



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX**

**75 Hawthorne Street
San Francisco, CA 94105-3901**

Jan 15, 2003

CERTIFIED MAIL 7001 2510 0006 7303 3699
RETURN RECEIPT REQUESTED

In Reply Refer To: CWA-307-9-03-013

Jim Innes, Director of Engineering
Rippey Corporation
5000 Hillsdale Circle
El Dorado Hills, California 95762

Dear Mr. Innes:

This administrative order details the self-monitoring requirements under the Clean Water Act for the process-related wastewater discharges from Rippey Corporation to the sewers. These requirements would form the basis of any future sewer discharge permit issued by the El Dorado Irrigation District or the Regional Water Quality Control Board.

Pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act (Athe Act@) as amended [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)], enclosed is a Finding of Violation and Administrative Order, CWA-307-9-03-013, requiring Rippey Corporation to establish sampling protocols and begin self-monitoring in order to demonstrate consistent compliance with the applicable Federal standards, national prohibitions, and local limits. The key dates are as follows:

KEY DATES	ADMINISTRATIVE ORDER CWA-307-9-03-010
01/30/03	1. Submit written responses to the December 6, 2002 inspection report.
02/28/03	2. Establish compliance sampling point or points.
03/01/03	3-4. Begin self-monitoring multiple sampling points or a single overall point. Continuously or for each batch discharge for pH; Monthly for discharge flow rate; Four samples to determine baselines on formaldehyde, sulfides, etc.; Every six months for formaldehyde, sulfides, metals, cyanide, toxic organics, dissolved solids, and conventional pollutants.
02/29/04	End self-monitoring under this Administrative Order.
* * *	Self-monitoring reports are due on the 28th day of each month for the samples collected during the previous calendar month.

The Finding of Violation relates to the failure of Rippey Corporation to self-monitor for compliance with the Federal categorical pretreatment standards. This Finding of Violation is based on our August 13 and September 11, 2002 inspections and our review of the El Dorado Irrigation District's records. The December 6, 2002 inspection report was previously issued and is by reference made a part of this Finding of Violation and Administrative Order.

Any violation of the terms of this Administrative Order or pretreatment standards could subject Rippey Corporation to a civil action for appropriate relief pursuant to Section 309(b) of the Act [33 U.S.C. Section 1319(b)] and/or penalties under Section 309(d) of the Act [33 U.S.C. Section 1319(d)] of up to \$31,500 per day of violation. In addition, under Section 309(g) of the Act [33 U.S.C. Section 1319(g)], any violation of the pretreatment standards could also subject Rippey Corporation to an administrative penalty action of up to \$12,000 per day of violation not to exceed \$157,500. Sections 309(c)(1), (c)(2) and (c)(4) of the Act [33 U.S.C. Section 1319(c)(1), (c)(2) and (c)(4)] also provide penalties for negligent violations, knowing violations and knowingly making false statements.

The request for information included in this Administrative Order is not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because it is not an Ainformation collection request@ within the meaning of 44 U.S.C. Sections 3502(4), 3502(11), 3507, 3512, and 3518. Furthermore, it is exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons [44 U.S.C. Section 3502(4), 3502(11) and 5 CFR Section 1320.5(a)].

EPA has promulgated regulations to protect the confidentiality of the business information it receives. These regulations are set forth in 40 CFR Part 2, Subpart B and in the Federal Register at 41 F.R. 36902 (September 1, 1976) and 43 F.R. 40000 (September 8, 1978). A claim of business confidentiality may be asserted in the manner specified by 40 CFR Section 2.203(b) for part or all of the information requested. EPA will disclose business information covered by such a claim only as authorized under 40 CFR Part 2, Subpart B. If no claim accompanies the business information at the time EPA receives it, EPA may make it available to the public without further notice. Rippey Corporation may not withhold from EPA any information on the grounds that it is confidential.

If you have any questions regarding this matter, please contact Greg V. Arthur of my staff at (415) 972-3504 or at arthur.greg@epa.gov.

