

PALOS VERDES LANDFILL
REMEDIAL INVESTIGATION REPORT

APPENDIX E.12

CERTIFICATION FOR SAN JOSE CREEK
WATER QUALITY LABORATORIES

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CERTIFICATION FOR SAN JOSE CREEK
WATER QUALITY LABORATORIES

DEPARTMENT OF HEALTH SERVICES

2151 BERKELEY WAY
BERKELEY, CA 94704-1011
(510) 540-2800



December 13, 1991

Rodger B. Baird
San Jose Creek Water Quality Laboratory
1965 South Workman Mill Road
Whittier, CA 90601

Certificate No.: 1052

Dear Mr. Baird:

This is to advise you that the laboratory named above has been certified/registered as an environmental testing laboratory pursuant to the provisions of the California Environmental Laboratory Improvement Act of 1988 (Health and Safety Code, Division 1, Part 2, Chapter 7.5, commencing with Section 1010).

The fields of testing for which this laboratory has been certified/registered under this Act are indicated in the enclosed "List of Approved Fields of Testing and Analytes." Certification/registration shall remain in effect until November 30, 1993 unless revoked. This certificate is subject to an annual fee as prescribed by Section 1017(a), Health and Safety Code, on the anniversary date of the certificate.

Please note that your laboratory is required to notify the Environmental Laboratory Accreditation Program of any major changes in the laboratory such as the transfer of ownership, laboratory director, change in location, or structural alterations which may affect adversely the quality of analyses (Section 1014(b), California Health & Safety Code).

Until the new regulations pertaining to environmental laboratories are adopted under the Act, the existing regulations pertaining to drinking water and hazardous waste testing laboratories (California Code of Regulations, Title 22, Sections 64481-64499 and 67602-67606) will remain in effect to the extent that they are not superseded by the provisions of the Act.

Your continued cooperation is essential in order to establish a reputation for the high quality of the data produced by environmental laboratories certified by the State of California.

If you have additional questions, please contact Mr. William Ray at (510) 540-2800.

Sincerely,

A handwritten signature in dark ink, appearing to read "W. C. Kulasingam".

George C. Kulasingam, Ph.D., Manager
Environmental Laboratory
Accreditation Program

Enclosure

ENVIRONMENTAL LABORATORY ACCREDITATION/REGISTRATION
List of Approved Fields of Testing and Analytes

(Updated 5/27/92)

San Jose Creek Water Quality Laboratory
1965 South Workman Mill Road
Whittier, CA 90601

