# CHAPTER 8 QUALITY STANDARDS FOR WYOMING GROUNDWATERS

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1	CHAPTER 8
2 3 4	QUALITY STANDARDS FOR WYOMING GROUNDWATERS
5 6	Section 1. Authority.
7 8 9	These regulations are promulgated pursuant to Sections 35-11-101 through 1104 of the Wyoming Statutes, specifically Section 35-11-302, and no person shall cause, threaten or allow violation of any water quality standard or provision contained herein.
10 11	Section 2. Definitions.
12 13 14	The following definitions supplement those definitions contained in Section 35-11-103 of the Wyoming Environmental Quality Act.
15 16 17	(a) "Aquifer" means a zone, stratum or group of strata that can store and transmit water in sufficient quantities for a specific use.
18 19 20 21	(b) "Background" means the constituents or parameters and the concentrations or measurements that describe water quality and water quality variability prior to a subsurface discharge.
22 23 24	(c) "Below-Surface Receiver (Receiver)" means any zone, interval, formation or unit in the subsurface that can accept water or fluid from other sources.
25 26 27 28 29 30 31	(d) "Domestic Water" means a water that is suitable for uses, including but not limited to, drinking, gardening and other household uses, municipal uses and farmstead uses, including water used in the washing or hydro-cooling of farm products destined for human consumption on the farm, for sale on the fresh food market or for delivery to a processing plant for canning, freezing or other type of preparation prior to marketing. Classification of Domestic water does not mean that it meets the national drinking water standards.
32 33 34	(e) "Fluid" means any material that flows or moves whether semisolid liquid, sludge, gas or any other form or state.
35 36 37	(f) "Groundwater" means subsurface water that fills available openings in rock or soil materials such that they may be considered water saturated under hydrostatic pressure.
38 39 40 41	(g) "Groundwaters of the State" are all bodies of underground water that are wholly or partially within the boundaries of the State; Groundwaters of the State is synonymous with Groundwaters of Wyoming.

(h) "Hazardous Material (Substance)" means any matter of any description including petroleum related products and radioactive material (substance) that, when discharged into any waters of the State presents an imminent and substantial hazard to public health or welfare and shall include all materials (substances) so designated by the U.S. Environmental Protection Agency in the Federal Register for March 13, 1978 (Part III), Water Programs, Hazardous Substances.

(i) "Milliequivalents Per Liter," abbreviated meq/L, used to report the Residual Sodium Carbonate concentration in water used for irrigation, is defined as 0.001 of the equivalent weight of the ion per liter volume.

(j) "Milligrams Per Liter," abbreviated mg/L, means milligrams of solute per liter of solution -- equivalent to parts per million assuming unit density of water.

(k) "Parameter" means one of a set of physical or chemical properties whose measured values determine the characteristics of a fluid.

(l) "pH" is a term to express the intensity of the acid or basic condition. A pH value of 7.0 at 25 degrees Celsius (C) is neutral, with pH's of less than 7.0 progressively more acid and pH's of greater than 7.0 progressively more basic.

(m) "Picocuries Per Liter," abbreviated pCi/L, is a measure of radioactivity of waters or fluids. A picocurie is equal to 10-12 curie; a curie is defined as 3.7 x 1010 disintegrations per second.

(n) "Residual Sodium Carbonate", abbreviated RSC, is defined as twice the concentration of carbonate or bicarbonate a water would contain after subtracting an amount equivalent to the calcium plus the magnesium, and is a measure of potential hazard that exists when waters high in carbonate and bicarbonate and relatively low in calcium and magnesium are used for irrigation.

(o) "Sodium Adsorption Ratio", abbreviated SAR, of a water is defined by the U.S. Department of Agriculture Laboratory (1954) as: where ion concentrations are expressed in meq/L. The SAR predicts reasonably well the degree to which irrigation water tends to enter into cation-exchange reactions in soil.

