CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

STATEMENT OF BASIS
APPLICATION FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
TO DISCHARGE TO STATE WATERS

Permittee Name:	McCabe Union School District	Public Notice No.:	7-01-28
NPDES Permit Number:	CA0104281	Board Order No.:	R7-2002-0001

Mailing Address: McCabe Union School District
701 West McCabe Road
El Centro, CA 92243

Location: 701 West McCabe Road
El Centro, CA 92243

Contact Person: Dan Eddins, Superintendent

Telephone: (760) 352-5443

I. Status of Permit

On February 13, 2001, McCabe Union School District, owner (hereinafter referred to as the discharger), submitted an application to update its Waste Discharge Requirements and to renew its permit to discharge wastewater under the National Pollutant Discharge Elimination System (NPDES). The application is for the wastewater treatment facility located at the address mentioned above.

II. Facility Description

The discharger owns and operates a wastewater collection and disposal system and provides a sewerage service to the McCabe Union School District. The average daily discharge to the receiving waters is 0.0015 million gallons-per-day (MGD). The present design capacity is 0.005 MGD. Wastewater is discharged into the Wildcat Drain, located in the NW ¼ of Section 23, T16S, R13E, SBB&M, as shown on the attached site map. Discharged water flows through the Wildcat Drain for about three (3) miles to Rice Drain #3 and then seven (7) miles before entering the New River, about 35 miles from the Salton Sea.

The wastewater collection system conveys water to the treatment plant, which is an extended aeration package wastewater treatment plant. The District is in the process of replacing the current sewage treatment plant with a new plant. The design capacity of the new plant is 0.015 MGD. The primary reason for the new plant is the age of the existing plant (35 + years) and deterioration of the current facility. The District expects the new facility to be completed by December 14, 2001. Bacteriological limits will become effective on October 1, 2002.

III. Description of Discharge

All wastewater discharged at this facility is discharged through Outfall 001 to the Wildcat Drain. The discharge consists of secondary treated domestic wastewater.

IV. Receiving Water

The receiving water for Outfall OO1 is the Wildcat Drain. Water discharged from the facility flows through the Wildcat Drain, Rice Drain, the New River and ultimately to the Salton Sea.

The beneficial uses of waters in the Imperial Valley Drains are:

a. Fresh Water Replenishment for Salton Sea (FRSH)
b. Water Contact Recreation (REC I)[1,2]
c. Non-Contact Water Recreation (REC II)[2]
d. Warm Water Habitat (WARM)
e. Wildlife Habitat (WILD)
f. Preservation of Rare, Endangered or Threatened Species (RARE)[3]

V. Description of Discharge

a. Permit Application Summary

The following table summarizes the discharge characteristics of Outfall 001 as reported in the NPDES application received February 13, 2001:

Average Daily Flow	0.0015	MGD[4]
Maximum Daily Flow Rate	0.0015	MGD
Minimum Daily pH	6.30	
Maximum Daily pH	7.60	
Average Daily BOD[5] Concentration	7.0	mg/L[6]
Maximum Daily BOD Concentration	14.0	mg/L
Average Daily TSS[7] Concentration	7.0	mg/L
Maximum Daily TSS Concentration	14.0	mg/L

b. Discharge Monitoring Report (DMR) Data

A summary of DMR data is given in Table 1, contained later in this Fact Sheet. This data was taken from March 2000 through May 2001.

[1] Unauthorized Use
[2] The only REC I usage that is known to occur is from infrequent fishing activity
[3] Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the California Department of Fish and Game on its own initiative and/or at the request of the Regional Board; and such substantiation must be provided with a reasonable time frame as approved by the Regional Board
[4] Million Gallons-per-Day
[5] Biochemical Oxygen Demand
[6] Milligrams-per-Liter
[7] Total Suspended Solids

VI. Proposed Technology-Based Effluent Limitations

Regulations promulgated at 40 CFR §125.3(a)(1) require technology-based effluent limits for municipal dischargers to be placed in NPDES permits based on Secondary or Equivalent to Secondary Treatment Standards.

a. Secondary Treatment Standards

Constituents	Unit	30-Day [8] Arithmetic Mean Discharge Rate	7-Day [9] Arithmetic Mean Discharge Rate
	mg/L	30	45
20° C BOD_5 [10]	lbs/day[11]	3.8[12]	5.6[12]
	mg/L	30	45
Total Suspended Solids	lbs/day	3.8[12]	5.6[12]

The 30-day average percent removal of the pollutant parameters BOD_5 and total suspended solids shall not be less than 85 percent.

The hydrogen ion (pH) of the effluent shall be maintained within the limits of 6.0 to 9.0.

VII. Proposed Water Quality-Based Effluent Limitations

Effluent discharged from this facility could contain pollutants in sufficient quantities to affect receiving water quality. Pursuant to Section 13263, Article 4, Chapter 4 of the Porter Cologne Water Quality Control Act, the Regional Boards are required to issue Waste Discharge Requirements for discharges that could affect the quality of the State's waters. Furthermore, Federal Regulation 40 CFR 122.1 requires the issuance of NPDES permits for pollutants discharged from a point source to the waters of the United States. The draft discharge requirements contain specific discharge limitations for selected pollutants.

