

Santaquin City Resolution 04-02-2016

MUNICIPAL WASTEWATER PLANNING PROGRAM RESOLUTION

WHEREAS, the City of Santaquin is a fourth class city in the State of Utah and operates a Wastewater Collection and Treatment System; and

WHEREAS, the Utah Division of Water Quality requires of the Santaquin City Public Works Department an annual Wastewater Planning Program Report; and

WHEREAS, the Utah Division of Water Quality desires formal action of the Santaquin City Council to review said report prior to its submission to the division;

NOW, THEREFORE, BE IT RESOLVED, that the Santaquin City Council informs the Water Quality Board that the following actions were taken by the City Council:

1. Reviewed the attached Municipal Wastewater Planning Program Report for 2015 (See Attached)
2. Have taken all appropriate actions necessary to maintain effluent requirements contained in the UPDES Permit (If Applicable)

Approved and adopted by the Santaquin City Council this 20th day of April, 2016.

Kirk F. Hunsaker, Mayor

Attest: _____
Susan B. Farnsworth, City Recorder

STATE OF UTAH

MUNICIPAL WASTEWATER PLANNING PROGRAM

SELF-ASSESSMENT REPORT

FOR

SANTAQUIN

2015



UTAH DEPARTMENT *of*
ENVIRONMENTAL QUALITY

**WATER
QUALITY**

Resolution Number 04-02-2016

MUNICIPAL WASTEWATER PLANNING PROGRAM RESOLUTION

RESOLVED that **SANTAQUIN** informs the Water Quality Board the following actions were taken by the **CITY COUNCIL**

1. Reviewed the attached Municipal Wastewater Planning Program Report for 2015.
2. Have taken all appropriate actions necessary to maintain effluent requirements contained in the UPDES Permit (If Applicable).

Passed by a (majority) (unanimous) vote on

4/20/2016
(date)

Mayor/Chairman

Attest:

Recorder/Clerk

Municipal Wastewater Planning Program (MWPP) Financial Evaluation Section

Owner Name: SANTAQUIN

Name and Title of Financial Contact Person:

BENJAMIN A. REEVES

SANTAQUIN CITY MANAGER

Phone:

(801) 754-3211

E-mail:

breeves@santaquin.org

PLEASE SUBMIT TO STATE BY: March 1, 2016

Mail to: MWPP - Department of Environmental Quality
Division of Water Quality
195 North 1950 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870
Phone : (801) 536-4300

NOTE: This questionnaire has been compiled for your benefit by a state sponsored task force comprised of representatives of local government and service districts. It is designed to assist you in making an evaluation of your wastewater system and financial planning. Please answer questions as accurately as possible to give you the best evaluation of your facility. If you need assistance please call, Marsha Case. Utah Division of Water Quality: (801) 536-4342.

I. Definitions: The following terms and definitions may help you complete the worksheets and questionnaire:

User Charge (UC) - A fee established for one or more class(es) of users of the wastewater treatment facilities that generate revenues to pay for costs of the system.

Operation and Maintenance Expense - Expenditures incurred for materials, labor, utilities, and other items necessary for managing and maintaining the facility to achieve or maintain the capacity and performance for which it was designed and constructed.

Repair and Replacement Cost - Expenditures incurred during the useful life of the treatment works for obtaining and installing equipment, accessories, and/or appurtenances necessary to maintain the existing capacity and the performance for which the facility was designed and constructed.

Capital Needs - Cost to construct, upgrade or improve the facility.

Capital Improvement Reserve Account - A reserve established to accumulate funds for construction and/or replacement of treatment facilities, collection lines or other capital improvement needs.

Reserve for Debt Service - A reserve for bond repayment as may be defined in accordance with terms of a bond indenture.

Current Debt Service - Interest and principal costs for debt payable this year.

Repair and Replacement Sinking Fund - A fund to accumulate funds for repairs and maintenance to fixed assets not normally included in operation expenses and for replacement costs (defined above).

