

**FACT SHEET**  
**STANSBURY PARK IMPROVEMENT DISTRICT**  
**STANSBURY PARK IMPROVEMENT DISTRICT LAGOONS**  
**MODIFIED PERMIT: DISCHARGE**  
**UPDES PERMIT NUMBER: UT0025241**  
**MAJOR MUNICIPAL**

**FACILITY CONTACTS**

Operator Name: Stansbury Park Improvement District  
Person Name: Brett Palmer  
Position: General Manager  
Phone Number: (435) 882-7922

Permittee: Stansbury Park Improvement District  
Facility Name: Stansbury Park Improvement District Lagoons  
Mailing and Facility Address: #10 Plaza  
Stansbury Park, Utah 84074  
Telephone: (435) 882-7922  
Actual Address: 3300 North 1200 West

**DESCRIPTION OF FACILITY**

The Stansbury Park Improvement District's (Stansbury Park) lagoon treatment facility consists of 7 facultative cells. The cells are contained on 164 acres. After chlorination, the effluent is discharged at outfall 002, or sent to a series of storage ponds, where the effluent may be discharged at outfall 001. The treatment facility was operated as a total containment treatment facility until 1996. The facility serves the City of Stansbury Park with a current population of about 8,500. In 2011, the facility underwent an upgrade to increase the design flow to 2.7 million gallons a day (MGD). However, some of the system components limit the flow to 1.5 MGD. As a result, this will be the flow limit in the Permit. The facility is located at latitude 40°39'30" and longitude 112°18'00".

A downstream evaluation was done by the Division of Water Quality (DWQ) in May 2010. As a result, it was determined that Stansbury Park discharges to a Class 3E ditch. The downstream receiving water north of I-80 where the ditch diffuses into a meadow wetland and ultimately a playa south of the railroad is classified as 2B and 3D. The Great Salt Lake (GSL) is on the north side of the railroad. Based on the observations of the diking, the discharge will not reach GSL at an elevation of 4208'.

As a result of the improvements at the facility, Stansbury Park has determined that they will not require the continuous use of the system's final three lagoon cells. They have also added a chlorination disinfection system to the system with the new outfall. This Outfall (002) is located 1600 feet (0.3 miles) south of Outfall 001, into the same ditch as Outfall 001. With the addition of chlorination to the system for disinfection, total residual chlorine limit and monitoring was added to the Permit in 2011.

With these two changes, Stansbury Park plans to use the storage cells as a way to further treat the effluent during periods when they cannot meet effluent limits, including high TSS levels from algal growth. They will

direct the flows to the first the storage cells to allow further treatment. When the levels have decreased, they plan to discharge to Outfall 001, or to the remaining storage cells for evaporation. An evaluation of the use of these two outfalls reveals that, as long as the combined flows of both discharges do not exceed the effluent flow limit for the Permit (1.5 MGD) during any given day, the loading will remain the same. DWQ determined that there is no need to complete a Level II ADR for the new outfall until the flows increase above 1.5 MGD.

According to the Utah Administrative Code (UAC) R317-1-3.2, the Director may allow, on a case-by-case basis, that the BOD5 and TSS effluent concentrations for discharging domestic wastewater lagoons shall not exceed 45 mg/L for a monthly average, nor 65 mg/L for a weekly average, provided certain criteria are met. Stansbury Park met all of the requirements, and the Director approved the new effluent limits according to the Utah Administrative Code (UAC) R317-1-3.2, thus, the limits were incorporated into their renewal Permit.

Stansbury Park also requested a waiver from the Minimum Percent Removal Requirements for TSS. The request was based on the significant inflow and infiltration (I&I) in the collection lines which dilutes the influent wastewater, therefore making it difficult to meet the minimum requirements consistently. In 1997, Stansbury Park overhauled its system to reduce the amount of I&I but is still plagued with the problem. The waiver was granted, and the Minimum Percent Removal Requirements for TSS have been removed from their Permit.

