliance schedule and effluent limits to allow for operational flexibility during this process.

The Division of Water Quality (DWQ) is granting this request to allow for time to complete startup, commissioning, stabilization, and optimization of the new facility. As a result:

- The effluent ammonia, disinfection, total suspended solids (TSS), and biochemical oxygen demand (BOD) limits will be held in abeyance until June 30, 2027.
- The Technology-Based Phosphorus Effluent Limit (TBPEL) requirements (maximum 1 mg/L annual average phosphorus) will be held in abeyance until January 1, 2028.

The requirements on the Compliance Schedule and Variance will be modified as follows.

- The requirements on the Compliance Schedule have been extended until June 30, 2027. Full compliance with effluent ammonia, disinfection, TSS, and BOD limits are required on July 1, 2027.
- The reporting requirements on the Compliance Schedule have been extended until June 30, 2027.
- The requirements of the Variance for the TBPEL have been extended until December 31, 2027. Full compliance with the TBPEL is expected on January 1, 2028.

Completed Compliance Schedule items, as found in Part I.C.3. of the Permit, are noted below:

May 1, 2019	Submit to DWQ a City Council resolution supporting the pursuit of the facility upgrade for the selected biological phosphorus and ammonia removal technology. The resolution shall include the approximate budget for the facility upgrade. If Payson is not pursuing a biological phosphorus removal technology the TBPEL variance will terminate, final limits for ammonia and total residual chlorine (TRC) will continue as per the effluent limits table below. (Completed)
July 1, 2019	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. (Completed)
December 1, 2019	Submit to DWQ a complete Capital Facilities Plan with the recommended biological phosphorus, ammonia removal technology and disinfection system. (Completed)
July 1, 2020	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. (Completed)
January 1, 2021	Submit to DWQ documentation of financial planning for the required facility upgrades. In addition, if rate increases are necessary Payson shall have passed the required rate increase resolution by no later than January 1, 2021. (Completed)
July 1, 2021	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. (Completed)

January 1, 2022	Submit to DWQ an approvable complete construction permit application for new facilities to meet permit effluent limit requirements. (Completed)
July 1, 2022	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. (Completed)
July 1, 2023	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. (Completed)
July 1, 2024	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. (Completed)
July 1, 2025	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. (Completed)
July 1, 2026	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. (Completed)

Remaining Compliance Schedule items, as found in Part I.C.3. of the Permit, are as follows:

October 5, 2027	Complete BNR construction and connection to collection system. Begin commissioning, start-up, and optimization of new plant.
July 1, 2027	Complete BNR commissioning, start-up, and optimization. Comply with all permit effluent limits and conditions except for the TBPEL annual average of 1mg/L. Abeyance period ends.
July 1, 2027	Quarterly WET testing with both species begins.
July 1, 2027	Submit to DWQ an annual report relating to its phosphorus discharges as detailed in the TBPEL Variance.
January 1, 2028	Comply with TBPEL limits and conditions.
February 1, 2028	Submit to DWQ the final annual report relating to its phosphorus discharges as detailed in the TBPEL Variance. This report will include a summary of the project.

When the facility upgrades are complete, and the increased flow limit goes into effect, Payson will start fresh with regard to Whole Effluent Toxicity (WET) compliance. Following the DWQ WET Guidance Policy that was updated and approved in 2018, the facility will be treated like they are a new discharger. The policy requires that a Major Publicly Owned Treatment Works (POTW) with a design flow less than 20 MGD, sample quarterly, and analyze both species for chronic WET. This requirement will not go into effect until the end of the facility upgrades and the compliance schedule.

There are no changes to other Permit limitations because of this modification. Modified limitations are bolded in the table below and can be found in Part I.C.2(a) of the Permit.