Part I: OPERATION AND MAINTENANCE

Complete the following table:

Question	Points Earned	Total
Are revenues sufficient to cover operation, maintenance, and repair & replacement (OM&R) costs <i>at this time?</i>	YES = 0 points NO = 25 points	0
Are the projected revenues sufficient to cover operation, maintenance, and repair & replacement (OM&R) costs for the <i>next five years?</i>	YES = 0 points NO = 25 points	0
Does the facility have sufficient staff to ensure proper O&M?	YES = 0 points NO = 25 points	0
Has a dedicated sinking fund been established to provide for repair & replacement costs?	YES = 0 points NO = 25 points	0
Is the repair & replacement sinking fund adequate to meet anticipated needs?	YES = 0 points NO = 25 points	0
TOTAL PART I =		0

Part II: CAPITAL IMPROVEMENTS

Complete the following table:

Question	Points Earned	Total
Are present revenues collected sufficient to cover all costs and provide funding for capital improvements?	YES = 0 points NO = 25 points	0
Are projected funding sources sufficient to cover all projected capital improvement costs for the <i>next five years?</i>	YES = 0 points NO = 25 points	0
Are projected funding sources sufficient to cover all projected capital improvement costs for the <i>next ten years?</i>	YES = 0 points NO = 25 points	0
Are projected funding sources sufficient to cover all projected capital improvement costs for the <i>next twenty years?</i>	YES = 0 points NO = 25 points	0
Has a dedicated sinking fund been established to provide for future capital improvements?	YES = 0 points NO = 25 points	0
TOTAL PART II =		0

Part III: GENERAL QUESTIONS

Complete the following table:

Question	Points Earned	Total
Is the wastewater treatment fund a separate enterprise fund/account or district?	YES = 0 points NO = 25 points	0
Are you collecting 95% or more of your sewer billings?	YES = 0 points NO = 25 points	0
Is there a review, at least annually, of user fees?	YES = 0 points NO = 25 points	0
Are bond reserve requirements being met if applicable?	YES = 0 points NO = 25 points	0
TOTAL PART III =		0

Part IV: PROJECTED NEEDS

Estimate as best you can the following:

Cost of projected capital improvements (in thousands)	2016	2017	2018	2019	2020
	0	0	0	0	0

Growth will dictate when the next WRF membrane train will come online. This could be within 5 years or after. However, we set aside \$2500 from every sewer impact fee/building permit to cover this future expenditure in its entirety. **Point Summation**

Fill in the values from Parts I through III in the blanks provided in column 1. Add the numbers to determine the MWPP point total that reflects your present financial position for meeting your wastewater needs.

Part	Points
I	0
II	0
III	0
Total	0

Municipal Wastewater Planning Program (MWPP) Collection System Section

Owner Name: SANTAQUIN

Name and Title of Contact Person:

	<u>Jason Callaway</u>	Wade Eva
	<u>Operations Manager</u>	Public Works Director
Phone:	<u>801-420-3033</u>	801-420-3006
E-mail:	<u>jcallaway@santaquin.org</u>	weva@santaquin.org

PLEASE SUBMIT TO STATE BY: March 1, 2016

Mail to: MWPP - Department of Environmental Quality
Division of Water Quality
195 North 1950 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870
Phone : (801) 536-4300

Form completed by

Jason Callaway: Ben Reeves

Part I: SYSTEM AGE

A. What year was your collection system first constructed (approximately)?

Year 1994

B. What is the oldest part of your present system?

Oldest part 1994 years

Part II: BYPASSES

A. Please complete the following table:

Question	Number	Points Earned	Total Points
How many days last year was there a bypass, overflow or basement flooding by untreated wastewater in the system due to rain or snowmelt?	0	0 times = 0 points 1 time = 5 points 2 times = 10 points 3 times = 15 points 4 times = 20 points 5 or more = 25 points	0
How many days last year was there a bypass, overflow or basement flooding by untreated wastewater due to equipment failure? (except plugged laterals)	0	0 times = 0 points 1 time = 5 points 2 times = 10 points 3 times = 15 points 4 times = 20 points 5 or more = 25 points	0
TOTAL PART II =			0

