

RESOLUTION NO. 50-1993

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS, APPROVING THE MUNICIPAL WATER POLLUTION PREVENTION ENVIRONMENTAL AUDIT REPORT.

WHEREAS, the Abilene City Council has received the Municipal Water Pollution Prevention (MWPP) Order for Information Docket No. VI-91-2609, and,

WHEREAS, the Abilene City Council agrees to submit the information outlined in the MWPP Environmental Audit Report as required by the Environmental Protection Agency (EPA), Region 6; and,

WHEREAS, the Abilene City Council agrees to implement the MWPP program as necessary for the next reissuance of the City of Abilene's National Pollutant Discharge Elimination System permit;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF ABILENE, TEXAS, that:

PART 1. The Abilene City Council informs EPA Region 6 that it has reviewed and approved the MWPP Environmental Audit Report, attached hereto as Exhibit "A" and incorporated for all purposes, for the Abilene Wastewater Treatment Plant, Permit No. TX0023973.

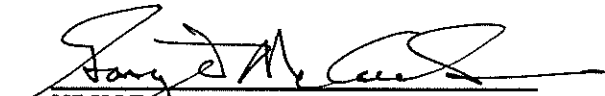
PART 2. This Resolution shall take effect immediately from and after its passage.

ADOPTED THIS 16 DAY OF DECEMBER, 1993.

ATTEST:



CITY SECRETARY



MAYOR

APPROVED:



CITY ATTORNEY

MUNICIPAL WATER POLLUTION PREVENTION
MWPP
ENVIRONMENTAL AUDIT
REPORT

PREPARED BY

MUNICIPALITY: City of Abilene STATE: Texas

NPDES PERMIT #: TX 0023973
FOR WASTEWATER TREATMENT PLANT

CONTACT PERSON: Dwayne Hargesheimer
MUNICIPAL OFFICIAL
Director of Water Utilities
TITLE

MAILING ADDRESS: P.O. Box 60
Abilene, Texas 79604-0060

TELEPHONE #: (915) 676-6416

CHIEF OPERATOR: Brian Socia
NAME

TELEPHONE #: (915) 548-2237

SIGNATURE: _____

AUTHORIZED
REPRESENTATIVE

TITLE

DATE

PART 1: INFLUENT FLOW/LOADINGS

- A. List the average monthly volumetric flows and BOD₅ loadings received at your facility during your 12-month MWPP reporting period.

MWPP REPORTING PERIOD		COLUMN 1 *AVERAGE MONTHLY INFLUENT FLOW	COLUMN 2 AVERAGE MONTHLY INFLUENT BOD₅ LOADING (LBS/DAY)
YEAR	MONTH	(MGD)	(LBS/DAY)
92	October	12.202	16,259
92	November	13.156	18,218
92	December	13.252	19,156
93	January	14.200	22,193
93	February	14.693	22,102
93	March	15.099	20,650
93	April	14.493	20,852
93	May	14.322	21,051
93	June	14.402	20,627
93	July	12.925	20,481
93	August	12.873	21,986
93	September	12.877	20,442

*Use same reporting period as DMR's

PART 2: EFFLUENT QUALITY/PLANT PERFORMANCE

A. For the permitted parameters, list the average monthly effluent concentration and average daily mass loading produced by your facility during your 12-month MWPP reporting period. Disregard any columns which are not applicable to your permit. Circle whether you are measuring ammonia nitrogen (NH₃-N) or nitrate nitrogen (NO₃-N).

