

APPENDIX E

KWWI's NPDES Permit

Kansas Permit No.: I-KS12-P005
Federal Permit No.: KS-0092126

KANSAS WATER POLLUTION CONTROL PERMIT AND
AUTHORIZATION TO DISCHARGE UNDER
THE NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM

Pursuant to the Provisions of Kansas Statutes Annotated 65-164 and 65-165, the Federal Water Pollution Control Act as amended, (33 U.S.C. 1251 et seq; the "Act"),

Owner: Kansas Waste Water, Inc.

Owner's Address: P.O. Box 781750
Wichita, Kansas 67278

Facility Name: Kansas Waste Water, Inc.

Facility Location: 35425 West 103rd
DeSoto, Kansas 66018
NW 1/4 Section 20, Township 12S, Range 22E, Johnson
County, Kansas

Receiving Stream: Kansas River via Pipeline,
River Basin: Kansas River Basin

is authorized to discharge from the waste treatment facility described herein, in accordance with effluent limitations and monitoring requirements as set forth herein.

This permit shall become effective October 14, 1996, will supersede all previous permits and/or agreements in effect between the Kansas Department of Health and Environment and the permittee, and will expire September 30, 2001.

FACILITY DESCRIPTION:

This is a centralized industrial wastewater treatment facility. Non-hazardous industrial wastewater from various off-site sources is transported to this facility for treatment in different batches. Influent wastewater is first analyzed to separate out metal bearing waste from non-metal bearing wastes. If necessary, metal-bearing wastewater is treated to reduce cyanides prior to subjecting the metal bearing wastewater to selective chemical precipitation, plate filtration, and analysis. If the effluent meets the permit limits for metals, it is sent for further treatment of organics.

Secretary, Kansas Department of Health and Environment

October 10, 1996
Date

FACILITY DESCRIPTION: Continued

Effluent from metal treatment and non-metal bearing wastewater is treated by equalization, aerobic biological treatment, induced carbon absorption and ozonation prior to transfer to one of the six final storage tanks. Effluent in the final storage tank is analyzed. If the effluent meets the permit limits, it is discharged to Kansas River. In case the effluent does not meet the permit limits, it is recycled for further treatment. The dewatered sludge is hauled to the Forestview Landfill. The daily discharge is about 120,000 gallons.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The effluent limitations shall become effective on the dates specified herein. Such discharges shall be controlled, limited, and monitored by the permittee as specified. There shall be no discharge of floating solids or visible foam in other than trace amounts.

Monitoring reports shall be submitted on or before the 28th day of the following month. In the event no discharge occurs, written notification is still required.

<u>Effective Date</u>	<u>EFFLUENT LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>		
	<u>Final Upon Issuance</u>				
<u>Outfall Number and Sample</u>	<u>Daily</u>	<u>Monthly</u>	<u>Measurement</u>		
<u>Effluent Parameter(s)</u>	<u>Units</u>	<u>Maximum</u>	<u>Average</u>	<u>Frequency</u>	<u>Type</u>
<u>001a - Metals Subcategory-Cyanide Waste Prior to Mixing With Metal Bearing Waste</u>					
Total Cyanide	- mg/l	350.0	130.0	each batch	grab
<u>001b - Metals Subcategory-Metal Bearing Waste Effluent Prior To Mixing With Organics Treatment⁽¹⁾</u>					
Flow	- mgd	Monitor	Monitor	each batch	grab
Oil & Grease	- mg/l	15.0	10.0	each batch	grab
Total Suspended Solids	- mg/l	55.0	18.0	each batch	grab
pH	- S.U.	6.0	9.0	each batch	grab
Aluminum, Total	- mg/l	1.50	1.00	each batch	grab
Antimony, Total	- mg/l	0.140	0.031	each batch	grab
Arsenic ⁽²⁾ , Total	- mg/l	Monitor	Monitor	each batch	grab
Barium, Total	- mg/l	2.00	1.00	each batch	grab
Cadmium, Total	- mg/l	0.73	0.16	each batch	grab
Cobalt, Total	- mg/l	0.73	0.16	each batch	grab
Copper, Total	- mg/l	1.0	0.23	each batch	grab
Chromium, Total	- mg/l	0.77	0.300	each batch	grab
Chromium, hexavalent	- mg/l	0.140	0.077	each batch	grab
Iron, Total	- mg/l	2.40	1.00	each batch	grab
Lead, Total	- mg/l	0.370	0.150	each batch	grab
Magnesium, Total	- mg/l	9.90	9.00	each batch	grab
Manganese, Total	- mg/l	0.180	0.039	each batch	grab

Effective Date	EFFLUENT LIMITATIONS		MONITORING			
	Final Upon Issuance		REQUIREMENTS			
Outfall Number and Sample	Units	Daily	Monthly	Measurement	Frequency	Type