B. The Utah Sewer Management Program defines sanitary sewer overflows into two classes. Below include the number of SSOs that occurred in 2015:

Number of Class 1 SSOs in Calendar year 2015 0

Number of Class 2 SSOs in Calendar year 2015 0

Class 1- a Significant SSO means a SSO or backup that is not caused by a private lateral obstruction or problem that:

- (a) effects more than five private structures;
- (b) affects one or more public, commercial or industrial structure(s);
- (c) may result in a public health risk to the general public;
- (d) has a spill volume that exceeds 5,000 gallons, excluding those in single private structures; or
- (e) discharges to Waters of the state.

Class 2 – a Non-Significant SSO means a SSO or backup that is not caused by a private lateral obstruction or problem that does not meet the Class 1 SSO criteria.

Part II: BYPASSES (cont.)

- C. Please specify whether the SSOs were caused a contract or tributary community, etc.

Part III: NEW DEVELOPMENT

- A. Please complete the following table:

Question	Points Earned	Total Points
Has an industry (or other development) moved into the community or expanded production in the past two years, such that either flow or wastewater loadings to the sewerage system were significantly increased (10 - 20%)?	No = 0 points Yes = 10 points	0
Are there any major new developments (industrial, commercial, or residential) anticipated in the next 2- 3 years, such that either flow or BOD ₅ loadings to the sewerage system could significantly increase (25%)?	No = 0 points Yes = 10 points	0
TOTAL PART III =		0

- B. Approximate number of new residential sewer connections in the last year

125 new residential connections

- C. Approximate number of new commercial/industrial connections in the last year

0 new commercial/industrial connections

- D. Approximate number of new population serviced in the last year

460 new people served

Part IV: OPERATOR CERTIFICATION

A. How many collection system operators are currently employed by your facility?

6 collection system operators employed

B. What is/are the name(s) of your DRC operator(s)?

Jason Callaway

C. You are required to have the collection DRC operator(s) certified at **Grade II**

What is the current grade of the DRC operator(s)? Grade II

D. State of Utah Administrative Rules require all operators considered to be in DRC to be appropriately certified. List all the operators in your system by their certification class.

Not Certified _____
 Small Lagoons _____
 Collection I _____
 Collection II 6 _____
 Collection III _____
 Collection IV _____

E. Please complete the following table:

Question	Points Earned	Total Points
Is/are your DRC operator(s) currently certified at the appropriate grade for this facility? (see C)	Yes = 0 points No = 50 points	0
How many continuing education units has each of the DRC operator(s) completed over the last 3 years?	3 or more = 0 points less than 3 = 10 points	0
TOTAL PART IV =		0

Part V: FACILITY MAINTENANCE

A. Please complete the following table:

Question	Points Earned	Total Points
Do you follow an annual preventative maintenance program?	Yes = 0 points No = 30 points	0
Is it written?	Yes = 0 points No = 20 points	0
Do you have a written emergency response plan?	Yes = 0 points No = 20 points	0
Do you have an updated operations and maintenance manual	Yes = 0 points No = 20 points	0
Do you have a written safety plan?	Yes = 0 points No = 20 points	0
TOTAL PART V =		0

Part VI: SSMP EVALUATION

A. Has your system completed its Sewer System Management Plan (SSMP)?

Yes _____ NO _____

B. If the SSMP has been completed then has the SSMP been public noticed?

No _____ Yes, included date of public notice _____

C. Has the SSMP been approved by the permittee's governing body at a public meeting?

Yes _____ NO _____

D. During the annual assessment of the operation and maintenance plan were any adjustments needed based on the performance of the plan?

No _____ If yes, what components of the plan were changed (i.e. line cleaning, CCTV inspections and manhole inspections and/or SSO events)

Part VII: SUBJECTIVE EVALUATION

This section should be with the system operators.