Sincerely,

*Original signed by:
Catherine Kuhlman*

Catherine Kuhlman
Director, Water Division

Enclosure

cc: Eric Munz, El Dorado Irrigation District
Melissa Hall, RWQCB-Sacramento

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 9

In the Matter of)	
)	
Ripsey Corporation)	FINDING OF VIOLATION
El Dorado Hills, California)	
)	AND ORDER
Proceedings under Section 308(a) and 309(a)(3),)	
(a)(4) and (a)(5)(A) of the Clean Water Act, as)	Docket No. CWA-307-9-03-013
amended, 33 U.S.C. Section 1318(a) and)	
1319(a)(3), (a)(4) and (a)(5)(A))	

STATUTORY AUTHORITY

The following Finding of Violation and Order (Docket No. CWA-307-9-03-013) is issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)] (hereinafter the Act). This authority has been delegated by the Administrator and the Regional Administrator to the Director of the Water Division of EPA Region 9.

FINDING OF VIOLATION

The Director of the Water Division of EPA Region 9 finds that Ripsey Corporation in El Dorado Hills (ARipsey@) is in violation of Section 307(d) of the Act [33 U.S.C. Section 1317(d)]. This Finding is made on the basis of the following facts:

1. Section 307(d) of the Act [33 U.S.C. Section 1317(d)] prohibits any owner or operator of any source from introducing pollutants into publicly owned treatment works (POTWs) in violation of any effluent standard or prohibition or pretreatment standard promulgated under Section 307 of the Act.

2. Under Section 307(b) of the Act [33 U.S.C. 1317(b)], EPA promulgated the following general pretreatment regulations and categorical pretreatment standards:
 - a. The Federal categorical pretreatment standards for organic chemicals, plastics, and synthetic fibers in 40 CFR Part 414 which require indirect discharging thermoplastic resin products manufacturers to comply with the daily-maximum and monthly-average standards for lead, zinc, cyanide, halogenated organics, organic solvents, phenolics, and coal tar derivatives listed in 40 CFR 414.111;
 - b. The national pretreatment standards in 40 CFR 403.12(e)(g) for all categorical industrial dischargers into POTWs which require, at least twice per year, the submission of periodic reports on continued compliance that indicate the concentration of the discharge for all Federally-regulated parameters and the flow rate of the discharge.
3. Ripsey is a corporation and therefore a person within the meaning of Section 502(5) of the Act, [33 U.S.C. Section 1362(5)]. Ripsey owns and operates a polyvinyl alcohol sponge manufacturing facility at 5000 Hillsdale Circle, in El Dorado Hills, California. Ripsey is a non-domestic source and introduces pollutants within the meaning of Section 502(6) of the Act [33 U.S.C. Section 1362(6)], into the domestic sewer system leading to an El Dorado Irrigation District wastewater treatment plant, which is a POTW within the meaning of Section 307(b) and the pretreatment regulations in 40 CFR 403.3(o). Ripsey is therefore subject to the provisions of the Act, [33 U.S.C. Section 1251 et seq., including Section 307, 33 U.S.C. Section 1317].
4. On August 13 and September 11, 2002, an EPA inspector and a representative of the El Dorado Irrigation District conducted a compliance evaluation inspection of Ripsey:

- a. Facility Description: Riphey owns and operates a facility in El Dorado Hills which manufactures polyvinyl alcohol sponge:
1. The manufacturing of polyvinyl alcohol sponge involves (1) the mixing of polyvinyl alcohol with starch for pore formation, (2) the addition of formaldehyde, ammonia, and hydrochloric acid as a reaction catalyst to initiate an acetalization with an aldehyde reaction, (3) the injection molding of the sponge slurry, (4) oven curing, (5) cured sponge cleaning, (6) finished sponge packaging, and (7) injection mold cleaning;
 2. Acetalization with an aldehyde is a form of polymerization by condensation in which one or more new rings in polymer chains are formed as water condenses out;
 3. Riphey manufactures polyvinyl alcohol sponge for semiconductor-related cleaning and medical-related uses;
 4. Riphey is assigned four SIC codes for the wholesale distribution and sales of electrical equipment, computers, peripherals, software, industrial supplies, and miscellaneous durable goods, and a fifth SIC code for the manufacturing of specialty industrial machinery;
- b. Wastewater Discharge: Riphey discharges process-related wastewaters into domestic sewer lines which feed into the El Dorado Hills Wastewater Treatment Plant for discharge into Deer Creek:
1. The sponge production operations of acetalization and injection molding generate (1) plant and equipment wash waters, (2) rinses from washing of sponges, (3) spills within secondary containment;