001b - Metals Subcategory-Metal Bearing Waste Effluent Prior To Mixing With Organics Treatment⁽¹⁾ Continued

Mercury, Total	- mg/l	0.013	0.003	each batch	grab
Nickel, Total	- mg/l	5.40	1.200	each batch	grab
Silver, Total	- mg/l	0.028	0.0063	each batch	grab
Tin, Total	- mg/l	0.20	0.044	each batch	grab
Titanium, Total	- mg/l	0.021	0.0047	each batch	grab
Total Cyanide	- mg/l	4.40	1.20	each batch	grab
Zinc, Total	- mg/l	1.20	0.40	each batch	grab

⁽¹⁾ A sample shall be collected and analyzed prior to transfer to the next treatment step. If the limit(s) are not met for this Outfall, the wastewater shall be recycled for further treatment to achieve the above limits. Also, see Supplemental Condition No. 2.

⁽²⁾ See Supplemental Condition No. 1.

001 - Discharge From Final Storage Tank to the Kansas River^{(3), (4)}

Flow	- mgd	Monitor		each batch	grab
Sulfate	- mg/l	Monitor		each batch	grab
Chloride	- mg/l	Monitor		each batch	grab
Ammonia, as Nitrogen	- mg/l	Monitor		each batch	grab
Nitrogen, Total	- mg/l	Monitor		each batch	grab
Phosphate, as Phosphorus	- mg/l	Monitor		each batch	grab
BOD ₅	- mg/l	45.0	30.0	each batch	grab
Oil & Grease	- mg/l	13.0	4.9	each batch	grab
Total Suspended Solids	- mg/l	55.0	18.0	each batch	grab
pH	- S.U.	6.0	9.0	each batch	grab
1,1,1,2-tetrachloroethane	- mg/l	0.013	0.011	each batch	grab
1,1,1 trichloroethane	- mg/l	0.021	0.018	each batch	grab
1,1,2-trichloroethane	- mg/l	0.21	0.17	each batch	grab
1,1-dichloroethane	- mg/l	0.037	0.027	each batch	grab
1,2,3-trichloropropane	- mg/l	0.016	0.014	each batch	grab
1,2-dibromoethane	- mg/l	0.014	0.011	each batch	grab
1,2-dichloroethane	- mg/l	0.031	0.025	each batch	grab
2,3-dichloroaniline	- mg/l	0.17	0.14	each batch	grab
Butanone	- mg/l	1.1	0.84	each batch	grab
2-Propanone	- mg/l	1.6	1.3	each batch	grab
4-Methyl-2- pentanone	- mg/l	0.093	0.074	each batch	grab
Acetophenone	- mg/l	0.048	0.022	each batch	grab

Effective Date	EFFLUENT LIMITATIONS			MONITORING	
	Final Upon Issuance			REQUIREMENTS	
Outfall Number and Sample	Units	Daily	Monthly	Measurement	
Effluent Parameter(s)	Units	Maximum	Average	Frequency	Type
001 - Discharge From Final Storage Tanks to the Kansas River Continued					
Benzene	- mg/l	0.014	0.011	each batch	grab
Benzoic Acid	- mg/l	0.49	0.24	each batch	grab
Carbon-disulfide	- mg/l	0.16	0.11	each batch	grab
Chloroform	- mg/l	0.56	0.48	each batch	grab
Diethylether	- mg/l	0.07	0.056	each batch	grab
Hexanoic Acid	- mg/l	0.51	0.25	each batch	grab
Methylenechloride	- mg/l	1.10	0.97	each batch	grab
m-xylene	- mg/l	0.014	0.011	each batch	grab
o-cresol	- mg/l	0.051	0.025	each batch	grab
Phenol	- mg/l	0.79	0.38	each batch	grab
Pyrethrin (Cypermethrin)	- µg/l	52.5	35.0	each batch	grab
Pyridine	- mg/l	0.71	0.24	each batch	grab
p-cresol	- mg/l	0.098	0.040	each batch	grab
Tetrachloroethene	- mg/l	0.73	0.53	each batch	grab
Tetrachloromethane	- mg/l	0.013	0.011	each batch	grab
Toluene	- mg/l	0.014	0.011	each batch	grab
Trans-1,2-dichloroethane	- mg/l	0.15	0.11	each batch	grab
Trichloroethene	- mg/l	1.20	0.86	each batch	grab
Vinyl chloride	- mg/l	0.071	0.052	each batch	grab
Aluminum, Total	- mg/l	1.50	1.00	each batch	grab
Antimony, Total	- mg/l	0.42	0.24	each batch	grab
Barium, Total	- mg/l	3.80	2.20	each batch	grab
Lead, Total	- mg/l	0.16	0.095	each batch	grab
Molybdenum, Total	- mg/l	0.98	0.57	each batch	grab
Zinc, Total	- mg/l	0.43	0.25	each batch	grab
Arsenic ⁽²⁾ , Total	- mg/l	Monitor		each batch	grab
Cadmium, Total	- mg/l	Monitor		each batch	grab
Cobalt, Total	- mg/l	Monitor		each batch	grab
Copper, Total	- mg/l	Monitor		each batch	grab
Chromium, Total	- mg/l	Monitor		each batch	grab
Iron, Total	- mg/l	Monitor		each batch	grab
Magnesium, Total	- mg/l	Monitor		each batch	grab
Manganese, Total	- mg/l	Monitor		each batch	grab
Mercury, Total	- mg/l	Monitor		each batch	grab
Nickel, Total	- mg/l	Monitor		each batch	grab
Silver, Total	- mg/l	Monitor		each batch	grab
Tin, Total	- mg/l	Monitor		each batch	grab
Titanium, Total	- mg/l	Monitor		each batch	grab
Total Cyanide	- mg/l	Monitor		each batch	grab