#### Metals and Organic Toxics Monitoring:

Metals and organic toxics monitoring were added to the Permit during the 2006 renewal to help establish a record of the presence or absence of pollutant in relation to possible pretreatment requirements. Currently, Stansbury Park does not meet the requirements for a pretreatment program and has not shown RP for the pollutants. During the 2018 renewal it was determined that the monitoring for metals and organic toxics could be reduced. Monitoring for metals other than mercury were reduced to once a year. And monitoring for organic toxics was reduced to once during the second year of the Permit cycle.

It was also determined that monitoring for mercury using a more sensitive method (1631) would remain at the current frequency of twice a year, or once every six months.

During the 2018 Renewal, a study of the total residual chlorine (TRC) in the receiving water to determine an appropriate decay rate for the TRC in the WLA Model. As a result of this and the change in the WLA Model, the total residual chlorine (TRC) limit increased from the previous (2013) Permit. The previous WLA indicated TRC limits of 0.73 mg/L for acute and 0.43 mg/L for chronic; the new WLA indicated TRC limits of 1.1 mg/L for acute and 0.63 mg/L for chronic. However, the limit remained the same as in the previous Permit, and will be carried forward to future renewals.

The 2023 renewal Permit was the first Stansbury Park Permit to contain ammonia limits. A Compliance Schedule (CS) to allow time to evaluate the effluent ammonia levels, and determine the most prudent way to and achieve compliance.

### **SUMMARY OF CHANGES FROM PREVIOUS PERMIT**

The 2023 renewal Permit is the first Stansbury Park Permit to contain ammonia limits, and included a CS to allow time to evaluate ammonia presence and breakdown as it flows from the current discharge locations, through the ditch and meadow wetlands, to the playa, and evaluate the discharge and disposal options to comply with the new effluent limits.

Stansbury Park has completed a preliminary evaluation and has determined that they will need to complete some interim improvements and pursue a Ground Water Discharge Permit for the Rapid Infiltration Basin (RIB) in order to comply with the effluent limits.

Stansbury Park has also determined that growth and increased demand for the districts services in the area could also require increases in effluent flow limits and more extensive upgrades to the system over the next decade to stay in compliance.

This Permit modification is to extend the CS and incorporate the estimated timeline for changes and additional Permitting to be completed. This extension was anticipated when the CS was included in the 2023 Renewal Permit.

<b>Modified Ammonia Compliance Schedule</b>		
<b>Date</b>	<b>Compliance Schedule Milestone</b>	<b>Construction and Upgrade Milestone</b>
May 1, 2024	Submit a Sampling and Analysis Plan (Plan) that includes the specific purpose and goals (Study) of monitoring and a description of the sampling to be conducted (including methods and frequency). If no Plan is submitted, the ammonia limits will go into effect September 1, 2025 and this Compliance Schedule ends. (Completed)	
June 1, 2025	Submit a Report detailing the findings of the Study outlined in the Plan. This report should include all data collected, analysis of the results, and the proposed administrative path forward. (Completed)	
June 1, 2025	If Stansbury Park wants to modify their Permit, they must request DWQ to modify UPDES Permit No. UT0025241. This modification request can be for a compliance schedule extension, an alternative compliance point for ammonia, or an alternative outfall location as long as the Study results and analysis support the request. If the request is for a compliance schedule extension, the request should include a detailed approach, including a list of facility upgrades, an associated timeline, and a detailed description of how Stansbury Park plans to comply with the final ammonia limits listed in the Permit. If no request for Permit modification is received by DWQ, ammonia limits will go into effect September 1, 2025 and this compliance schedule ends. (Completed)	
September 1, 2025	If the Permit has yet to be modified as described above, the final limits will go into effect.	
January 1, 2026		Ground water test wells installation complete. Impact fee facilities plan completed. Impact fee and rate analysis substantially complete. Start Phase 1 of Treatment Plant Design.