PHONE: (213) 699-7411
COUNTY: Los Angeles

LABORATORY CATEGORY: District
CERTIFICATE NUMBER: 1052

Y = CERTIFIED; N = NOT CERTIFIED

1.0	Microbiology of Drinking Water and Wastewater -----			(11-16-88)
1.1	Total Coliforms by Multiple Tube Fermentation ----Y	1.5	Heterotrophic Plate Count -----	Y
1.2	Fecal Coliforms by Multiple Tube Fermentation ----Y	1.6	Total Coliforms by MMO-MUG Drinking Water Only--N	
1.3	Total Coliforms by Membrane Filter -----Y	1.7	Fecal Coliforms by MMO-MUG Drinking Water Only--N	
1.4	Fecal Coliforms by Membrane Filter -----Y	1.99	Enterococcus by MTF -----	Y
2.0	Inorganic Chemistry and Physical Properties of Drinking Water excluding Toxic Chemical Elements -----			(-----)
2.1	Alkalinity -----N	2.8	MBAS -----	N
2.2	Calcium -----N	2.9	Nitrate -----	N
2.3	Chloride -----N	2.10	Nitrite -----	N
2.4	Corrosivity -----N	2.11	Sodium -----	N
2.5	Fluoride -----N	2.12	Sulfate -----	N
2.6	Hardness -----N	2.13	Total Filterable residue and Conductivity -----	N
2.7	Magnesium -----N	2.14	Iron (Colorimetric Only) -----	N
		2.15	Manganese (Colorimetric Only) -----	N
3.0	Analysis of Toxic Chemical Elements in Drinking Water -----			(-----)
3.1	Arsenic -----N	3.8	Manganese -----	N
3.2	Barium -----N	3.9	Mercury -----	N
3.3	Cadmium -----N	3.10	Selenium -----	N
3.4	Chromium, total -----N	3.11	Silver -----	N
3.5	Copper -----N	3.12	Zinc -----	N
3.6	Iron -----N	3.13	Aluminum -----	N
3.7	Lead -----N	3.14	Asbestos -----	N
4.0	Organic Chemistry of Drinking Water (measurement by GC/MS combination) -----			(-----)
4.1	Volatile Organics -----N	4.3	Acid and Base/Neutral Compounds -----	N
4.2	Trihalomethanes -----N			
5.0	Organic Chemistry of Drinking Water (excluding measurements by GC/MS combination) -----			(-----)
5.1	Total Trihalomethanes -----N	5.5	Aromatic Volatiles -----	N
5.2	Chlorinated pesticides -----N	5.6	EDB and DBCP -----	N
5.3	Chlorophenoxy herbicides -----N	5.7	Polychlorinated Biphenyls -----	N
5.4	Halogenated Volatiles -----N	5.8	Carbamates -----	N
		5.9	Nitrogen/Phosphorus Pesticides -----	N
6.0	Radiochemistry -----			(-----)
6.1	Gross alpha and beta and counting error -----N	6.7	Iodine 131 -----	N
6.2	Total Radium -----N	6.8	Radioactive Strontium -----	N
6.3	Radium 226 -----N	6.9	Tritium -----	N
6.4	Uranium -----N	6.10	Gamma emitting Isotopes -----	N
6.5	Radon 222 -----N	6.11	Gross Alpha by Co-precipitation -----	N
6.6	Radioactive Cesium -----N			
7.0	Shellfish Sanitation -----			(-----)
7.1	Shellfish meat Microbiology -----			N
7.2	Paralytic Shellfish Poison -----			N
8.0	Aquatic Toxicity Bioassays -----			(08-26-81)
8.1	All Fresh Water: Static,Static/Renewal and Continuous Flow Bioassays; and Estuarine/Marine: Static, Static/Renewal, and Continuous Flow Bioassays -----			Y
8.2	Hazardous wastes Section 66696 (a) (4) -----			(01-21-88) Y
9.0	Physical Properties Testing of Hazardous Waste -----			(11-16-89)
9.1	Ignitability (Flashpoint determination Section 66702) -----			Y

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George C. Kulasingam, Ph.D., Manager
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ENVIRONMENTAL LABORATORY ACCREDITATION/REGISTRATION
List of Approved Fields of Testing and Analytes

Updated 5/27/92

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PHONE: (213) 699-7411
COUNTY: Los Angeles

LABORATORY CATEGORY: District
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1.0	Microbiology of Drinking Water and Wastewater -----	(11-16-88)
1.1	Total Coliforms by Multiple Tube Fermentation ----Y	
1.2	Fecal Coliforms by Multiple Tube Fermentation ----Y	
1.3	Total Coliforms by Membrane Filter -----Y	
1.4	Fecal Coliforms by Membrane Filter -----Y	
1.5	Heterotrophic Plate Count -----Y	
1.6	Total Coliforms by MMO-MUG Drinking Water Only--N	
1.7	Fecal Coliforms by MMO-MUG Drinking Water Only--N	
1.99	Enterococcus by MTF -----Y	
2.0	Inorganic Chemistry and Physical Properties of Drinking Water excluding Toxic Chemical Elements -----(-----)	
2.1	Alkalinity -----N	2.8 MBAS -----N
2.2	Calcium -----N	2.9 Nitrate -----N
2.3	Chloride -----N	2.10 Nitrite -----N
2.4	Corrosivity -----N	2.11 Sodium -----N
2.5	Fluoride -----N	2.12 Sulfate -----N
2.6	Hardness -----N	2.13 Total Filterable residue and Conductivity ----N
2.7	Magnesium -----N	2.14 Iron (Colorimetric Only) -----N
		2.15 Manganese (Colorimetric Only) -----N
3.0	Analysis of Toxic Chemical Elements in Drinking Water -----(-----)	
3.1	Arsenic -----N	3.8 Manganese -----N
3.2	Barium -----N	3.9 Mercury -----N
3.3	Cadmium -----N	3.10 Selenium -----N
3.4	Chromium, total -----N	3.11 Silver -----N
3.5	Copper -----N	3.12 Zinc -----N
3.6	Iron -----N	3.13 Aluminum -----N
3.7	Lead -----N	3.14 Asbestos -----N
4.0	Organic Chemistry of Drinking Water (measurement by GC/MS combination) -----(-----)	
4.1	Volatile Organics -----N	4.3 Acid and Base/Neutral Compounds -----N
4.2	Trihalomethanes -----N	
5.0	Organic Chemistry of Drinking Water (excluding measurements by GC/MS combination) -----(-----)	
5.1	Total Trihalomethanes -----N	5.5 Aromatic Volatiles -----N
5.2	Chlorinated pesticides -----N	5.6 EDB and DBCP -----N
5.3	Chlorophenoxy herbicides -----N	5.7 Polychlorinated Biphenyls -----N
5.4	Halogenated Volatiles -----N	5.8 Carbamates -----N
		5.9 Nitrogen/Phosphorus Pesticides -----N
6.0	Radiochemistry -----(-----)	
6.1	Gross alpha and beta and counting error -----N	6.7 Iodine 131 -----N
6.2	Total Radium -----N	6.8 Radioactive Strontium -----N
6.3	Radium 226 -----N	6.9 Tritium -----N
6.4	Uranium -----N	6.10 Gamma emitting Isotopes -----N
6.5	Radon 222 -----N	6.11 Gross Alpha by Co-precipitation -----N
6.6	Radioactive Cesium -----N	
7.0	Shellfish Sanitation -----(-----)	
7.1	Shellfish meat Microbiology -----N	
7.2	Paralytic Shellfish Poison -----N	
8.0	Aquatic Toxicity Bioassays -----(08-26-88)	
8.1	All Fresh Water: Static,Static/Renewal and Continuous Flow Bioassays; and Estuarine/Marine: Static, Static/Renewal, and Continuous Flow Bioassays -----Y	
8.2	Hazardous wastes Section 66696 (a) (4) -----(01-21-88)-----Y	
9.0	Physical Properties Testing of Hazardous Waste -----(11-16-89)	
9.1	Ignitability (Flashpoint determination Section 66702) -----Y	