(p) "Standard Unit", abbreviated s.u., is the unit of measurement used to describe the numerical pH of a solution, fluid or pollutant.

(q) "Subsurface Discharge" means a discharge to a below-surface receiver.

(r) "Total Dissolved Solids," abbreviated TDS, is the sum of the dissolved mineral constituents in water, expressed as mg/L.

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Classified.

(s) "Toxic Materials (Substances)" are those materials (substances) or combinations of materials (substances), including disease-causing agents, that, after discharge and upon exposure, ingestion, inhalation or assimilation into any environmentally significant organism, either directly from the environment or indirectly by ingestion through food chains, may cause death, disease, behavioral abnormalities, cancer, genetic malfunctions, physiological malfunctions (including malfunctions in reproduction of offspring) or physical deformations in such organisms or their offspring; and includes all materials (substances) so designated as toxic by the U.S. Environmental Protection Agency in the Federal Register for December 24, 1975 (Part IV), Water Programs, National Interim Primary Drinking Water Regulations.

- (t) "Underground Water" means subsurface water that is any body of water under the surface of the earth, including water in the vadose zone and groundwater.
- (u) "Vadose Zone" means the unsaturated zone in the earth, between the land surface and the top of the first saturated aquifer that is not a perched water aquifer. The vadose zone characteristically contains liquid water under less than atmospheric pressure, and water vapor and air or other gases at atmospheric pressure. Perched water bodies exist within the vadose zone.
- (v) "Virtually Free" means a concentration less than the concentration that is the lower limit of detection.

#### Section 3. Underground Water Protected.

- (a) All waters, including Groundwaters of the State, within the boundaries of the State of Wyoming are the property of the State; and control of the beneficial use of waters of the State resides with the Wyoming State Engineer.
- (b) Nothing herein contained shall be construed so as to interfere with the right of any person to use water from any underground water source for any purpose identified in W.S. 35-11-102 and 35-11-103(c)(i); or to limit or interfere with the jurisdiction, duties or authorities of other Wyoming State agencies or officials.
- (c) Protection shall be afforded all underground water bodies (including water in the vadose zone). Water being used for a purpose identified in W.S. 35-11-102 and 103(c)(i) shall be protected for its intended use and uses for which it is suitable. Water not being put to use shall be protected for all uses for which it is suitable.

## Section 4. Quality Standards Prescribed; Groundwaters of the State

(a) Standards are prescribed to protect the natural quality of underground water:

127	(i) Receiving pollution or wastes directly from a subsurface discharge or by
128	migrating water or fluid of a discharge;
129	
130	(ii) Invaded by underground water of inferior quality as a result of well or
131	exploration hole drilling or completion practices;
132	
133	(iii) From pollution that may result from above-ground facilities capable of
134	causing or contributing to pollution;
135	
136	(iv) From pollution that may result from surface mining operations.
137	
138	(b) Groundwaters of the State are classified in order to apply standards to protect
139	water quality. Groundwaters of the State are classified by use, and by ambient water quality.
140	
141	(c) Waters that are known sources of supply and appropriated for uses identified in
142	W.S. 35-11-102 and 103(c)(i) are classified herein as: Domestic water; Water for fish and
143	aquatic life; Water for agriculture; Water for livestock; and, Water for industry. A discharge or
144	activity that impacts an underground source of water for existing uses identified in W.S. 35-11-
145	102 and 103(c)(i) shall not make the affected water unsuitable for its intended use or uses, at any
146	place or places of withdrawal or natural flow to the surface.
147	
148	(d) Unappropriated waters are classified by ambient water quality.
149	
150	(i) Class I Groundwater of the State - This water is suitable for domestic use.
151	The ambient quality of underground water of this suitability does not have a concentration in
152	excess of any of the standards for Class I Groundwater of the State (see Table I, page 9).
153	
154	(ii) Class II Groundwater of the State - This water is suitable for agricultural
155	use where soil conditions and other factors are adequate. The ambient quality of underground
156	water of this suitability does not have a concentration in excess of any of the standards for Class
157	II Groundwater of the State (see Table I, page 9).
158	
159	(iii) Class III Groundwater of the State - This water is suitable for livestock.
160	The ambient quality of underground water of this suitability does not have a concentration in
161	excess of any of the standards for Class III Groundwater of the State (see Table I, page 9).
162	
163	(iv) Class Special (A) Groundwater of the State -This water is suitable for fish
164	and aquatic life. The ambient quality of underground water of this suitability does not have a
165	concentration in excess of any of the standards for Class Special (A) Groundwater of the State
166	(see Table I, page 10).
167	
168	(v) Underground water of Class I, II, III or Special (A)
169	

