



INTEROFFICE CORRESPONDENCE

DATE: December 21, 1994

TO: M. C. Burmeister, EOM, Bldg. T891A, X5891

FROM: L. J. Peterson-Wright, OU 5, 6, 7 Closures, Bldg. 080, X8558 

SUBJECT: OU7 PROPOSED PERFORMANCE STANDARDS - LJPW-025-94

DOE Order: 4700.1

Action: Review performance standards

Attached please find the OU 7 Proposed Performance Standards. These standards have been reviewed by the public and the regulatory agencies in the Proposed Action Memorandum. The Proposed Action Memorandum was approved by the CDPHE on December 8, 1994.

Please review these performance standards with respect to the capability of OU 1, OU 2 and/or sitewide facility to treat the OU 7 effluent. Please respond at your earliest possible convenience.

I appreciate your assistance during the conceptual design phase of this project and I look forward to working with you during operation. If you have any questions please call.

LJPW:cb

Attachment:
As Stated

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ADM. COPY
A-OU07-000432

Constituents	Ave. Conc. (µg/L)	Max Conc. (µg/L)	OU7 Performance Standards (µg/L)	Reference	Comment
Antimony	22	60.4	14	5 CCR 1002-8 state standard drinking water	Standard 30-day average
Barium	640	1,550	1,000	5 CCR 1002-8 state standard human health; CWA-AWQC for protection of human health, water and fish ingestion	
Calcium	151,000	212,000	N/A		Nutrient species will not be considered for treatment
Iron	80,510	155,000	13,200	5 CCR 1002-8 Segment 5 standard. Temporary modification to Segment 5 until April 1, 1996	1,000 is a Segment 5 standard. (Standard is for 1-day)
Lithium	48	107	1,000		No federal or state surface or water quality standards exist. Suggest a value of 1,000 as 10 times the CLP Detection Limit
Magnesium	34,719	49,000			Nutrient species will not be considered for treatment
Manganese	1,611	2,490	1,000	Segment 4 and 5 Standard	Standard is 30-day average
Potassium	6,436	11,700			Nutrient species will not be considered for treatment

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Silicon	13,508	44,000			Nutrient species will not be considered for treatment
Sodium	71,367	110,000			Nutrient species will not be considered for treatment
Strontium	919	1,370	2,000		No federal or state surface or water quality standards exist. Suggest a value of 2,000 as 10 times the CLP Detection Limit
Tin	67	306	1,000		No federal or state surface or water quality standards exist. Suggest a value of 1,000 as 10 times the CLP Detection Limit
Zinc	2,945	16,000	350	350 µg/L is Segment 5 standard. 350 µg/L is the temporary modification to Segment 5 until April 1, 1996.	2,000 µg/L is WQCC basic surface water standard for agriculture (30-day average)
Gross Beta	11	17	4 mrem/year	SDWA MCL	mrem/yr
Strontium-89/90	1.3	4.06	8	SDWA MCL	
Tritium	349	1,500	1,000	DOE DCG value	
Uranium-235	0.1	0.7	600	DOE DCG value	
Nitrite	30.33	63	500	5 CCR 1002-8 Segment 4 and 5 standard	Standard is 1-day
1,1-Dichloroethane	6	10	59	6 CCR 1007-3, Section 268.43	
2-Butanone	12	76	280	6 CCR 1007-3, Section 268.43	

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2-Hexanone	5	10	100		No Federal I or State surface or water quality standards exist. Suggest a value of 100 as 10 times the CLP Detection Limit
4-Methyl-2-pentanone	11	87	140	6 CCR 1007-3 Section 268.43	
Acetone	33	220	280	6 CCR 1007-3 Section 268.43	
Benzene	2	5	1	5 CCR 1002-8, State Standard for Water Supply	
Carbon Disulfide	3	6	14	5 CCR 1002-8, State Standard for Water Supply	
Chloroethane	22	57	270	6 CCR 1007-3 Section 268.43	
Chloromethane	5	10	190	5 CCR 1002-8, State Standard for Water and Fish Supply	
Ethylbenzene	13	18	680	5 CCR 1002-8, State Standard for Water Supply	
Methylene Chloride	14	190	4.7	5 CCR 1002-8, Segment 4 and 5 standard	
Tetrachloroethane	2	5	1	5 CCR 1002-8, 3.1.11 PQL	
Toluene	38	88	1000	SDWA MCL	
Total Xylenes	14	25	10,000	SDWA MCL	
Trichloroethene	2	5	66	5 CCR 1002-8, Segment 5 standard. Temporary modification to Segment 5 until April 1, 1996	5 µg/L=5 CCR 1002-8, State standard for water supply

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Vinyl Acetate	7	49	500		No federal or state surface or water quality standards exist. Suggest a value of 500 as 10 times the Method 8240 Detection Limit
Vinyl Chloride	5	11	2	5 CCR 1002-8, State Standard for Water Supply	
2,4-Dimethylphenol	5	10	2,120	5 CCR 1002-8 State Standard for Aquatic Life	Acute Value
2-Methylnaphthalene	16	23	100		Not listed in 40 CFR 302.4 or 6 CCR 1007-3 Pt. 261 Appendix VII. Suggest a value of 100 as 10 times the CLP Detection Limit
4-Methylphenol	4	10	100		Not listed in 40 CFR 302.4 or 6 CCR 1007-3 Pt 261 Appendix VII. Suggest a value of 100 as 10 times the CLP Detection Limit (Note: PPRG for residential surface water swimming is 140 mg/L)
Acenaphthene	3	3	10	5 CCR 1002-8, 3.1.11 PQL	0.0028 is Segment 4 and 5 standard
Bis(2-ethylhexyl) phthalate	5	12	10	5 CCR 1002-8 3.1.11 PQL	1.8 = WQCC basic surface water standard

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Dibenzofuran	1	2	10		Not listed in 40 CFR 302.4 or 6 CCR 1007-3 Pt 261 Appendix VII. Suggest a values of 100 as 10 times the CLP Detection Limit
Diethyl Phthalate	3	10	23,000	5 CCR 1002-8, State Standard for Water and Fish	
Fluorene	2	3	10	5 CCR 1002-8, 3.1.11 PQL	0.0028 is Segment 4 and 5 standard
Napthalene	18	22	10	5 CCR 1002-8, 3.1.11 PQL	0.0028 is Segment 4 and 5 standard
Phenanthrene	4	5	10	5 CCR 1002-8, 3.1.11 PQL	0.0028 is Segment 4 and 5 standard

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