9.2	Corrosivity - pH determination				
9.3	Corrosivity - Corrosivity towards steel (Section 66708)				
9.4	Reactivity (Section 66705)				
10.0	Inorganic Chemistry and Toxic Chemical Elements of Hazardous Waste				
10.1	Antimony			7041(11-16-89)	
10.2	Arsenic			7060(11-16-89)	
10.3	Barium		6010(11-16-89)		
10.4	Beryllium		6010(11-16-89)		
10.5	Cadmium		6010(11-16-89)		
10.6	Chromium, total		6010(11-16-89)		
10.7	Cobalt		6010(11-16-89)		
10.8	Copper		6010(11-16-89)		
10.9	Lead		6010(11-16-89)		
10.10	Mercury			7470(11-16-89)	
10.11	Molybdenum		6010(11-16-89)		
10.12	Nickel		6010(11-16-89)		
10.13	Selenium			7740(11-16-89)	
10.14	Silver		6010(11-16-89)		
10.15	Thallium			7841(11-16-89)	
10.16	Vanadium		6010(11-16-89)		
10.17	Zinc		6010(11-16-89)		
10.18	Chromium (VI)			7196(11-16-89)	
10.19	Cyanide			9010(11-16-89)	
10.20	Fluoride		340.2(11-16-89)		
10.21	Sulfide				
10.22	Total Organic Lead				
11.0	Extraction Tests of Hazardous Waste				(11-16-89)
11.1	Section 66700		Y		
11.2	Extraction Procedure Toxicity		N		
					11.3 Toxicity Characteristic Leaching Procedure (TCLP)
12.0	Organic Chemistry of Hazardous Waste (measurement by GC/MS combination)				(11-16-89)
12.1	Volatile compounds				
12.2	Semivolatile compounds			8270	
13.0	Organic Chemistry of Hazardous Waste (excluding measurements by GC/MS combination)				
13.1	Halogenated Volatiles			8010(11-16-89)	
13.2	Non-Halogenated Volatiles				
13.3	Aromatic Volatiles			8020(11-16-89)	
13.4	Acrolein, Acrylonitrile, Acetonitrile			8030(11-16-89)	
13.5	Phenols				
13.6	Phthalate Esters				
13.7	Organochlorine Pesticides			8080(11-16-89)	
13.8	Polychlorinated Biphenyls (PCBs)			8080(11-16-89)	
13.9	Nitroaromatics and Cyclic Ketones				
13.10	Polynuclear Aromatic Hydrocarbons				
13.11	Chlorinated Hydrocarbons				
13.12	Organophosphorus Pesticides				
13.13	Chlorinated Herbicides				
13.14	Carbamates				
13.15	Total Petroleum Hydrocarbons				
14.0	Bulk Asbestos Analysis				()
14.1	Section 66699 (1% or greater asbestos concentrations)				
15.0	Substances Regulated Under the California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) and Not Included in Other listed Groups.				