(A) Shall not contain biological, hazardous, toxic or potentially toxic materials or substances in concentrations or amounts that exceed maximum allowable concentrations based upon information of the EPA in the Federal Register for December 24, 1975 (Part IV), Water Programs, National Interim Primary Drinking Water Regulations; and in the Federal Register for March 13, 1978 (Part II), Water Programs, Hazardous Substances. In addition, underground water of Class I, II, III or Special (A) shall not contain any biological, hazardous, toxic or potentially toxic materials or substances in concentrations or amounts that, based upon the latest available scientific information and as determined by the Administrator, will impair this water for its use suitability or that may contribute to a condition in contravention of groundwater quality standards or to any toxic or hazardous effect on natural biota.

(vi) A discharge into an aquifer containing Class I, II, III or Special (A)

(A) Groundwater of the State shall not result in variations in the range of any parameter, or concentrations of constituents in excess of the standards of these regulations at any place or places of withdrawal or natural flow to the surface. A discharge that results in concentrations in excess of standards shall be permitted if post-discharge water quality can be returned to a quality of use equal to, or better than, and consistent with the uses for which the water was suitable prior to the operation.

(vii) Class IV Groundwater of the State - This water is suitable for industry. The quality requirements for industrial water supplies range widely and almost every industrial application has its own standards.

(A) Class IV (A) Groundwater of the State has a total dissolved solids concentration not in excess of 10,000 mg/L.

(B) Class IV (B) Groundwater of the State has a total dissolved solids concentration in excess of 10,000 mg/L.

(C) A discharge into an aquifer containing Class IV (A) or IV (B) Groundwater of the State shall not result in the water being unfit for its intended use.

(D) A discharge into an aquifer with Class IV (A) or IV (B) Groundwater of the State shall not result in oil and grease concentrations in excess of 10 mg/L or a lesser amount if a concentration in excess of the lesser amount is determined to be toxic; or oil and grease in excess of background concentrations of the underground water, whichever is greater, at any place or places of withdrawal or natural flow to the surface.

(E) A discharge into an aquifer with Class IV (A) or IV (B) Groundwater of the State shall not result in radioactivity concentrations or amounts that exceed the standards for Class I through III and Special (A) Groundwaters of the State; or in