(1) CONCENTRATION

MWPP REPORTING PERIOD

Year	Month	BOD ₅ * (mg/1)	TSS (mg/1)	NH ₃ -N or NO ₃ -N (mg/1)	Total Phosphorus (mg/1)	Fecal Coliform (Count/ 100 ml)	pH (Lowest/ Highest)	Other DO (min.)
92	Oct.	5.7	5.8				6.8 / 7.2	5.35
92	Nov.	6.2	9.2				6.7 / 7.2	4.80
92	Dec.	9.5	13.1				6.9 / 7.3	4.80
93	Jan.	9.1	11.0				6.9 / 8.0	3.10
93	Feb.	13.5	15.1				6.4 / 7.2	5.4
93	Mar.	10.5	13.5				6.9 / 7.4	5.2
93	Apr.	7.1	11.5				6.8 / 7.6	5.4
93	May	5.6	11.4				6.7 / 7.8	4.8
93	Jun.	5.7	7.7				6.8 / 7.3	4.8
93	Jul.	7.2	8.5				6.6 / 7.2	3.2
93	Aug.	3.3	4.9				6.7 / 7.1	3.4
93	Sept.	3.1	4.6				6.6 / 7.0	3.7

*Use CBOD if applicable to your permit. Use CBOD on all BOD questions if applicable to your permit.

B. List the monthly permit limits for the facility in the blanks below. Circle whether your permit lists ammonia nitrogen (NH₃-N) or nitrate nitrogen (NO₃-N).

(1) CONCENTRATION (Attach Additional Sheets for OTHER if necessary)

Fecal Coliform (Count/100 ml)	BOD ₅ (mg/1)	TSS (mg/1)	NH ₃ -N or NO ₃ -N (mg/1)		DO		Ph		Other	
			Min	Max	Min	Max	Min	Max	Min	Max
Permit Limits: --	20	20	--	--	2	mg/l	9.0	su	6.0	su

(2) AVERAGE DAILY MASS LOADING (Attach Additional Sheets for OTHER if necessary)

BOD ₅ (lbs/day)	TSS (lbs/day)	NH ₃ -N or NO ₃ -N (lbs/day)		Other		Other	
		Min	Max	Min	Max	Min	Max
Permit Limits: 3002	3002	--	--	--	--	--	--
90% of the Permit Limits: 2701.8	2701.8	--	--	--	--	--	--

K. How many months did the effluent Phosphorus concentration (mg/l) exceed the permit limits? N/A (Circle the appropriate number)

0 = 0 points; 1-2 = 5 points; 3 or more = 30 points

L. Was biomonitoring required by your NPDES Permit in the past year?

Yes No

a. If yes, has the biomonitoring been done? _____ Give results:

SPECIES	# OF TESTS	# PASSED	# FAILED	TEST TYPE

b. Have biomonitoring requirements been met and testing complete? Circle One

Yes No

If yes, give date completed: Passed 14 months of Biomonitoring Completed Permit requirement Nov. 1991

PART 3: AGE OF THE WASTEWATER TREATMENT FACILITIES

- A. What year was the wastewater treatment plant constructed or last major improvements to rehabilitate, expand or upgrade the plant completed? _____

Current Year - (Answer to A.) = Age in Years

1993 - 1991 = 2 Years

Enter Age in Part C below.

- B. Specify the type of treatment plant Conventional Activated Sludge
- C. Check the type of treatment facility that is employed:

	<u>Factor</u>
<input checked="" type="checkbox"/> Mechanical Treatment Plant (Trickling filter, activated sludge, advanced treatment etc.)	2.0
<input type="checkbox"/> Aerated Lagoon	1.5
<input type="checkbox"/> Stabilization Pond/Wetlands	1.0

- D. Multiply the factor listed next to the type of facility your community employs by the age of your facility to determine the total point value of Part 3:

$$\text{TOTAL POINT VALUE FOR PART 3} = \frac{2.0}{\text{(factor)}} \times \frac{2}{\text{(age)}} = \frac{4.0}{\text{}}$$

Enter this value or 40, whichever is less, on the point calculation table on the last page.

PART 5: ULTIMATE DISPOSITION OF SLUDGE

A. What is the final disposition of sludge from your treatment plant?

Sludge is stored in a lagoon.

B. Describe basic sludge treatment processes of plant and final disposal: _____

Sludge is processed in a two stage digester to a volatile solids content of about 62%. The sludge is mixed & heated in the first stage & separated in the second stage. Gas is used to power aux engines and boiler. Digested sludge is pumped to a sludge lagoon.

