

Application for Third-Party Discharges to Riverside County Flood Control and Water Conservation District Facilities



June 2005

Purpose

The Purpose of this document is to specify a procedure to ensure that connections of third-party drains conveying non-stormwater flows to Riverside County Flood Control and Water Conservation District (District) facilities do not violate the District's three National Pollutant Discharge Elimination System (NPDES) stormwater permits (Permit). **The District must comply with the provisions of these NPDES permits in order to legally operate and maintain its flood control and drainage system infrastructure.**

The District, under permits issued by the Colorado River, Santa Ana, and San Diego Regional Water Quality Control Boards (RWQCB), is prohibited from allowing most non-stormwater discharges to enter its storm drains and flood control channels. Examples of non-stormwater discharges that may not be prohibited include rising ground waters, pumped groundwater, and discharges from foundation drains and footing drains. However, before the District can accept these types of non-stormwater discharges into its system, the Permits require that the District ensure that the discharges are not conveying pollutants to waters of the U.S.

Mail the completed application to:

NPDES Section
Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, CA 92501
951-955-1200

Regulatory Background

In 1987, Congress amended the Federal Clean Water Act (CWA) to require public agencies which serve urbanized areas to obtain permits to discharge urban stormwater runoff from municipally-owned drainage facilities including streets, highways, storm drains and flood control channels. In 1990, the United States Environmental Protection Agency (USEPA) promulgated enforceable regulations establishing municipal stormwater permit requirements under its National Pollutant Discharge Elimination System (NPDES) program. In California, USEPA has delegated its NPDES permitting authority to the State Water Resources Control Board (SWRCB). The SWRCB issues and enforces NPDES Municipal Stormwater permits through its nine Regional Water Quality Control Boards (RWQCB).

The District service area encompasses portions of three major watersheds: the Santa Ana, the Santa Margarita and the Whitewater. The discharge of stormwater from municipal storm drainage systems within each of these three watersheds is regulated pursuant to an NPDES municipal stormwater discharge permit administered by a separate RWQCB. **The District must comply with the provisions of these NPDES permits in order to legally operate and maintain its flood control and drainage system infrastructure.**

The stormwater discharge permits prohibit most non-stormwater discharges from entering District owned and operated facilities. The following categories of non-stormwater discharges are generally not prohibited, provided the discharge is not a source of pollutants to waters of the U.S.:

- a) Diverted stream flows;
- b) Rising ground waters;
- c) Uncontaminated ground water infiltration {as defined at 40 CFR 35.2005(20)} to municipally owned drainage facilities;
- d) Uncontaminated pumped ground waters;
- e) Foundation Drains;
- f) Springs;
- g) Water from crawl space pumps;
- h) Footing drains;
- i) Air conditioner condensation;
- j) Flows from riparian habitats and wetlands;
- k) Water line flushing;
- l) Landscape irrigation;
- m) Discharges from potable water sources other than water main breaks;
- n) Irrigation water;
- o) Lawn watering;
- p) Individual residential car washing;
- q) fire flows; and
- r) Dechlorinated swimming pool discharges.

All other non-stormwater discharges are strictly prohibited. Consultants and District Staff should consult with the District's NPDES section prior to initiating a discharge to verify that the aforementioned list of allowable non-stormwater discharges is current. You should also check with the governing RWQCB to determine whether a de Minimus permit may be required for the discharge.

Application to Discharge Non-Stormwater to District Facilities

Applicant: _____
Tract #: _____
APN #(s): _____
Developer: _____
Engineer: _____
Address: _____
Phone Number: _____

Please provide a grading plan, or equivalent, identifying:

- 1) The location, size and type of existing District Facilities within the project area.
- 2) The location(s) of the proposed connection points.
- 3) Elevation contours within and adjacent to the project area (can be based on USGS or District Topography if necessary).