<b>Modified Ammonia Compliance Schedule</b>		
Date	Compliance Schedule Milestone	Construction and Upgrade Milestone
		Prepare for Permit Modification to incorporate any flow and loading increase required.
June 1, 2026	Submit Project Compliance Report.	
January 1, 2027		Treatment plant design and review complete. Funding arranged, and ready for bidding. Design work on RIB underway, if needed.
June 1, 2027	Submit Project Compliance Report.	
January 1, 2028		There will have been substantial completion of treatment plant work, projected final completion by February 1, 2028. Work to obtain Ground Water Discharge Permit on Sovereign Land underway (if needed). If needed, Permittee shall request an extension of CS beyond April 30, 2028 (Contingency Compliance Period) due by Jan 1, 2028.
February 1, 2028		Expected final completion of treatment plant upgrades. Permittee to start optimization operations.
April 30, 2028		Plant optimization complete. End of the CS unless Contingency Compliance Period is requested and granted.
April 30, 2028		Expiration of the current modified UPDES Permit.
May 1, 2028		Projected effective date of next Renewal Permit.
May 1, 2028		Final Effluent Limits go into effect unless DWQ has received and granted the request for Contingency Compliance Period. If Contingency Compliance Period has been granted, it begins.
June 1, 2028	Submit Project Compliance Report.	This will be either the Final Project Compliance Report, or if the Contingency Compliance Period has been requested and granted, the next Project Compliance Report.
November 31, 2028	CS ends.	Compliance Contingency Period ends.
December 1, 2028	Final effluent limitations go into effect.	Final effluent limitations go into effect.
January 1, 2029	Submit Final Project Compliance Report.	

The annual Project Compliance Report mentioned in the above table will contain, at the minimum, the below items. The final Compliance Report will not contain item 2.:

- (1) An update of the work conducted during the previous year to include major milestone milestones completed and delays encountered.
- (2) A rough schedule for the upcoming year, including major milestones to be reached and the biggest anticipated potential delays.
- (3) Influent and effluent monitoring data for the nutrient and flow summary of effluent monitoring

This modified CS will tentatively end April 30, 2028, with the final effluent limit going into effect May 1, 2028. Stansbury Park is moving forward with an ambitious timeline for the work to be completed and they have also requested that a Contingency Compliance Period be included in case unexpected events delay work and they cannot meet the CS.

The request for extension of CS beyond April 30, 2028 (Contingency Compliance Period) is due by Jan 1, 2028. If the request is not received and approved, when the permit is renewed in 2028, the CS will not be included, and the effluent limits will go into effect May 1, 2028. If the contingency period is approved, the CS will be included in the renewal permit, and extend to November 31, 2028.

## **DISCHARGE**

### **DESCRIPTION OF DISCHARGE**

Stansbury Park has been reporting self-monitoring results on Discharge Monitoring Reports on a monthly basis. A summary of the last three years of data is attached.

<u>Outfall</u>	<u>Description of Discharge Point</u>
001	Located at latitude 40°39'30" and longitude 112°18'00". The discharge is through a gate to a flume to an 8-inch diameter gravity flow pipe, which leads to an unnamed ditch. This ditch flows under I-80, and hence to a playa south of the railroad, separated from the Great Salt Lake by the railroad, or through the gate to the RIB.
002	Located near latitude 40°39'30" and longitude 112°18'00". The discharge is 1300 feet south of Outfall 001 to the same ditch. This ditch flows under I-80, and hence to a playa south of the railroad, separated from the Great Salt Lake by the railroad.

### **RECEIVING WATERS AND STREAM CLASSIFICATION**

Stansbury Park will discharge to a Class 3E ditch. The downstream receiving water is north of I-80 where the ditch diffuses into a meadow wetland and ultimately a playa south of the railroad, and is classified as 2B and 3D. Based on observations of the diking, the discharge will not reach GSL at an elevation of 4208'.

No Level II ADR is required because water quality will not be degraded (R317-3.5.b.1). DWQ reviewed the submitted Level I ADR and concluded that water quality standards will not be violated in the receiving waters.