C. If sludge is disposed of by land application (surface application or shallow injection), complete the following:

N/A (1) Does your facility have access to sufficient land for: (Circle the appropriate point total)

3 or more years = 0 points
18-35 months = 10 points
less than 18 months = 20 points

N/A (2) What type of cover is on the site?

_____ Crops consumed by animals whose products are consumed by humans.

_____ Crops that are directly consumed by humans.

_____ Neither directly or indirectly consumed by humans.

_____ No plant cover.

N/A E. Does the sludge disposal site have an approved Ground Water Discharge Plan?
(New Mexico Only) (Circle One)

Yes..... 0 points

No.....25 points

N/A F. Does this city have an approved sludge management plan?
(Oklahoma and Arkansas Only) (Circle One)

Yes..... 0 points

No.....25 points

 X N/A

Sum of Questions: 5C(1) = 0
 5C(4) = 0
 5E/F = 0

TOTAL POINT VALUE FOR PART 5 0

Enter this total on the point calculation table on the last page.

- (2) For plants with more than ten operations personnel, are over 90% or more of required operations staff shown above in B(1) certified (including plant management in direct charge of operations)? (Circle One)

Yes..... 0 points

No.....15 points

- N/A (3) For plants with 10 or less Operations personnel, are there more than one (1) operator or supervisor in direct charge with no certification? (Circle One)

Yes.....15 points

No..... 0 points

C. List points in 6B(2) or 6B(3) (as applicable) = 0

- D. Do 75% or more of operations personnel that are required to have certification have the level of certification required to properly operate the plant in accordance with certification levels established by the state and your own personnel job description? (Circle One)

Yes..... 0 points

No.....15 points

- E. (1) What do you consider to be the proper number of personnel to operate and maintain the plant? 20

- (2) Is authorized (budgeted) staff 90% of proper manning level or within two positions of what you believe is necessary for a proper operation? (Circle One)

Yes..... 0 points

No..... 5 points

- (3) What % of positions authorized are actually filled with employees?

90% or over = 0 points, between 80 - 90% = 15 points;

less than 80% = 30 points

Sum of Questions:

6C	=	<u>0</u>
6D	=	<u>0</u>
6E(2)	=	<u>0</u>
6E(3)	=	<u>0</u>
6F	=	<u>0</u>
6G	=	<u>0</u>
6H	=	<u>0</u>
6I	=	<u>0</u>
6J	=	<u>5</u>

TOTAL POINT VALUE FOR PART 6 5

Enter this total on the point calculation table on the last page.

PART 7: FINANCIAL STATUS

All Financial Status Information should be based on your Last Fiscal Year Budget.

List Fiscal Year Begins: Oct. 1, 1992

Ends: Sept. 30, 1993

Did your municipality receive a Public Law 92-500 federal construction grant since March 1, 1973? (Circle one) Yes or No

If yes, do you have a user charge system in effect as required by Public Law 92-500 as a condition for receipt of the federal grant? (Circle One) Yes or No

A. Are revenues and expenditures for the wastewater utility/system posted to or kept in accounts separate from non-sewer accounts (i.e., water utilities, public works, etc.)? (Circle One)

Yes No

Explain: Separate expense and revenue accounting is maintained in the Water Utility Enterprises Fund.

(1) Are wastewater system expenditures ever paid for with non-wastewater system revenues? (Circle One)

Yes No

If Yes, explain: _____

(2) Are wastewater system revenues ever used for non-wastewater system expenditures? (Circle One)

Yes No

If Yes, explain: _____

N/A 7E. If any plant is over 15 years old with no major renovations or expansions answer:

Is there a definite plan to provide major mechanical or structural renovations or improvements (beyond what in-house maintenance forces can accomplish) in the next 5 years?

Yes..... 0 points

No.....10 points

N/A If yes, explain future renovations and approximate time to be completed for each plant over 15 years:

The City of Abilene is planning a plant expansion in 1994 that will

include the addition of sand filters, additioanl areation basin

capacity, and other, miscellaneous improvements. The City of Abilene is

also evaluating various options for sludge processing.

