

# STATE OF UTAH

## *MUNICIPAL WASTEWATER PLANNING PROGRAM*

### SELF-ASSESSMENT REPORT

FOR

SANTAQUIN CITY

2006



Resolution Number 08-01-2007

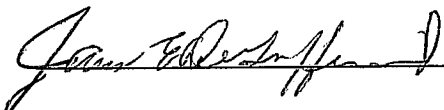
**MUNICIPAL WASTEWATER PLANNING PROGRAM RESOLUTION**

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

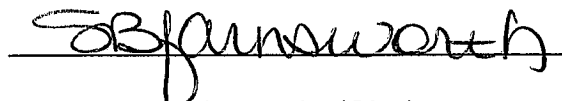
1. Reviewed the attached Municipal Wastewater Planning Program Report for 2006.
2. Have taken all appropriate actions necessary to maintain effluent requirements contained in the UPDES Permit (If Applicable)

Passed by a (majority) (unanimous) vote on

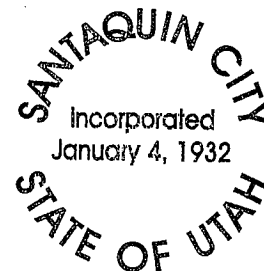
8/1/07  
(date)

  
\_\_\_\_\_

Mayor/Chairman

  
\_\_\_\_\_

Attest: Recorder/Clerk



# Municipal Wastewater Planning Program (MWPP) Financial Evaluation Section

Owner Name: SANTAQUIN CITY

Name and Title of Contact Person:

Dennis Barnes

Pub. Works Superv

Phone: 801-754-3211

**PLEASE SUBMIT TO STATE BY: AUGUST 1, 2007**

Mail to: MWPP - Department of Environmental Quality  
c/o Paul Krauth, P.E.  
Division of Water Quality  
288 North 1460 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870  
Phone : 538-6146

*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, Emily Cantón. Utah Division of Water Quality: (801) 538-6070.*

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
<b>TOTAL PART I =</b>		<b>0</b>

## 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
<b>TOTAL PART II =</b>		<b>0</b>

**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 <b>95%</b> 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
<b>TOTAL PART III =</b>		0

**Part IV: PROJECTED NEEDS**

Estimate as best you can the following:

Cost of projected capital improvements (in thousands)	2007	2008	2009	2010	2011
		25K-			

**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 CITY  
Name and Title of Contact Person:

Dennis Barnes

Pub-works Superv.

Phone: 801-254-3211

**PLEASE SUBMIT TO STATE BY: AUGUST 1, 2007**

Mail to: Department of Environmental Quality  
c/o Paul Krauth, P.E.  
Division of Water Quality  
288 North 1460 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870  
Phone : 538-6146

Form completed by

Dennis Barnes

**Part I: SYSTEM AGE**

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

Year 1995

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

Oldest part 1995 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 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 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
<b>TOTAL PART II =</b>			0

B. Please specify whether the bypass(es) was caused a contract or tributary communities, etc.

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**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 <sub>5</sub> loadings to the sewerage system could significantly increase (25%)?	No = 0 points Yes = 10 points	10
<b>TOTAL PART III =</b>		10

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

155 new residential connections

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

2 new commercial/industrial connections

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

465 new people served

**Part IV: OPERATOR CERTIFICATION**

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

5 collection system operators employed

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

Dennis Barnes Wade Eva

Ray Ross Jason Callaway

Pat Hatfield

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

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

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
<b>TOTAL PART IV =</b>		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
<b>TOTAL PART V =</b>		0

**Part VI: SUBJECTIVE EVALUATION**

*This section should be with the system operators.*

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

*Good*

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

*New mechanical plant - new lift station*

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Part VI: SUBJECTIVE EVALUATION (cont.)

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

\_\_\_\_\_ *none* \_\_\_\_\_  
\_\_\_\_\_

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

\_\_\_\_\_ *New LiFT Station For growth area* \_\_\_\_\_  
\_\_\_\_\_ *new mechanical plant -* \_\_\_\_\_  
\_\_\_\_\_

E. How many times in the last year were there sewage in basements at any point in the collection system for any reason, except plugging of the lateral connections?

0 times sewage was in basements

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

ALWAYS X      SOMETIMES \_\_\_\_\_      NO \_\_\_\_\_

If they do, what percentage is paid?

approximately 100 %

G. Is there a written policy regarding continuing education and training for wastewater operators?

YES X      NO \_\_\_\_\_



**POINT SUMMATION**

Fill in the values from Parts II through V 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
II	0
III	10
IV	0
V	0
Total	10

# Municipal Wastewater Planning Program (MWPP) Non-Discharging Lagoon Facility Section

Owner Name: SANTAQUIN CITY

Name and Title of Contact Person:

Dennis Barnes

Pub-Works Superv.