Constituents	Basis for Limitations
Biochemical Oxygen Demand (BOD)	Discharges to waters that support aquatic life, that is dependent on oxygen. Organic matter in the discharge may consume oxygen as it breaks down.
Total Suspended Solids (TSS)	High levels of suspended solids can adversely impact aquatic habitat. Untreated or improperly treated wastewater can contain high amounts of suspended solids.
Total Dissolved Solids	High levels of TDS can adversely impact aquatic life. The

[8] 30-Day Mean – The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days as specified in the Monitoring and Reporting Program.
[9] 7-Day Mean – The arithmetic mean of pollutant parameter values of samples collected in a period of 7 consecutive days as specified in the Monitoring and Reporting Program.
[10] Biochemical Oxygen Demand
[11] lbs/day - pounds per day
[12] Based on a design treatment capacity of o.015 MGD

	TDS limit is from the Basin Plan of the Region.
Hydrogen Ion (pH)	Hydrogen Ion (pH) is a measure of Hydrogen Ion concentration in the water. A range specified between 6 to 9 ensures suitability of biological life. This limitation has been adopted in the Basin Plan of the Region.
Toxicity	Toxicity testing ensures that the effluent does not contain metals, chemicals, pesticides or other constituents in concentrations toxic to aquatic life.
Escherichia Coli	These limits are required by the Basin Plan for waters designated for water contact recreation (RECI).
Flow	The design capacity of the treatment plant is 0.005 MGD. After expansion, the design capacity will be 0.015 MGD.

VIII. Proposed Effluent Limitations

Table 2, contained later in this Fact Sheet, summarizes the proposed effluent limitations for Outfall 001. Proposed effluent limitations are based on secondary treatment standards and Colorado River Basin Plan Water Quality Standards.

IX. Monitoring Requirements

Monitoring for those pollutants expected to be present in the Outfall OO1 will be required as shown on the proposed monitoring and reporting program and as required in the "*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*" adopted March 2, 2000.

X. Information Sources

While developing effluent limitations and receiving water limitations, monitoring requirements, and special conditions for the draft permit, the following information sources were used:

(1) EPA NPDES Application Forms 1 and 2A dated February 9, 2001.
(2) 40 CFR Parts 117,122, 123, 124, 136, 302, 403, and 503.
(3) Water Quality Control Plan (Colorado River Basin – Region 7) dated 1994.
(4) Regional Board files related to McCabe Union School District NPDES permit CA0104281.
(5) Porter-Cologne Water Quality Control Act with additions and amendments effective January 1, 2000.
(6) Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted March 2, 2000.
(7) California Toxics Rule, published May 18,2000 by U.S. EPA.
(8) National Toxics Rule (NTR), adopted by U.S. EPA on February 5, 1993.

Written Comments

Interested parties and agencies are invited to submit written comments on the proposed Waste Discharge Requirements and the Regional Board's Executive Officer's proposed determinations. Comments should be submitted in writing not later than November 30, 2001 to:

Executive Officer
California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

The application number shall appear on the first page of any submitted comments. All comments received by the above date will be considered in the formulation of the final determinations.

Public Hearing

The Waste Discharge Requirements will be considered by the Regional Board at a public hearing to be held at the City of La Quinta City Council Chambers, 78495 Calle Tampico, La Quinta on January 16, 2002.

Waste Discharge Requirements Appeals

Any person may petition the State Board to review the decision of the Regional Board regarding Waste Discharge Requirements. A petition must be made within 30 days of the Regional Board's hearing.

Additional Information

Persons wishing further information may write to the following address:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260
or call the Regional Board at (760) 346-7491.

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TABLE 1
DISCHARGE MONITORING REPORT
MCCABE UNION SCHOOL DISTRICT

	INFLUENT DATA		EFFLUENT DATA		
DATE	BOD (MG/L)	SS (MG/L)	BOD (MG/L)	SS (MG/L)	DO (MG/L)
March 2000			7	5	6.46
April 2000	134	116	6	13	5.25
May 2000			4	5	3.82
September 2000	109	140	6	6	4.09
October 2000	158	138	6	6	5.08
November 2000	164	178	11	13	6.07
December 2000			6	7	7.45
January 2001			17	15	7.83
February 2001	179	162	10	8	7.00
March 2001			5	6	7.90
April 2001	148	154	7	8	5.15
May 2001			12	15	6.58

	EFFLUENT DATA		
DATE	SETTLEABLE MATTER (ML/L)	FLOW TO CHANNEL (MGD)	PH
March 2000	0.01	0.0015	6.53
April 2000	0.01	0.0015	6.81
May 2000	0.01	0.0015	6.51
September 2000	0.01	0.0015	6.97
October 2000	0.01	0.0015	6.67
November 2000	0.03	0.0015	6.85
December 2000	0.01	0.0018	6.78
January 2001	0.03	0.0015	6.45
February 2001	0.10	0.0015	6.44
March 2001	0.10	0.0015	6.39
April 2001	0.10	0.0015	6.40
May 2001	0.23	0.0015	6.44