- A. Describe the physical condition of the sewer collection system: (lift stations, etc. included)

Santaquin collection system is only 22 years old. We have all plastic pipe with concrete manholes. Very little IandI is present in our system. Our lift station is 9 years old and the pumps were upgraded in 2013

- B. What sewerage system improvements does the community have under consideration for the next 10 years?

depending on growth we may upgrade the center Street Lift Station

- C. Explain what problems, other than plugging have you experienced over the last year

We experience grease accumulation in our lift station. This requires more frequent cleanings and monitoring.

- D. Is your community presently involved in formal planning for system expansion/upgrading? If so explain.

as new developments come into the city we expand our collection system. This is all handled through the DRC process.

- E. Does the municipality/district pay for the continuing education expenses of operators?

ALWAYS SOMETIMES _____ NO _____

If they do, what percentage is paid?

approximately 100 %

Municipal Wastewater Planning Program (MWPP) Mechanical Plant Section

Owner Name: SANTAQUIN

Name and Title of Contact Person:

Jason Callaway Wade Eva
operations manager Public Works Director

Phone: 801-420-3033 801-420-3006

E-mail: jcallaway@santaquin.org weva@santaquin.org

PLEASE SUBMIT TO STATE BY: March 1, 2016

Mail to: MWPP - Department of Environmental Quality
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Form completed by

Jason Callaway : Ben Reeves

Part I: INFLUENT INFORMATION

- A. Please update (if needed) the average design flow and average design BOD₅ and TSS loading for your facility.

	Average Design Flow (MGD)	Average Design BOD ₅ Loading (lbs/day)	Average Design TSS Loading (lbs/day)
Design Criteria	.65	1355	1355
90% of the Design Criteria	.585	1226	1220

- B. Please list the average monthly flows in millions of gallons per day (MGD) and BOD₅ and TSS loadings in milligrams per liter (mg/L) **received** at your facility during 2015. (Calculate the BOD₅ and TSS loadings in pounds per day (lbs/day)).

Month	(1) Average Monthly Flow (MGD)	(2) Average Monthly BOD ₅ Concentration (mg/L)	(3) Average BOD ₅ Loading (lbs/day) 1	(4) Average Monthly TSS Concentration (mg/L)	(5) Average TSS Loading (lbs/day) 2
January	.576	177	850	224	1076
February	.548	208	950	345	1576
March	.560	205	957	305	1424
April	.559	201	937	260	1212
May	.559	376	1752	326	1519
June	.557	190	882	258	1198
July	.555	175	810	321	1485
August	.585	166	809	327	1595
September	.588	184	902	284	1393
October	.588	132	647	202	990
November	.598	88	432	281	1401
December	.613	262	1339	304	1462
Average	.574	197	938	286	1361

1 BOD₅ Loading (3) = Average Monthly Flow (1) x Average Monthly BOD₅ Concentration (2) x 8.34
 2 TSS Loading (5) = Average Monthly Flow (1) x Average Monthly TSS Concentration (4) x 8.34

Part I. INFLUENT INFORMATION (cont.)

C. Refer to the information in A & B to determine a point value for your facility. Please enter the points for each question in the blank provided.

Question	Number	Points Earned	Total Points
How many times did the average monthly flow (Part B., Column 1) to the wastewater facility exceed 90% of design flow?		0 = 0 points 1 - 2 = 10 points 3 - 4 = 20 points 5 or more = 30 points	20
How many times did the average monthly flow (Part B., Column 1) to the wastewater facility exceed the design flow?		0 = 0 points 1 - 2 = 20 points 3 - 4 = 40 points 5 or more = 60 points	0
How many times did the average monthly BOD ₅ loading (Part B., Column 3) to the wastewater facility exceed 90% of the design loading?		0-1 = 0 points 1 - 2 = 10 points 3 - 4 = 20 points 5 or more = 30 points	10
How many times did the average monthly BOD ₅ loading (Part B., Column 3) to the wastewater facility exceed the design loading?		0 = 0 points 1 - 2 = 20 points 3 - 5 = 40 points 5 or more = 60 points	20
TOTAL PART I =			50

Part II: EFFLUENT INFORMATION

A. Please list the average monthly BOD₅, TSS, Ammonia (NH₃), monthly maximum Cl₂, minimum monthly DO, and 30-day geometric averages for Fecal and Total Coliform, or E-Coli produced by your facility during 2015.