16.0 Wastewater Inorganic Chemistry, Nutrients and Demand -----			(11-16-89)
16.1 Acidity -----	Y	16.22 Oxygen, dissolved -----	Y
16.2 Alkalinity -----	Y	16.23 pH -----	Y
16.3 Ammonia -----	Y	16.24 Phenols -----	Y
16.4 Biochemical Oxygen Demand -----	Y	16.25 Phosphate, ortho -----	Y
16.5 Boron -----	Y	16.26 Phosphorus, total -----	Y
16.6 Bromide -----	N	16.27 Potassium -----	Y
16.7 Calcium -----	Y	16.28 Residue, Total -----	Y
16.8 cBOD -----	Y	16.29 Residue, Filterable (TDS) -----	Y
16.9 Chemical Oxygen Demand -----	Y	16.30 Residue, Nonfilterable (TSS) -----	Y
16.10 Chloride -----	Y	16.31 Residue, Settleable (SS) -----	Y
16.11 Chlorine Residual, total -----	Y	16.32 Residue, Volatile -----	Y
16.12 Cyanide -----	Y	16.33 Silica -----	Y
16.13 Cyanide amenable to Chlorination -----	Y	16.34 Sodium -----	Y
16.14 Fluoride -----	Y	16.35 Specific Conductance -----	Y
16.15 Hardness -----	Y	16.36 Sulfate -----	Y
16.16 Kjeldahl Nitrogen -----	Y	16.37 Sulfide (includes total and soluble) -----	Y
16.17 Magnesium -----	Y	16.38 Sulfite -----	Y
16.18 Nitrate -----	Y	16.39 Surfactants (MBAS) -----	Y
16.19 Nitrite -----	Y	16.40 Tannin and Lignin -----	N
16.20 Oil and Grease -----	Y	16.41 Turbidity -----	Y
16.21 Organic Carbon -----	Y	16.42 Iron (Colorimetric Only) -----	N
		16.43 Manganese (Colorimetric Only) -----	N
		16.99 Non-polar Oil & Grease -----	Y
		Mercaptan	
		Nid	
17.0 Toxic Chemical Elements in Wastewater -----			(11-16-89)
17.1 Aluminum -----	Y	17.17 Molybdenum -----	Y
17.2 Antimony -----	Y	17.18 Nickel -----	Y
17.3 Arsenic -----	Y	17.19 Osmium -----	N
17.4 Barium -----	Y	17.20 Palladium -----	N
17.5 Beryllium -----	Y	17.21 Platinum -----	N
17.6 Cadmium -----	Y	17.22 Rhodium -----	N
17.7 Chromium (VI) -----	Y	17.23 Ruthenium -----	N
17.8 Chromium, total -----	Y	17.24 Selenium -----	Y
17.9 Cobalt -----	Y	17.25 Silver -----	Y
17.10 Copper -----	Y	17.26 Strontium -----	N
17.11 Gold -----	N	17.27 Thallium -----	Y
17.12 Iridium -----	N	17.28 Tin -----	Y
17.13 Iron -----	Y	17.29 Titanium -----	Y
17.14 Lead -----	Y	17.30 Vanadium -----	Y
17.15 Manganese -----	Y	17.31 Zinc -----	Y
17.16 Mercury -----	Y	17.99 Lithium -----	Y
18.0 Organic Chemistry of Wastewater (measurements by GC/MS combination) -----			(11-16-89)
18.1 Volatile Organics -----	N		
18.2 Acid and Base/Neutral compounds -----	N		
19.0 Organic Chemistry of Wastewater (excluding measurements by GC/MS combination) -----			(11-16-89)
19.1 Halogenated Volatiles -----	Y	19.8 Organochlorine Pesticides -----	Y
19.2 Aromatic Volatiles -----	Y	19.9 Polychlorinated Biphenyls -----	Y
19.3 Acrolein, Acrylonitrile, Acetonitrile -----	Y	19.10 Nitroaromatics and Cyclic Ketones -----	N
19.4 Phenols -----	N	19.11 Polynuclear Aromatics -----	Y
19.5 Benzidine -----	Y	19.12 Haloethers -----	N
19.6 Phthalate Esters -----	N	19.13 Carbamates -----	N
19.7 Nitrosoamines -----	N	19.99 Volatile Fatty Acids -----	Y

This Laboratory is also certified for additional hazardous material test categories under Certificate No. _____.

This laboratory is also certified for drinking water test categories under Certificate No. _____.