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TABLE 1 (CONT.)
DISCHARGE MONITORING REPORT
MCCABE UNION SCHOOL DISTRICT

	EFFLUENT DATA			
DATE	BIOASSAY[11] ACUTE		BIOASSAY[12] CHRONIC	
	Ceriodaphnia Dubia	Pimephales promelas	Ceriodaphnia dubia	Pimephales promelas
April 1992	80	100	<1.0	<1.0
March 1993	0	90	4.0	<1.0
January 1995		100	2.0	<1.0
October 1995	100	100	<1.0	<1.0
February 1997		92.5	<1.0	<1.0
October 1997	100	90	<1.0	<1.0
October 1998	100		<1.0	<1.0
November 1999	90	62.5	<1.0	2.0
May 2000	90	62.5	<1.0	<2.0
December 2000	0	95	2.0	<1.0
March 2001	90			

	RECEIVING WATER DATA			
	WILDCAT DRAIN Upstream of Discharge		WILDCAT DRAIN Downstream of Discharge	
DATE	DISSOLVED OXYGEN (MG/L)	PH	DISSOLVED OXYGEN (MG/L)	PH
March 2000				
April 2000				
May 2000				
September 2000				
October 2000	6.98	7.98	7.00	7.95
November 2000				
December 2000				
January 2001				
February 2001	8.20	6.98		
March 2001				
April 2001			7.89	8.30
May 2001				

[11] Bioassay Acute is measured in % survival in 100% effluent (C. dubia / P. promelas) at the end of 96 hours.
[12] Bioassay Chronic survival is measured in chronic toxicity units (C. dubia / P. promelas) at the end of 7 days.

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TABLE 2
PROPOSED EFFLUENT AND RECEIVING WATER LIMITATIONS
NPDES PERMIT NO. CA0104281
BOARD ORDER NO. R7-2002-0001
MCCABE UNION SCHOOL DISTRICT

EFFLUENT LIMITATIONS

1. Effluent discharged to the Wildcat Drain shall not contain constituents in excess of the following limits:

Constituent	Unit	30-Day Arithmetic Mean Discharge Rate	7-Day Arithmetic Mean Discharge Rate
20°C BOD_5	mg/L	30	45
	lbs/day[13]	3.8[14]	5.6[14]
Total Suspended Solids	mg/L	30	45
	lbs/day	3.8[14]	5.6[14]
Total Dissolved Solids	mg/L	4,000	4,500

2. The 30-day average percent removal of the pollutant parameters BOD_5 and total suspended solids shall not be less than 85 percent.

3. The hydrogen ion (pH) of the effluent shall be maintained within the limits of 6.0 to 9.0.

4. Beginning October 1, 2002, effluent discharged to Wildcat Drain shall not contain a total chlorine residual greater than 0.02 mg/L as an instantaneous maximum and 0.01 mg/L as a monthly average. Compliance for this effluent limitation shall be at a location acceptable to the Regional Board's Executive Officer or designee.

5. Beginning October 1, 2002, effluent discharged to Wildcat Drain shall not have an Escherichia Coli (E. Coli) concentration in excess of a log mean of Most Probable Number (MPN) of 126 MPN per 100 milliliters (based on a minimum of not less than five (5) samples for any 30-day period) nor shall any sample during any 30-day period, exceed 400 MPN per 100 milliliters.

6. No waste discharge shall exceed the effluent limitations for Group 1 or Group 2 pollutants. Exceedance of a Group 1 pollutant by 40 percent or a Group 2 pollutant by 20 percent or more is a serious violation. Group 1 and Group 2 pollutants are defined in 40 CFR Section 123.45.

7. The effluent shall not contain heavy metals, chemicals, pesticides or other constituents in concentrations toxic to aquatic life.

8. There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Board.

13 lbs/day - pounds-pert-day mass loading
14 Based on a design treatment capacity of 0.015 MGD

RECEIVING WATER LIMITATIONS

1. Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit. The discharge shall not cause the following in Wildcat Drain:

   a. Depress the concentration of dissolved oxygen below 5.0 mg/L. When dissolved oxygen in receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.

   b. Cause the presence of oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.

   c. Result in the deposition of pesticides or combination of pesticides to be detected in concentration that adversely affects beneficial uses.

   d. Cause aesthetically undesirable discoloration or odors in the receiving water.

   e. Cause an increase in fungi, slime, or other objectionable growth.

   f. Cause the turbidity to increase by more than ten (10) percent over background levels.

   g. Cause the normal ambient pH to fall below 6.0 or exceed 9.0 units.

   h. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.

   i. The natural receiving water temperature of surface waters shall not be altered by discharges of wastewater unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.

   j. Cause the maximum electrical conductivity to exceed background levels.

   k. Cause the chemical constituents to exceed concentrations that adversely affect beneficial uses or create nuisance.

   l. Cause toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

2. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Permit in accordance with such more stringent standards.