If the discharge collection system is solely a preventative measure where discharges are not to be expected (such as a sub-drain system for an engineered fill on a slope), please clearly explain this and provide data on historical groundwater depths within the area. No further action may be required. Otherwise, please describe the types of discharges to be conveyed by this connection. Examples include rising ground water sub-drains, pumped ground water sub-drains, foundation drains, footing drains, etc:

Can the discharge(s) be conveyed to another outlet (e.g., sanitary sewer, treatment wetlands, existing watercourse, other non-district facility)? If not, please explain why:

Please characterize the discharge:

- 1) Discharge Rate (cfs or gpm, use range if appropriate):
- 2) Duration (e.g., days, hours or minutes as appropriate):
- 3) Frequency (e.g., daily, summer, continuous, intermittent, etc):

Please sample the discharge for the parameters listed on the attached tables. Groundwater analyses will be required for sub-drains draining rising and pumped groundwater. The Sample should be collected by a person knowledgeable of sample collection techniques and analyzed by an Environmental Laboratory Approval Program (ELAP)-certified lab. A copy of the lab analysis should be sent to the District's NPDES Section within 30 days of sample collection.

If the concentrations of any of the listed parameters were above Basin Plan Objectives, California Toxics Rule (CTR) levels, and/or any other applicable water quality standards, please identify proposed Best Management Practices to reduce pollutants to the Maximum Extent Practicable:

If you were unable to sample the discharge please describe why the sample could not be taken. Further, please also research and provide any existing water quality data that may be capable of characterizing the discharge. Based on this research, briefly describe the types of pollutants are commonly associated with the discharge. For ground water discharges, please provide analyses of ground water collected from surrounding areas.

Riverside County Flood Control and Water Conservation District
Non-Stormwater Flow Monitoring Parameter List

Project:

Non-stormwater discharges proposed for connection to the District's Municipal Separate Storm Sewer System (MS4) shall be tested for the following checked parameters¹:

Required (Checked)	District Test #	Parameter	Method	Reporting Limit		Estimated Cost
				Value	Unit	

Cations

✓	1265	Hardness, total (CaCO ₃) (mg/l)	EPA 200.7	3	mg/L	\$24.00
✓	1150	Calcium, total (mg/l)	EPA 200.7	1	ug/L	\$12.00
✓	1300	Magnesium, total (mg/l)	EPA 200.7	1	mg/L	\$12.00
✓	1540	Sodium, total (mg/l)	EPA 200.7	1	mg/L	\$12.00
✓	1500	Potassium, total (mg/l)	EPA 200.7	1	mg/L	\$12.00
✓	1680	Total Cations (me/l)	Calculation	0.05	me/L	---

Anions

✓	1035	Alkalinity, total (CaCO ₃) (mg/l)	SM 2320 B	3	mg/L	\$8.00
✓	1275	Hydroxide (OH) (mg/l)	SM 2320 B	3	mg/L	\$8.00
✓	1160	Carbonate (CO ₃) (mg/l)	SM 2320 B	3	mg/L	\$8.00
✓	1125	Bicarbonate (HCO ₃) (mg/l)	SM 2320 B	3	mg/L	\$8.00
✓	1640	Sulfate (SO ₄) (mg/l)	EPA 300.0	0.5	mg/L	\$8.00
✓	1165	Chloride (mg/l)	EPA 300.0	1	mg/L	\$8.00
✓	1340	Nitrogen, nitrate (N) (mg/l)	EPA 300.0	0.2	mg/L	\$8.00
✓	1255	Fluoride (mg/l)	SM 4500 F C	0.1	mg/L	\$8.00
✓	1675	Total Anions (me/l)	Calculation	0.05	me/L	---

Aggregate Properties

✓	1235	ElectroChemical Balance (me/l)	Calculation	N/A	me/L	---
✓	1710	pH, lab (units)	SM 4500 H+ B	1	pH units	\$8.00
✓	1205	Conductance, specific -lab (umho/cm)	SM 2510	1	umhos/cm	\$8.00
✓	1018	Air Temperature, field (deg. F)				---
✓	1660	Water Temperature, field (deg. F)				---
✓	1705	pH, field (units)				---

¹ Additional parameters may be required; please contact the District's NPDES representative for advice if you downloaded this form directly from the Internet.