7F. Do you collect proportionate fees from industries for extra strength wastes?
Circle One

Do collect revenues for extra strength wastes = 0 points

Do not collect revenues for extra strength wastes = 10 points

*List amount of revenues collected last year for extra strength wastes \$ 162,291

Sum of Questions: 7C = 0
7D = 0
7E = 0 If applicable
7F = 0

TOTAL POINT VALUE FOR PART 7 0

Enter this total on the point calculation table on the last page.

- (3) Will the 4-year projected flow exceed current or planned plant capacity (include capacity of plants in design or construction which will be completed within 4 years as current capacity in answering this question)? (Circle One)

Yes.....25 points

No..... 0 points

- (4) Will the 4-year projected flow exceed 90% of current plant capacity (include capacity of plants in design or construction as current capacity in answering this question)? (Circle One)

Yes.....5 points

No.....0 points

A(2) = 0 points

B(3) = 0 points

B(4) = 0 points

TOTAL POINT VALUE FOR PART 8 = 0

Enter this total on the point calculation on the last page

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C. Sewer Backups

Sewer backups means backups in sewer lines, not those caused by customer service lines. Backups means the stopping of flow such as to cause sewer to backup into customer premises or overflow at a manhole or other structure.

- (1) Miles of line in the system 546
- (2) Number of sewer backups last year 510

(3) Is C(2) greater than C(1) or in other words did you have more than 1 backup last year per mile of pipe? (Circle One)

Yes.....25 points

No..... 0 points

(4) Is C(2) more than half of C(1) or in other words did you have more than 1 backup last year per two miles of pipe? (Do not circle if you circled YES to answer C(3))

Yes.....10 points

No..... 0 points

D. Is sewer system maintenance supervisor in charge state certified? (Circle One)

Yes..... 0 points

No.....10 points

E. Does the collection system section have a planned maintenance program? (Circle One)

Yes..... 0 points

No..... 5 points

F. Is there a planned or preventive maintenance program for Lift Stations? (Circle One)

Yes..... 0 points

No..... 5 points

G. Is there an alarm system for monitoring lift station failure?

Yes X

No

PART 10: SUBJECTIVE EVALUATION

A. Describe briefly the physical and structural conditions of this treatment facility:
The Wastewater Plant is in good condition overall. Major upgrade work
(additional Final Clairfiers, Primary Clarifiers, Sludge Pump Station,
Dechlorination Facilities, Influent Structure, Metering Devices, ect).
Completed in 1991.

B. Are there any significant problems over the last year that have threatened your ability to treat wastewater at this facility? No

C. Are there industrial dischargers to this wastewater plant? (Circle One)

Yes No

Describe major or significant industrial discharges to this plant: The POTW
receives discharges from the following types of significant industries;
metal finishers; electroplater; oil refinery; healthcare facilities;
national defense facility; soft drink manufacturers; industrial laundry;
aluminum can manufacturer; and, correctional facility.

D. Do you have an industrial pretreatment program? (Circle One)

Yes No

H. Is your treated wastewater effluent reused outside the treatment facility?
(Circle One)

Yes

No

If yes, describe: A portion of our effluent is diverted to several land
owners for irrigation purposes.

(1) What potential reuse alternatives are available?

Describe: Additional irrigations of agricultural lands, golf
courses and parks.

I. Has an energy audit been performed to determine the minimum amount of energy needed for efficient operation and maintenance? (Circle One)

Yes

No

If yes, describe:

M. Does your treatment system have a planned maintenance program including a preventive maintenance program on major equipment items and treatment plant? (Circle One)

Yes

No

If yes, describe: All maintenance work information is logged and saved for future reference. Every piece of equipment is on a maintenance schedule.

N. Does this preventive maintenance program specify frequency of intervals, types of lubrication, types of repair, and other preventive maintenance tasks necessary for each major piece of equipment? (Circle One)

Yes

No

O. Are these preventive maintenance tasks, as well as equipment problems, being recorded and filed so future maintenance problems can be assessed properly? (Circle One)

Yes

No

P. Is an inventory of spare parts and preventive maintenance supplies maintained (i.e. oil, grease, packing, etc.)? (Circle One)

Yes

No

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