2. The clean room operations generate wash waters from the final cleaning and packaging of sponges;
 3. All process-related wastewaters generated by sponge production are treated for organics and pH through a bio-treatment unit prior to batch discharge from a final holding tank to the sewers through the first of two sewer connections;
 4. All process-related wastewaters generated by the clean room operations are treated for pH prior to batch discharge from a final holding tank to the sewers through the second of two sewer connections;
 5. The following compliance sampling discharge point(s) at Ripsey have been established by El Dorado Irrigation permit:
 - i. IWD-1 is the outlet from the final holding tank following the bio-treatment unit into the first of two facility sewer connections to the El Dorado Irrigation District sewers;
 - ii. IWD-2 is the outlet from the final holding tank following clean room pH adjustment into the second of two facility sewer connections to the El Dorado Irrigation District sewers.
- c. Categorical Standards: At Ripsey, the Federal categorical pretreatment standards for organic chemical plastics and synthetic fibers in 40 CFR 414 apply to wastewater discharges to the sewers from polyvinyl alcohol sponge manufacturing:
1. Ripsey qualifies for regulation under 40 CFR 414 because (1) Subpart D of the rule specifically applies to the discharges from the manufacturing of polyvinyl

alcohol resins and its products via the polymerization by condensation reaction chemistry, and (2) Ripsey is not assigned to any of the listed SIC codes either for inclusion into or exclusion from the rule;

2. Wastewater discharges from the sponge production operations to the sewers through IWD-1, and from the clean room operations through IWD-2, are all subject to the Federal categorical pretreatment standards for organic chemicals, plastics, and synthetic fibers for indirect discharging point sources in 40 CFR 414.111, since Ripsey indirectly discharges to a water of the United States through a POTW;
 3. The wastewaters discharged from Ripsey to the sewers through the sewer connections to the sewer are all subject to the Federal categorical pretreatment standards without adjustment;
 - d. National Prohibitions: The general prohibitions in 40 CFR 403.5(a) against the pass-through of pollutants through the POTW to the sludge or receiving waters and against the interference with POTW operations, as well as the specific prohibition in 40 CFR 403.5(b) against discharges with pH=s below 5.0 and a closed-cup flashpoint under 140EF, apply to non-domestic wastewaters discharged from Ripsey to the El Dorado Irrigation District sewers;
 - e. Local Limits: The El Dorado Irrigation District has local limits for pH, sulfides, formaldehyde, biochemical oxygen demand, and total suspended solids that apply to non-domestic discharges in its service area.
5. Ripsey violated Section 307(d) of the Act [33 U.S.C. Section 1317(d)] in that:

- a. The following unadjusted Federal categorical pretreatment standards, and national prohibitions apply to the discharges from Rippey to the sewers:

Toxic Organics (µg/l)	Federal Standards (Daily-Max)	(Month-Avg)	Nat'l Prohib & Local Limits (Inst-Max)
acenaphthene	47	19	-
anthracene	47	19	-
benzene	134	57	-
bis(2-ethylhexyl)phthalate	258	95	-
carbon tetrachloride	380	142	-
chlorobenzene	380	142	-
chloroethane	295	110	-
chloroform	325	111	-
di-n-butyl phthalate	43	10	-
1,2-dichlorobenzene	794	196	-
1,3-dichlorobenzene	380	142	-
1,4-dichlorobenzene	380	142	-
1,1-dichloroethane	59	22	-
1,2-dichloroethane	574	180	-
1,1-dichloroethylene	60	22	-
1,2-dichloropropane	794	196	-
1,3-dichloropropylene	794	196	-
diethyl phthalate	113	46	-
dimethyl phthalate	47	19	-
4,6-dinitro-o-cresol	277	78	-
ethylbenzene	380	142	-
fluoranthene	54	22	-
fluorene	47	19	-
formaldehyde	-	-	5000
hexachlorobenzene	749	196	-
hexachlorobutadiene	380	142	-
hexachloroethane	794	196	-
methyl chloride	295	110	-
methylene chloride	170	36	-
naphthalene	47	19	-
nitrobenzene	6402	2237	-
2-nitrophenol	231	65	-
4-nitrophenol	576	162	-
phenanthrene	47	19	-
pyrene	48	20	-

Toxic Organics - continued (µg/l)	Federal Standards		Nat'l Prohib & Local
	(Daily-Max)	(Month-Avg)	Limits (Inst-Max)
tetrachloroethylene	164	52	-
toluene	74	28	-
1,2,4-trichlorobenzene	794	196	-
1,1,1-trichloroethane	59	22	-
1,1,2-trichloroethane	127	32	-
trichloroethylene	69	26	-
vinyl chloride	172	97	-
Compliance	@ IWD-1 and IWD-2		@ IWD-1 and IWD-2
Sampling Point(s)			

- b. The following unadjusted Federal categorical pretreatment standards, national prohibitions, and local apply to the discharges from Ripsey to the sewers:

Inorganics and Conventional (mg/l)	Federal Standards		Nat'l Prohib & Local
	(Daily-Max)	(Month-Avg)	Limits (Inst-Max)
chromium	-	-	1.0
copper	-	-	2.7
cyanide-total	1.20	0.42	-
lead-total	0.69	0.32	-
manganese	-	-	0.5
nickel	-	-	2.6
zinc-total	2.61	1.05	2.6
biochem oxygen demand	-	-	300.
total suspended solids	-	-	300.
sulfides	-	-	1.0
oil+grease	-	-	150.
closed-cup flashpoint	-	-	<140EF
temperature-max	-	-	150EF
pH-(min and max)	-	-	6.0 and 9.0 s.u.
Compliance	@ IWD-1 and IWD-2		@ IWD-1 and IWD-2
Sampling Point(s)			

- c. EPA reviewed the El Dorado Irrigation District sample record for Riphey and found that Riphey discharges to the sewers without a valid permit that applies the Federal standards, national prohibitions, and local limits;
 - d. Riphey did not self-monitor the discharges from the polyvinyl alcohol sponge manufacturing operations to the sewer from IWD-1 nor IWD-2 for all of the regulated pollutants at least twice per year from January 1, 1998 to June 30, 2002, resulting in at least 9 days of violation.
6. The November 15, 2002 EPA report of the August 13 and September 11, 2002 inspection of Riphey was previously issued on December 6, 2002 and is by reference made part of this Finding of Violation and Administrative Order.

ADMINISTRATIVE ORDER

Taking these Findings into consideration and considering the potential environmental and human health effects of the violations and all good faith efforts to comply, EPA has determined that compliance in accordance with the following requirements is reasonable. Pursuant to Section 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Act [33 U.S.C. Section 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)], IT IS HEREBY ORDERED that Rippey comply with the following requirements:

Compliance Sampling Protocols

1. By **JANUARY 30, 2003**, Rippey shall submit a response to each of the numbered Sections 2.0 through 5.2 of the previously issued inspection report.
2. By **FEBRUARY 28, 2003**, Rippey shall establish compliance sampling points for each process wastewater sewer connection. The compliance sampling points must satisfy the following conditions:
 - a. They must be representative of and account for all process-related wastewater discharges to the sewers;
 - b. They must not include contributions of domestic sewage from on-site domestic sources such as bathrooms, lunchrooms, or air conditioners;
 - c. The El Dorado Irrigation District must have around-the-clock, unescorted access. For the purposes of this Order, the sampling points for the individual sewer inlets are designated as IWD-1, and IWD-2, while a hypothetical sample point, combining sponge production and clean room discharges, is designated as IWD-overall.