212	concentrations or amounts that exceed background concentrations of the underground water,
213	whichever is greater, at any place or places of withdrawal or natural flow to the surface.
214	(E) A discharge into an equifor with Class IV (A) or IV (B)
<ul><li>215</li><li>216</li></ul>	(F) A discharge into an aquifer with Class IV (A) or IV (B) Groundwater of the State shall not result in biological, hazardous, toxic or potentially toxic
217	materials or substances including pesticides, insecticides or herbicides in concentrations or
218	amounts that exceed maximum allowable concentrations, based upon information of the EPA in
219	the Federal Register for December 24, 1975 (Part IV), Water Programs, National Interim
220	Primary Drinking Water Regulations, and in the Federal Register for March 13, 1978 (Part II),
221	Water Programs, Hazardous Substances; or that exceed background concentrations of the
222	underground water, whichever is greater, at any place or places of withdrawal or natural flow to
223	the surface.
224	the surface.
225	In addition, a discharge shall not result in any biological, hazardous, toxic or potentially
226	toxic materials or substances, in concentrations or amounts that, based on the latest available
227	scientific information and as determined by the Administrator, will impair the quality of ambient
228	Groundwaters of the State of this class; or that may contribute to a condition in contravention of
229	groundwater quality standards or cause, allow or permit any deleterious effect on natural biota.
230	ground with quality summands of cause, and we of permits and account of the cause of causes of causes, and we of permits and account of the causes of causes of causes, and we of permits and account of the causes of causes of causes, and we of permits and account of the causes of causes
231	(viii) Groundwater of the State found closely associated with commercial
232	deposits of hydrocarbons and/or other minerals, or that is considered a geothermal resource, is
233	Class V (Hydrocarbon Commercial), Class V (Mineral Commercial) or Class V (Geothermal)
234	Groundwater of the State.
235	
236	(A) A discharge into a Class V (Hydrocarbon Commercial)
237	Groundwater of the State shall be for the purpose of the production of oil and gas and shall not
238	result in the degradation or pollution or waste of other water resources.
239	
240	(B) A discharge into a Class V (Mineral Commercial)
241	Groundwater of the State shall be for the purpose of mineral production and shall not result in
242	the degradation or pollution of the associated or other groundwater and, at a minimum, be
243	returned to a condition and quality consistent with the pre-discharge use suitability of the water.
244	
245	(C) A discharge into a Class V (Geothermal) Groundwater of the State
246	shall be for the purpose of the production of geothermal resources and shall not result in the
247	degradation or pollution or waste of other water resources.
248	
249	(ix) Class VI Groundwater of the State may be unusable or unsuitable for use:
250	
251	(A) Due to excessive concentration of total dissolved solids or specific
252	constituents; or
253	

254 255	technological	(B) Is so contaminated that it would be economically or lly impractical to make the water useable; or	
256	C		
257 258	to make use	(C) Is located in such a way, including depth below the sureconomically and technologically impractical.	face, so as
259	Section	on 5. Classification for Groundwater of the State Affected by a l	Discharge:
260		on by Aquifer and Area.	Jischai ge,
261	Clussificatio	n by riquiter und rived.	
262	(a)	Classification of Groundwaters of the State shall be based on the water	er quality
263	` '	this chapter; excepting, a Class I Groundwater of the State shall be class	
264		er quality and the technical practicability and economic reasonableness of	•
265		er quality to meet use suitability standards.	n trouting
266	unioione wate	ar quality to meet use surfacility standards.	
267	(b)	Underground water quality shall be classified for an aquifer that is or	may be
268	` ′	subsurface discharge or other activity identified in Section 4.a. of these	•
269			1.680100101101
270	(c)	Classification shall be made:	
271	( )		
272		(i) Whenever there is pollution or the threat of pollution to a Grow	undwater of
273	the State; or		
274	,		
275		(ii) The physical, chemical, radiological or biological properties o	f any
276	Groundwater	of the State are or may be altered by man's action.	J
277		, , , , , , , , , , , , , , , , , , ,	
278	(d)	Classification shall be for a water in a specified locally defined area b	y named and
279	described aqu	uifer or receiver. Any aquifer or receiver in its regional setting may have	•
280	_	cations by defined area or areas.	
281		·	
282		(i) The name shall be a recognized geologic name whenever poss	ible;
283			
284		(ii) The description shall include a lithologic description.	
285			
286	(e)	The lateral and vertical limits of an aquifer or receiver, for purposes of	$\mathbf{f}$
287	classification	n, shall be based on existing water use, ambient water quality and geolog	gic and
288		haracteristics of the aquifer or of the receiver.	
289			
290	(f)	An underground water may be reclassified if new or additional data w	arrant
291	reclassification	on	