Parameter	Effluent Limitations ¹				
	Maximum Monthly Ave	Maximum Weekly Ave	Daily Minimum	Daily Maximum	Annual Average
Interim Effluent Limits ²					
BOD ₅ , mg/L ²¹	25	35	-	-	-
BOD ₅ Min. % Removal ²¹	85	-	-	-	-
TSS, mg/L ²¹	25	35	-	-	-
TSS Min. % Removal ²¹	85	-	-	-	-
Total Phosphorus, mg/L ²¹	-	-	-	-	4.6
Total Ammonia (as N), mg/L ²¹					
Summer (Jul-Sep)	-	-	-	14.1	-
Fall (Oct-Dec)	-	-	-	13.1	-
Winter (Jan-Mar)	-	-	-	12.5	-
Spring (Apr-Jun)	-	-	-	13.1	-
TRC, mg/L ²¹					
Summer (Jul-Sep)	-	-	-	1.1	-
Fall (Oct-Dec)	-	-	-	1.6	-
Winter (Jan-Mar)	-	-	-	2.4	-
Spring (Apr-Jun)	-	-	-	1.6	-
WET, Chronic Biomonitoring ²¹				IC ₂₅ > X% Eff. ²¹	
Summer (Jul-Sep)	-	-	-	X=54%	-
Fall (Oct-Dec)	-	-	-	X=32%	-
Winter (Jan-Mar)	-	-	-	X=26%	-
Spring (Apr-Jun)	-	-	-	X=32%	-
Final Effluent Limits ³					
BOD ₅ , mg/L ²¹	25	35	-	-	-
BOD ₅ Min. % Removal ²¹	85	-	-	-	-
TSS, mg/L ²¹	25	35	-	-	-
TSS Min. % Removal ²¹	85	-	-	-	-
Total Phosphorus, mg/L ²¹	-	-	-	-	4.6
Total Ammonia (as N), mg/L ²¹					
Summer (Jul-Sep)	3.0	-	-	4.5	-
Fall (Oct-Dec)	6.0	-	-	7.0	-
Winter (Jan-Mar)	6.0	-	-	8.5	-
Spring (Apr-Jun)	4.0	-	-	4.0	-
TRC, mg/L ²¹					
Summer (Jul-Sep)	0.5	-	-	0.7	-
Fall (Oct-Dec)	0.3	-	-	0.3	-
Winter (Jan-Mar)	0.2	-	-	0.3	-
Spring (Apr-Jun)	0.3	-	-	0.4	-
WET, Chronic Biomonitoring ²¹				IC ₂₅ > X% Eff. ²¹	
Summer (Jul-Sep)	-	-	-	X=43%	-
Fall (Oct-Dec)	-	-	-	X=54%	-

Parameter	Effluent Limitations ¹				
	Maximum Monthly Ave	Maximum Weekly Ave	Daily Minimum	Daily Maximum	Annual Average
Winter (Jan-Mar)	-	-	-	X=39%	-
Spring (Apr-Jun)	-	-	-	X=56%	-
Final Effluent Limits (TBPEL) ²⁰					
Total Phosphorus, mg/L	-	-	-	-	1
1. See Definitions, Part VIII, for the definition of terms.					
2. Interim ammonia limits are in effect until June 30, 2027 .					
3. Final limits, other than TBPEL , go into effect on July 1, 2027 .					
20. Final TBPEL goes into effect on January 1, 2028.					
21. The limitations will be held in abeyance during the startup period. See Part 1.C.3. of the permit for more information					

The changes to parameter monitoring resulting from this modification are bolded in the table below and can be found in Part I.C.2(a) of the Permit.

Self-Monitoring and Reporting Requirements ⁵			
Parameter	Frequency	Sample Type	Units
Interim Self-Monitoring Requirements ⁶			
WET – Biomonitoring ¹¹ Ceriodaphnia - Chronic Fathead Minnows - Chronic	1 st & 3 rd Quarter 2 nd & 4 th Quarter	Composite Composite	Pass/Fail ²¹ Pass/Fail ²¹
Final Self-Monitoring Requirements ¹⁶			
WET – Biomonitoring ¹⁷ Ceriodaphnia - Chronic Fathead Minnows - Chronic	Quarterly Quarterly	Composite Composite	Pass/Fail Pass/Fail
6. Interim Self-Monitoring Requirements are in effect until June 30, 2027 .			
11. Until June 30, 2027 , the chronic Ceriodaphnia will be tested during the 2nd and 4th quarters, and the chronic fathead minnows will be tested during the 1st and 3rd quarters.			
16. Final Self-Monitoring Requirements go into effect on July 1, 2027 .			
17. Starting July 1, 2027 , both the Ceriodaphnia and fathead minnows will be tested Quarterly for chronic WET.			
21. The limitations will be held in abeyance during the startup period. See Part 1.C.3. of the permit for more information.			

PERMIT DURATION

It is recommended that this modified permit expire on the original expiration date of March 31, 2029.

Drafted and Reviewed by
Daniel Griffin, Discharge Permit Writer
Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE INFORMATION (to be updated after)

Began: Month Day, Year

Ended: Month Day, Year

Comments shall be received at: 195 North 1950 West
PO Box 144870
Salt Lake City, UT 84114-4870

The Public Notice of the draft permit was published on State of Utah and/or DWQ's website for at least 30 days as required.

During the public notice and comment period provided under Utah Admin. Code R317-8-6.5, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and shall be answered as provided in Utah Admin. Code R317-8-6.12.

ADDENDUM TO FACT SHEET

During finalization of the permit certain dates, spelling edits and minor language corrections were completed. Due to the nature of these changes, they are considered minor changes and the permit is not required to be re Public Noticed as provided in Utah Admin. Code R317-8-5.6(3).

Responsiveness Summary

TBD.

DWQ-2026-005720