Month	(1) BOD ₅ (mg/L)	(2) TSS (mg/L)	(3) Fecal Coliform (#/100 mL)	(4) Total Coliform (#/100 mL)	(5) E-Coli	(6) Cl ₂ (mg/L)	(7) DO (mg/L)	(8) NH ₃ (mg/L)
	Whole Numbers Only					One Decimal Place Only		
January	ND				0			
February	ND				0			
March	ND				0			
April	ND				0			
May	ND				0			
June	7				0			
July	ND				0			
August	ND				0			
September	ND				0			
October	ND				0			
November	ND				0			
December	ND				0			
Average					0			

B. Please list the monthly average permit limits for the facility in the blanks below.

	BOD ₅ (CBOD ₅) (mg/L)	maximum Cl ₂ (mg/L)	NH ₃ (mg/L)	minimum DO (mg/L)
Monthly Permit Limit	10	N/A	N/A	N/A
80% of the Permit Limit	8			

Part II: EFFLUENT INFORMATION (cont.)

C. Refer to the information in A & B and your operating reports to determine a point values for your facility.

Question	Number	Points Earned	Total Points
How many months did the effluent BOD ₅ (CBOD ₅) exceed 80% of monthly permit limit?	0	0 - 1 = 0 points 2 = 5 points 3 = 10 points 4 = 15 points 5 or more = 20 points	0
How many months did the effluent BOD ₅ (CBOD ₅) exceed the monthly permit limits?	0	0 = 0 points 1 - 2 = 10 points 3 or more = 20 points	0
How many months did the effluent TSS exceed 20 mg/L?	N/A	0 - 1 = 0 points 2 = 5 points 3 = 10 points 4 = 15 points 5 or more = 20 points	0
How many months did the effluent TSS exceed 25 mg/L?	N/A	0 = 0 points 1 - 2 = 10 points 3 or more = 20 points	0
How many times did the Cl ₂ exceed permit limit?	N/A	0 = 0 points 1 - 2 = 15 points 3 or more = 30 points	0
How many times did the NH ₃ exceed permit limits?	N/A	0 = 0 points 1 - 2 = 15 points 3 or more = 30 points	0
How many times did the DO not meet permit limit?	N/A	0 = 0 points 1 - 2 = 15 points 3 or more = 30 points	0
How many months did the 30-day fecal coliform exceed 200 #/100 mL?	N/A	0 = 0 points 1 - 2 = 10 points 3 or more = 20 points	0
How many months did the 30-day total coliform exceed 2,000 #/100 mL?	N/A	0 = 0 points 1 - 2 = 10 points 3 or more = 20 points	0
How many months did the 30-day E-coli exceed 126 #/100 mL?	0	0 = 0 points 1 - 2 = 20 points 3 or more = 40 points	0
TOTAL PART II =			0

Part III: FACILITY AGE

In what year were the following process units constructed or underwent a major upgrade?
To determine a point score subtract the construction or upgrade year from 2015.

Points = Age = Present Year - Construction or Upgrade Year.

Enter the calculated age below.

If the point total exceeds 20 points, enter only 20 points.

Unit Process	Current Year	Construction or Last Upgrade Year	Age = Points
Headworks	2015	2013	2
Primary Treatment	2015	2013	2
Secondary Treatment	2015	2013	2
Solids Handling	2015	2013	2
Disinfection	2015	2013	2
TOTAL PART III (not greater than 20) =			10

Part IV: BYPASSES

Please complete the following table:

Question	Number	Points Earned	Total Points
How many days in the past year was there a bypass or overflow of untreated wastewater due to high flows?	0	0 = 0 points 1 = 5 points 2 = 10 points 3 = 15 points 4 = 20 points 5 or more = 25 points	0
How many days in the last year was there a bypass or overflow of untreated wastewater due to equipment failure?	0	0 = 0 points 1 = 5 points 2 = 10 points 3 = 15 points 4 = 20 points 5 or more = 25 points	0
TOTAL PART IV =			0