- d. Riphey may consolidate all flows through IWD-1, if the process-related wastewaters from the clean room are rerouted to discharge through the final holding tank following bio-treatment.

Self-Monitoring

3. Schedule - Dual Sampling Points: Riphey shall self-monitor for a year from March 1, 2003 through February 29, 2004, in accordance with either the schedule for dual sampling points here in item 3 of this Order or either of the alternate schedules in item 4 of this Order for a single comprehensive sampling point:

For the final holding tank following biotreatment @ IWD-1

- a. **FOR EACH BATCH**, Riphey shall self-monitor the batch discharge from the final holding tank to the sewer for pH;
- b. **FOR EACH MONTH**, Riphey shall determine the total volume of wastewater discharged from the final holding tank to the sewer, and indicate the days on which a batch discharge occurred;
- c. **ON EACH OF THE FIRST FOUR DAYS** when the final holding tank is batch discharged to the sewers, Riphey shall self-monitor each batch discharge to the sewers for formaldehyde, and sulfides;
- d. **ONCE EVERY SIX MONTHS**, Riphey shall self-monitor the batch discharge from the final holding tank to the sewers for formaldehyde, sulfides, biochemical oxygen demand, total suspended solids, total dissolved solids, and the Federally-

regulated pollutants in 40 CFR 414.111 as listed in item 5(a) of the attached

Finding of Violation;

For the clean room final holding tank discharge @ IWD-2

- e. **FOR EACH BATH DISCHARGE**, Riphey shall self-monitor the batch discharge from the final holding tank to the sewer for pH;
 - f. **FOR EACH MONTH**, Riphey shall determine the total volume of wastewater discharged from the final holding tank to the sewer, and indicate the number of batches discharged on each of the days on which a batch discharge occurred;
 - g. **FOR EACH BATCH DISCHARGE DURING ONE DAY IN MARCH**, Riphey shall self-monitor each batch discharge from the final holding tank to the sewers for the Federally-regulated pollutants in 40 CFR 414.111 as listed in item 5(a) of the attached Finding of Violation;
 - h. **ONCE EVERY SIX MONTHS**, Riphey shall self-monitor the batch discharge from the final holding tank to the sewers for formaldehyde, and the Federally-regulated pollutants in 40 CFR 414.111 as listed in item 5(a) of the attached Finding of Violation.
4. Schedule - Single Comprehensive Sampling Point: Riphey shall self-monitor for a year from March 1, 2003 through February 29, 2004, in accordance with either of the schedules for a single sampling point here in item 4 of this Order if all process-related wastewater flows discharge through a single sewer connection or the schedule above in item 3 of this Order for dual sampling points:

For overall discharges routed through @ IWD-1

- a. **FOR EACH BATCH**, Ripsey shall self-monitor the batch discharge from the final holding tank to the sewer for pH;
- b. **FOR EACH MONTH**, Ripsey shall determine the total volume of wastewater discharged from the final holding tank to the sewer, and indicate the days on which a batch discharge occurred;
- c. **ON EACH OF THE FIRST FOUR DAYS** when the final holding tank is batch discharged to the sewers, Ripsey shall self-monitor each batch discharge to the sewers for formaldehyde, and sulfides;
- d. **ONCE EVERY SIX MONTHS**, Ripsey shall self-monitor the batch discharge from the final holding tank to the sewers for formaldehyde, sulfides, biochemical oxygen demand, total suspended solids, total dissolved solids, and the Federally-regulated pollutants in 40 CFR 414.111 as listed in item 5(a) of the attached Finding of Violation.