292 **TABLE I** 

U U	NDERGROUND WATER CLASS
I	II III
Use Suitability Constituent or Domestic*	Agriculture Livestock
Parameter Concentration	** Concent.** Concent.**
Aluminum (Al)	5.0 5.0
Ammonia (NH <sub>3</sub> -N) $0.5^7$	
Arsenic (As) 0.05	0.1 0.2
Barium (Ba) 2.0	
Beryllium (Be)	0.1
Boron (B) 0.75	0.75 5.0
Cadmium (Cd) 0.005	0.01 0.05
Chloride (Cl) 250.0	100.0 2000.0
Chromium (Cr) 0.10	0.1 0.05
Cobalt (Co)	0.05 1.0
Copper (Cu) 1.0	0.2 0.5
Cyanide (CN) 0.2	
Fluoride (F) 4.0	
Hydrogen Sulfide(H <sub>2</sub> S) 0.05	
Iron (Fe) 0.3	5.0
Lead (Pb) 0.015	5.0 0.1
Lithium (Li)	2.5
Manganese (Mn) 0.05	0.2
Mercury (Hg) 0.002	0.00005
Nickel (Ni)	0.2
Nitrate ( $NO_3$ - $N$ ) 10.0	
Nitrite ( $NO_2$ - $N$ ) 1.0	10.0
(NO <sub>3</sub> +NO <sub>2</sub> )-N	100.0
Oil & Grease Virtually Fre	
Phenol 0.001	
Selenium (Se) 0.05	0.02 0.05
Silver (Ag) 0.10	
Sulfate (SO <sub>4</sub> ) 250.0	200.0 3000.0
Total Dissolved Solids (TDS) 500.0	2000.0 5000.0
Vanadium (V)	0.1 0.1
Zinc (Zn) 5.0	2.0 25.0
pH 6.5-8.5	4.5-9.0s.u. 6.5-8.5s.u
SAR	8.0
RSC	1.25 meq/L
Combined Total Radium 226	
and Radium 228 5pCi/L	5pCi/L 5pCi/L
Total Strontium 90 8pCi/L	8pCi/L 8pCi/L

Gross alpha particle			
radioactivity (including			
Radium 226			
but excluding		15pCi/L	15pCi/L
Radon and Uranium <sup>8</sup>	15pCi/L	_	_

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297 **TABLE I** 

TABLE I	_ <del>_</del>
	UNDERGROUND WATER CLASS
Use Suitability Constituent or Parameter	Special (A)
·	Fish/Aquatic Life
	Concentration*
Aluminum (Al)	0.1
Ammonia (NH <sub>3</sub> )	$0.02^{1}$
Arsenic (As)	0.05
Barium (Ba)	5.0
Beryllium (Be)	$0.011-1.3^3$
Boron (B)	
Cadmium (Cd)	$0.0004 - 0.015^3$
Chloride (Cl)	
Chromium (Cr)	0.05
Cobalt (Co)	
Copper (Cu)	$0.01 - 0.04^3$
Cyanide (CN)	0.005
Fluoride (F)	
Hydrogen Sulfide (H <sub>2</sub> S)	$0.002^2$
Iron (Fe)	0.5
Lead (Pb)	$0.004 - 0.15^3$
Lithium (Li)	
Manganese (Mn)	1.0
Mercury (Hg)	0.00005
Nickel (Ni)	$0.05 - 0.4^3$
Nitrate (NO <sub>3</sub> -N)	
Nitrite (NO <sub>2</sub> -N)	
(NO <sub>3</sub> +NO <sub>2</sub> -N	
Oil & Grease	Virtually Free
Phenol	0.001
Selenium (Se)	0.05
Silver (Ag)	$0.0001$ - $0.00025^3$
Sulfate (SO <sub>4</sub> )	
Total Dissolved Solids(TDS)	$500.0^4 - 1000.0^5 - 2000.0^6$

<sup>\*</sup> This list does not include all constituents in the national drinking water standards.