Required (Checked)	District Test #	Parameter	Method	Reporting Limit		Estimated Cost
				Value	Unit	

Solids

✓	1625	Solids, total dissolved(resdu) (mg/l)	SM 2540 C	10	mg/L	\$12.00
✓	1630	Solids, total suspended(resdu) (mg/l)	SM 2540 D	5	mg/L	\$12.00
	1615	Solids, total (mg/l)	SM 2540 B	10	mg/L	\$12.00

Aggregate Organic Compounds

	1425	Oxygen Demand, biochemical BOD (mg/l)	SM 5210 B	5	mg/L	\$28.00
	1430	Oxygen Demand, chemical (COD) (mg/l)	SM 5220 D	10	mg/L	\$16.00
	1155	Carbon, total organic (TOC) (mg/l)	SM 5310 B	0.7	mg/L	\$32.00
	1380	Oil & Grease (mg/l)	EPA 1664	2.55	mg/L	\$45.00
	1270	Hydrocarbons, total petroleum (mg/l)	EPA 418.1	1	mg/L	\$60.00
	1460	Phenols (mg/l)	EPA 420.2	0.02	mg/L	\$24.00
✓	1435	Oxygen, dissolved field conc (mg/l)	SM 4500 O C	0.1	mg/L	\$8.00

General Physical

✓	1195	Color (units)	SM 2120B	3	Color Units	\$8.00
✓	1375	Odor (TON)	SM 2150	1	T.O.N	\$8.00
✓	1695	Turbidity, lab (NTU)	SM 2130 B	0.2	NTU	\$8.00
✓	262	Flow rate (cfs, note if measured or calculated)				---

Surfactants

		MBAS	SM5540C (not on list A)			

Nutrients

	1051	Ammonia-nitrogen (mg/l)	SM 4500 NH3H	0.1	mg/L	\$12.00
	1345	Nitrogen, nitrite (N) (mg/l)	SM4500 NO2 B	0.1	mg/L	\$8.00
	1360	Nitrogen, total Kjeldahl (N) (mg/l)	EPA 351.1	0.1	mg/L	\$32.00
	1350	Nitrogen, organic (N) (mg/l)	Calculation	0.1	mg/L	\$44.00
	1490	Phosphorus,total dissolved(P) (mg/l)	SM 4500 P B E	0.05	mg/L	\$16.00
	1495	Phosphorus,total insoluble(P) (mg/l)	SM 4500 P B E	0.05	mg/L	\$12.00
	1485	Phosphorus, total (P) (mg/l)	SM 4500 P B E	0.05	mg/L	\$16.00
	1365	Nitrogen, total inorganic (N) (mg/l)	Calculation	0.2	mg/L	---
	1355	Nitrogen, total (N) (mg/l)	Calculation	0.2	mg/L	---

Required (Checked)	District Test #	Parameter	Method	Reporting Limit		Estimated Cost
				Value	Unit	

Metals and Metalloids

	1070	Arsenic, total (mg/l)	EPA 200.8	2	ug/L	\$12.00
	1090	Barium, total (mg/l)	EPA 200.8	20	ug/L	\$12.00
	1135	Boron, total (mg/l)	EPA 200.7	100	ug/L	\$12.00
	1145	Cadmium, total (mg/l)	EPA 200.7	2	ug/L	\$12.00
	1180	Chromium, total, all valences (mg/l)	EPA 200.8	20	ug/L	\$12.00
✓	1210	Copper, total (mg/l)	EPA 200.8	10	ug/L	\$12.00
✓	1290	Lead, total (mg/l)	EPA 200.8	10	ug/L	\$12.00
	1310	Mercury, total (mg/l)	SM 3112 B	0.2	ug/L	\$18.40
✓	1320	Nickel, total (mg/l)	EPA 200.8	20	ug/L	\$12.00
	1520	Selenium, total (mg/l)	EPA 200.8	5	ug/L	\$12.00
	1535	Silver, total (mg/l)	EPA 200.8	10	ug/L	\$12.00
✓	1700	Zinc, total (mg/l)	EPA 200.8	10	ug/L	\$12.00
✓	1285	Iron, total (mg/l)	EPA 200.7	50	ug/L	\$12.00

Site-Specific

	N/A	Perchlorate				
	1661	Tetrachloroethene (PCE, ug/l)	EPA 624	0.5	ug/L	EPA 624
	1684	Trichloroethene (TCE, ug/l)	EPA 624	0.75	ug/L	EPA 624
	N/A	Total Petroleum Hydrocarbons				
	N/A	BTEX				
	N/A	Diesel fraction				
	N/A	NDMA				