Part V: SOLIDS HANDLING

A. Please complete the following table:

Current Disposal Method (check all that apply)	Points Earned	Total Points
Landfill	Class B = 0 points < Class B = 50 points	0
Land Application	Site Life 0 - 5 years = 20 points 5 - 10 years = 10 points 10+ years = 0 points	N/A
Give Away/Distribution and Marketing	Class A = 10 points Class B = 20 points	N/A
TOTAL PART V =		0

Part VI: NEW DEVELOPMENT

A. Please complete the following table:

Question	Points Earned	Total Points
Has an industry (or other development) moved into the community or expanded production in the past two years, such that either flow or wastewater loadings to the sewerage system were significantly increased (10 - 20%)?	No = 0 points Yes = 10 points	0
Are there any major new developments (industrial, commercial, or residential) anticipated in the next 2 - 3 years, such that either flow or BOD ₅ loadings to the sewerage system could significantly increase (25%)?	No = 0 points Yes = 10 points	0
Have you experienced any upset due to septage haulers?	No = 0 points Yes = 10 points	0
TOTAL PART VI =		0

Part VI: NEW DEVELOPMENT (cont.)

- B. Approximate number of new residential sewer connections in the last year
125 new residential connections
- C. Approximate number of new commercial/industrial connections in the last year
0 new commercial/industrial connections
- D. Approximate number of new population serviced in the last year
460 new people served

Part VII: OPERATOR CERTIFICATION

- A. How many operators are currently employed by your facility?
2 operator(s) employed
- B. What is/are the name(s) of your DRC operator(s)?
Jason Callaway

- C. You are required to have the treatment DRC operator(s) certified at **GRADE III**.
What is the current grade of the DRC operator(s)? IV
- D. State of Utah Administrative Rules Require that all operators considered to be in DRC to be appropriately certified. List all the operators in your system by their certification class.

Not Certified	_____
Treatment I	<u>2</u>
Treatment II	_____
Treatment III	_____
Treatment IV	<u>1</u>

Part VII: OPERATOR CERTIFICATION (cont.)

E. Please complete the following table:

Question	Points Earned	Total Points
Is/are your DRC operator(s) currently certified at the appropriate grade for this facility? (see C)	Yes = 0 points No = 50 points	0
How many continuing education units has each of the DRC operator(s) completed over the last 3 years?	3 or more = 0 points less than 3 = 10 points	0
TOTAL PART VII =		0

Part VIII: FACILITY MAINTENANCE

A. Please complete the following table:

Question	Points Earned	Total Points
Do you follow an annual preventative maintenance program?	Yes = 0 points No = 30 points	0
Is it written?	Yes = 0 points No = 20 points	0
Do you have a written emergency response plan?	Yes = 0 points No = 20 points	0
Do you have an updated operations and maintenance manual	Yes = 0 points No = 20 points	0
Do you have a written safety plan?	Yes = 0 points No = 20 points	0
TOTAL PART VIII =		0

Part IX: SUBJECTIVE EVALUATION

This section should be completed with the facility operators.

A. Do you consider your wastewater facility to be in good physical and structural condition?

YES NO

If NOT, why?

B. What improvements do you think the plant will need in the next 5 years?

Within the next 2 years we are planning on adding more Membrane Modules. This will increase the capacity of the plant by about 30%

C. Where there any backups into basements at any point in the collection system in 2015.

YES NO

Why? (do not include backups due to clogged laterals)

D. Does the municipality/district pay for the continuing education expenses of operators?

ALWAYS SOMETIMES NO

If so, what percentage do they pay?

approximately _____ %

POINT SUMMATION

Fill in the values from Parts I through VIII in the blanks provided in column 1. Add the numbers to determine the MWPP point total that your wastewater facility has generated for the past twelve months.

Part	Points
I	50
II	0
III	10
IV	0
V	0
VI	0
VII	0
VIII	0
Total	60