Phone: 801-254-3211

**PLEASE SUBMIT TO STATE BY: AUGUST 1, 2007**

Mail to: Department of Environmental Quality  
c/o Paul Krauth, P.E.  
Division of Water Quality  
288 North 1460 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870  
Phone : 538-6146

Form completed by

Dennis Barnes

## Part I: INFLUENT INFORMATION

- A. Please update (if needed) the average design flow and average design BOD<sub>5</sub> and TSS loading for your facility.

	Average Design Flow (MGD)	Average Design BOD <sub>5</sub> Loading (lbs/day)	Average Design TSS Loading (lbs/day)
Design Criteria	. 493	1030	1030
90% of the Design Criteria	. 444	900	900

- B. Please list the average monthly flows in millions of gallons per day (MGD) and BOD<sub>5</sub> and TSS loadings in milligrams per liter (mg/L) **received** at your facility during 2006. (Calculate the BOD<sub>5</sub> and TSS loadings in pounds per day (lbs/day).

Month	(1) Average Monthly Flow (MGD)	(2) Average Monthly BOD <sub>5</sub> Concentration (mg/L)	(3) Average BOD <sub>5</sub> Loading (lbs/day) <sup>1</sup>	(4) Average Monthly TSS Concentration (mg/L)	(5) Average TSS Loading (lbs/day) <sup>2</sup>
January	.437	245	892	234	853
February	.424	253	894	250	884
March	.424	172	608	250	884
April	.440	213	782	198	727
May	.426	250	876	202	708
June	.403	243	817	242	813
July	.401	155	518	280	936
August	.417	272	842	280	974
September	.426	184	645	244	856
October	.441	240	883	200	736
November	.436	240	872	202	742
December	.439	168	615	192	763
Average	.425	223	790	231	819

1 BOD<sub>5</sub> Loading (3) = Average Monthly Flow (1) x Average Monthly BOD<sub>5</sub> 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 = 0 points 1 - 2 = 10 points 3 - 4 = 20 points 5 or more = 30 points	0
How many times did the average monthly flow (Part B., Column 1) to the wastewater facility exceed the design flow?	0	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 <sub>5</sub> loading (Part B., Column 3) to the wastewater facility exceed 90% of the design loading?	2	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 <sub>5</sub> loading (Part B., Column 3) to the wastewater facility exceed the design loading?	0	0 = 0 points 1 - 2 = 20 points 3 - 5 = 40 points 5 or more = 60 points	0
<b>TOTAL PART I =</b>			10

**Part II: 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 2006.

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	Present Year	Construction or Upgrade Year	Age = Points
Headworks	2006	1995	11
Lagoons (including aeration)	2006	2002	4
Disinfection	2006	1995	11
<b>TOTAL PART II (not greater than 20) =</b>			26

**Part III: 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 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 points 1 = 5 points 2 = 10 points 3 = 15 points 4 = 20 points 5 or more = 25 points	0
<b>TOTAL PART III =</b>			0

**Part IV: 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 <sub>5</sub> loadings to the sewerage system could significantly increase (25%)?	No = 0 points Yes = 10 points	10
Have you experienced any upset due to septage haulers?	No = 0 points Yes = 10 points	0
<b>TOTAL PART IV =</b>		10

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

155 new residential connections

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

2 new commercial/industrial connections

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

465 new people served

### Part V: OPERATOR CERTIFICATION

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

5 treatment system operators employed

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

Dennis Barnes Wade Eva

Ray Ross Jason Callaway

Pat Hatfield

C. You are required to have the DRC operator(s) certified at *GRADE I*.

What is the current grade of the DRC operator(s)? \_\_\_\_\_

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 \_\_\_\_\_

Treatment I \_\_\_\_\_

Treatment II X \_\_\_\_\_

Treatment III \_\_\_\_\_

Treatment 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
<b>TOTAL PART V =</b>		0

**Part VI: 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
<b>TOTAL PART VI =</b>		0

Part VII: 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   x   NO \_\_\_\_\_

If NOT, why?

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

  LIFT Station  

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- C. Where there any backups into basements at any point in the collection system in 2006.

YES \_\_\_\_\_ NO   x  

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

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

ALWAYS   x   SOMETIMES \_\_\_\_\_ NO \_\_\_\_\_

If so, what percentage do they pay?

approximately   100   %

- E. Is there a written policy regarding continuing education and training for wastewater operators?

YES   x   NO \_\_\_\_\_



**POINT SUMMATION**

Fill in the values from Parts I through VII 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	10
II	20
III	10
IV	0
V	0
VI	0
Total	40