- Class 2B -- Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
- Class 3D -- Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.
- Class 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

### **TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS**

According to the Utah's 2022 303(d) Water Quality Assessment Report dated February 8, 2022, the receiving water for the discharge; Un-named Ditch, Wetland, and Playa isolated from the Great Salt Lake by a railroad causeway, was not listed as and showed no sign of being impaired.

### **BASIS FOR EFFLUENT LIMITATIONS**

The inclusion of and limitations on total suspended solids (TSS), biochemical oxygen demand (BOD5), *E. coli*, pH and percent removal for BOD5 are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. Attached is a WLA for this discharge into the unnamed irrigation ditch. The limit for TRC and

ammonia is from the WLA. The total phosphorus limit is the phosphorus loading cap calculated in accordance with UAC R317-3.3.B. It has been determined that this discharge will not cause a violation of water quality standards. An Antidegradation Level II review is not required since the Level I review shows that water quality impacts are minimal. The Permittee is expected to be able to comply with these limitations.

### Reasonable Potential Analysis

Since January 1, 2016, DWQ has conducted reasonable potential (RP) analysis on all new and renewal applications received after that date. RP for this Permit renewal was conducted following DWQ's September 10, 2015 Reasonable Potential Analysis Guidance (RP Guidance). There are four outcomes defined in the RP Guidance: Outcome A, B, C, or D. These Outcomes provide a frame work for what routine monitoring or effluent limitations are required

A qualitative RP analysis was conducted using the effluent metals monitoring data to determine if there was reasonable potential for the discharge to exceed the applicable water quality standards. Based on the RP analysis, no metals were determined to have a reasonable potential to exceed the water quality standard. The RP analysis also indicated that more frequent monitoring of selenium, cyanide and mercury was warranted. In addition, the RP analysis for mercury indicates using a more sensitive analytical method is required. A copy of the RP analysis is included at the end of this Fact Sheet.

The Permit limitations for both Outfall 001 and 002 are:

Parameter	Outfall 001 and 002 Effluent Limitations <sup>1</sup>				
	Maximum Monthly Avg	Maximum Weekly Avg	Annual Average	Daily Minimum	Daily Maximum
Total Flow <sup>2</sup>	1.5	-	-	-	-
BOD <sub>5</sub> , mg/L	45	65	-	-	-
BOD <sub>5</sub> Min. % Removal	85	-	-	-	-
TSS, mg/L	45	65	-	-	-
TSS Min. % Removal	65	-	-	-	-
TRC, mg/L	0.43	-	-	-	0.73
<i>E. coli</i> , No./100mL	126	158	-	-	-
pH, Standard Units	-	-	-	6.5	9
Total Phosphorus, lbs/year	-	-	8,966	-	-
Total Ammonia (as N), mg/L <sup>13</sup>					
Summer (Jul-Sep)	1.0	-	-	-	4.7
Fall (Oct-Dec)	2.7	-	-	-	8.2
Winter (Jan-Mar)	3.4	-	-	-	9.8
Spring (Apr-Jun)	2.7	-	-	-	8.2
1. See Definitions, Part VIII, for definition of terms.					
2. The total combined flow from all outfalls may not exceed the flow limit of 1.5 MGD.					
13. Total ammonia limits will go into effect in accordance with the Compliance Schedule found in Part I.C.4 of the Permit. There will be no limits at time of Permit issuance.					

### SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements have been modified since the previous Permit, as described above. The Permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) forms due 28 days after the end of the monitoring period. Effective January 1, 2017, monitoring results must be submitted using NetDMR unless the Permittee has successfully petitioned for an exception.

Lab sheets for biomonitoring must be attached to the biomonitoring DMR. Lab sheets for metals and toxic organics must be attached to the DMRs.