- (2) See Supplemental Condition No. 1.
- (3) A sample shall be collected and analyzed prior to discharge to the Kansas River. If the above limits are not met, the wastewater shall be recycled for further treatment to achieve the above limits.
- (4) Whole effluent toxicity testing shall be conducted semi-annually during the effective dates of this permit pursuant to section 101 of the Clean Water Act and Kansas Surface Water Quality Standards (K.S.A. 28-16-28). The procedure shall be in accordance with the EPA methods described in "Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, 4th. Edition (EPA/600/4-90/027F) 1993. The test organisms to be used are Fathead Minnows (*Pimephales promelas*) and *Daphnia pulex*.

If the LC_{50} concentration (concentration at which 50 % of the test organism is dead), determined through toxicity test detailed above, is:

1. More than 4 % (23.8 TU_a - acute toxic units) - whole effluent toxicity (WET) test shall be conducted twice in a year during the term of this permit.
2. Less than 4 % (>23.8 TU_a):
 - (a) the permittee shall immediately notify KDHE by telephone; followed by a written notification within five (5) working days, including a copy of the test report and the steps taken to reduce the toxicity of the effluent.
 - (b) Conduct toxicity tests, as detailed above, monthly. If the LC_{50} for four consecutive months is above 4 % effluent concentration, the permittee may request KDHE to reduce toxicity testing frequency to semi-annually.

B. STANDARD CONDITIONS

In addition to the specified conditions stated herein, the permittee shall comply with the attached Standard Conditions dated August 1, 1996.

C. SCHEDULE OF COMPLIANCE

None

D. SUPPLEMENTAL CONDITIONS

1. The permittee shall not accept or treat any arsenic containing wastewater. After the EPA promulgated Toxics Rule is withdrawn permittee may request for permit modification to accept and treat arsenic containing wastewater.

2. Effluent from Outfall 001a or 001b shall not be discharged direct to surface waters without complying with permit limits for Outfall 001.
3. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301 (b)(2), (C), and (D), 304 (b)(2), and 307 (a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit, or
 - b. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application.
- b. That any activity has occurred or will occur which result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit if that discharge will exceed the highest of the following notification levels".
 - (1) Five hundred micrograms per liter (500 µg/l);

D. **SUPPLEMENTAL CONDITIONS** (Continued)

- (2) One milligram per liter (1 mg/l) for antimony;

- (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.
5. In the event the Environmental Protection Agency amends or promulgates the BPT, BAT, and/or BCT effluent guideline limitations for a specific Point Source Category or any of the subcategories covering your industry, this permit will be revoked and reissued to incorporate the new limitation(s).
6. Toxic Substances - Water Treatment Additives. If the permittee utilizes or changes water treatment additives:
 - a. After the mixing zone provided by Kansas Water Quality Standards, the discharge of water treatment additives shall not be harmful to human, animal or plant life uses in the receiving stream, as determined by laboratory and field bioassessment methods and procedures established by KDHE.
 - b. The permittee shall provide KDHE the results of toxicity tests or other data for proper evaluation to determine if the requirements in the paragraph above can be achieved, and obtain prior approval from KDHE to change or add any water treatment additives. In the event it is determined that the requirements in the paragraph above are not achieved, KDHE reserves the right to amend this permit to specify additional terms and conditions for toxic substances.
7. The permittee shall not allow any waste water containing pesticides with the exception of pyrethrin (cypermethrin) to be treated at this facility.
8. The permittee shall not allow any wastewater containing any PCBs (detection limit 0.5 µg/l) to be treated at this facility.
9. At least 180 days prior to start up of any modifications to this facility, permittee shall submit an updated permit application form to the Kansas Department of Health and Environment (KDHE) with an estimate of the flows and wastewater characteristics of the modified discharge. This permit may be reopened and modified after review of the above information by KDHE.
10. After one year of operation, the permittee may request for reduced sampling if the treatment systems pass the permit limits on first treatment cycle.