For combined discharges after the final holding tanks @ IWD-overall

- e. Ripsey shall install a continuous pH meter, and **CONTINUOUSLY** self-monitor the discharge to the sewer for pH;
- f. **FOR EACH MONTH**, Ripsey shall determine the daily-average and daily-maximum flow rates of the wastewater discharged to the sewer;
- g. **ON EACH OF THE FIRST FOUR DAYS**, Ripsey shall self-monitor the discharge to the sewers for formaldehyde, sulfides;
- h. **ONCE EVERY SIX MONTHS**, Ripsey shall self-monitor the discharge to the

sewers for formaldehyde, sulfides, biochemical oxygen demand, total suspended solids, total dissolved solids, and the Federally-regulated pollutants in 40 CFR 414.111 as listed in item 5(a) of the attached Finding of Violation.

5. Sampling and Analysis: Rippey shall self-monitor and analyze using the sampling protocols and EPA approved analytical methods indicated below:

Parameter	Sampling Protocol	Analytical Method
flow rate	continuous flow meter	-
chromium	24-hour flow-weighted composite	EPA 218.2
copper	24-hour flow-weighted composite	EPA 220.2
nickel	24-hour flow-weighted composite	EPA 249.2
lead	24-hour flow-weighted composite	EPA 239.2
manganese	24-hour flow-weighted composite	EPA 272.2
zinc	24-hour flow-weighted composite	EPA 289.2
total cyanide	grab	EPA 335.2
total toxic organics	grab	EPA 624/625
pH	continuous pH meter	-
biochem oxy demand	24-hour flow-weighted composite	EPA 405.1
suspended solids	24-hour flow-weighted composite	EPA 160.2
sulfides	grab	EPA 376.2
dissolved solids	24-hour flow-weighted composite	EPA 160.2

6. Grab Sampling in Lieu of Composite Monitoring: If Rippey collects samples of batch discharges to the sewer from a final holding tank with a minimum retention-time capacity of at least 24-hours, the following sampling protocols in Item 5, above, may be changed:
- Grab sampling may replace the 24-hour flow-weighted composite sampling methods for chromium, copper, nickel, lead, manganese, zinc, biochemical oxygen demand, total suspended solids and total dissolved solids;
 - Single field measurements may replace continuous metering for pH;
 - Tank volume estimations may replace continuous metering for flow rate.

Submissions

7. By the **TWENTY-EIGHTH (28th) DAY OF EACH MONTH**, Riphey shall submit all self-monitoring results for the previous month. The first monthly report is due on April 28, 2003 for the March 2003 self-monitoring. The 12th-and-last monthly report is due on March 28, 2004 for the February 2004 self-monitoring.
8. For each sample, Riphey shall record the sample results, the EPA analytical methods used, the date, time and location of sampling, and the type of sample (ie. 24-hour composite, grab), the name of the laboratory used.
9. All reports submitted pursuant to this Order shall be signed by a principal executive officer of Riphey and shall include the following self-certifying statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
10. This Order is not and shall not be interpreted to be an NPDES permit under Section 402 of the Act [33 U.S.C. Section 1342], nor an El Dorado Irrigation District nor RWQCB sewer discharge permit under 40 CFR 403.8(f)(iii), nor shall it in any way relieve Riphey of obligations imposed by the Act, or any other Federal, State or local law, including the El Dorado Irrigation District sewer use ordinances. The request for information included in this Order is not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because it is not an Ainformation collection request@

within the meaning of 44 U.S.C. Sections 3502(4), 3502(11), 3507, 3512, and 3518.

Furthermore, it is exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons [44 U.S.C. Sections 3502(4) and 3502 (11) and 5 CFR Section 1320.5(a)].

11. All submissions shall be mailed to the following addresses:

U.S. ENVIRONMENTAL PROTECTION AGENCY
75 Hawthorne Street
San Francisco, California 94105
Attn: Greg V. Arthur (WTR-7)

REGIONAL WATER QUALITY CONTROL BOARD
3443 Routier Road, Suite A
Sacramento, California 95827-3098
Attn: Melissa Hall

THE EL DORADO IRRIGATION DISTRICT
2890 Mosquito Road
Placerville, California 95667
Attn: Eric Munz

12. This Order takes effect upon signature.

Original signed by: Catherine Kuhlman

Jan 15, 2003

Catherine Kuhlman
Director, Water Division

Dated