Outfall 001 and 002 Self-Monitoring and Reporting Requirements <sup>1, 3</sup>			
Parameter	Frequency	Sample Type	Units
Total Flow <sup>2, 4, 5</sup>	Continuous	Recorder	MGD
BOD <sub>5</sub> , Influent <sup>6</sup>	Weekly	Composite	mg/L
Effluent	Weekly	Composite	mg/L
TSS, Influent <sup>6</sup>	Weekly	Composite	mg/L
Effluent	Weekly	Composite	mg/L
<i>E. coli</i>	Weekly	Grab	No./100mL
pH	Weekly	Grab	SU
TRC	Weekly	Grab	mg/L
Total Ammonia (as N)	Weekly	Grab	mg/L
DO	Weekly	Grab	mg/L
Orthophosphate (as P), <sup>7</sup> Effluent	Monthly	Composite	mg/L
Total Phosphorus (as P), <sup>7</sup> Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Total Phosphorus, (Reporting)	Yearly	Reporting	lbs/year
Total Kjeldahl Nitrogen TKN (as N), <sup>7</sup> Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Nitrate, NO <sub>3</sub> <sup>7</sup>	Monthly	Composite	mg/L
Nitrite, NO <sub>2</sub> <sup>7</sup>	Monthly	Composite	mg/L
Total Cyanide, Effluent <sup>10</sup>	2 X Yearly	Grab/ Composite	mg/L
Total Mercury, Effluent <sup>8, 10</sup>	2 X Yearly	Grab	mg/L
Total Selenium, Effluent, <sup>10</sup>	2 X Yearly	Grab/ Composite	mg/L
Metals, Influent, <sup>6, 8, 9</sup>	Yearly <sup>11</sup>	Grab/ Composite	mg/L
Effluent <sup>8</sup>	Yearly <sup>9</sup>	Grab/ Composite	mg/L
Organic Toxics <sup>6, 12</sup>	2 <sup>nd</sup> Year of the Permit Cycle	Grab/ Composite	mg/L
TDS	Monthly	Grab	mg/L
1. See Definitions, Part VIII, for definition of terms.			
2. The total combined flow from all outfalls may not exceed the flow limit of 1.5 MGD.			
3. These are the Self-Monitoring and Reporting Requirements for both Outfall 001 and 002. If there is no discharge to the ditch from an Outfall during a monitoring period then no monitoring is required for that Outfall.			
4. Flow measurements of influent/effluent volume shall be made in such a manner that the Permittee can affirmatively demonstrate that representative values are being obtained.			
5. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.			
6. In addition to monitoring the final discharge, influent samples shall be taken and analyzed for this constituent at the same frequency as required for this constituent in the discharge.			

Outfall 001 and 002 Self-Monitoring and Reporting Requirements <sup>1, 3</sup>			
Parameter	Frequency	Sample Type	Units
7. These reflect changes required with the adoption of UAC R317-1-3.3, Technology-based Phosphorus Effluent Limits rule.			
8. Stansbury will be required to have the effluent analyzed for mercury using a method that is sensitive enough to demonstrate a presence or absence of mercury in the effluent, such as EPA Method 1631.			
9. Testing for metals listed in the table below and organic toxics must be performed during the first discharge of the renewed Permits life cycle. The testing is conducted to support future RP analysis.			
10. See Part II of the Permit for additional requirements regarding sampling for metals and organic toxics.			
11. This is the monitoring frequency for the metals listed in the table below (Metals to be monitored for RP) with the exception cyanide, mercury, and selenium which must be monitored as indicated above.			
12. A list of the organics to be tested can be found in 40CFR122 appendix D table II.			

Metals to be Monitored for RP
Total Arsenic
Total Cadmium
Total Chromium
Total Copper
Total Cyanide
Total Lead
Total Mercury
Total Molybdenum
Total Nickel
Total Selenium
Total Silver
Total Zinc



### **PERMIT DURATION**

It is recommended that this Permit be effective for the remaining time of the original Permit, until April 30, 2028.

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 will 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 UAC 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 UAC 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 UAC R317-8-5.6(3)

### **Responsiveness Summary**

(Explain any comments received and response sent. Actual letters can be referenced, but not required to be included).