<sup>\*\*</sup> mg/L, unless otherwise indicated

Uranium (U)	$0.03-1.4^3$
Vanadium (V)	
Zinc (Zn)	$0.05 - 0.6^3$
рН	6.5-9.0 s.u.
Combined Total Radium 226 and Radium	
$228^{8}$	5 pCi/L
Total Strontium 90	8 pCi/L
Gross alpha particle radioactivity (including	
Radium 226 but excluding Radon and	
Uranium <sup>8</sup>	15pCi/L

<sup>\*</sup>mg/L, unless otherwise indicated

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**TABLE I** 

#### **Explanation for Superscripts Used in Table I**

<sup>1</sup>Unionized ammonia: When ammonia dissolves in water, some of the ammonia reacts with water to form ammonium ions. A chemical equilibrium is established that contains unionized ammonia (NH<sub>3</sub>), ionized ammonia (NH<sub>4</sub><sup>+</sup>) and hydroxide ions (OH<sup>-</sup>). The toxicity of aqueous solutions of ammonia is attributed to NH<sub>3</sub>; therefore, the standard is for unionized ammonia. [Note: 0.02 mg/L NH<sub>3</sub> is equivalent to 0.016 NH<sub>3</sub> as (N)]

<sup>2</sup>Undissociated H<sub>2</sub>S: The toxicity of sulfides derives primarily from H<sub>2</sub>S, rather than from the dissociated hydrosulfide (HS<sup>-</sup>) or sulfide (S<sup>2-</sup>) ions; therefore, the standard is for the toxic undissociated H<sub>2</sub>S.

<sup>3</sup>Dependent on hardness: The toxicity of metals in natural waters varies with the hardness of the water; generally, the limiting concentration is higher in hard water than in soft water.

<sup>4</sup>Egg hatching

<sup>5</sup>Fish rearing

<sup>6</sup>Fish and aquatic life

<sup>7</sup>Total ammonia nitrogen

<sup>8</sup>Requirements and procedures for the measurement and analysis of gross alpha particle activity, Radium 226 and Radium 228 shall be the same as requirements and procedures of the U.S. Environmental Protection Agency, National Interim Primary Drinking Water Regulations, EPA-570/9-76-003, effective June 24, 1977.

329 330	30 Wastes.		Standards for the Underground Management of Hazardous or Toxic		
331 332	The undergra	ound me	nogom	ant of westes includes the temporary storage and the ultimate	
333	_		_	ent of wastes includes the temporary storage and the ultimate toxic wastes in below-surface receivers. The following standards	
	_			_	
334 335	appry to any	undergi	Tourid Si	torage or disposal of hazardous or toxic wastes.	
336	(a)	The b	olow s	urface receiver:	
337	(a)	THE	0C10W-81	urrace receiver.	
338		(i)	Ic on	extensive sedimentary rock stratum or strata free of complex faulting	
339	and folding	` /		any underground water recharge area;	
340	and folding a	and dista	ant mon	if any underground water recharge area,	
341		(ii)	Is ade	equately separated from aquifers both above and below;	
342		(11)	15 aac	equatery separated from aquirers both above and below,	
343		(iii)	Has r	normal or low formation pressure and is capable of accepting the	
344	discharge wi	` /		ting excessive discharge or injection pressure;	
345	discharge wi	illout IIc	COBSIL	ting excessive discharge of injection pressure,	
346		(iv)	Has s	slow movement of ambient formation fluid under the natural	
347	horizontal gr	` /		ot in an area of underground water discharge for the receiver;	
348	nonzona gi	daroni d	15 11	or in an area of underground water disentings for the receiver,	
349		(v)	Is loc	ated areally and stratigraphically so that an escape of waste to	
350	useable wate	` /		uld not be anticipated due to:	
351	00000010 11 0000	1 100001			
352			(A)	Seismic risk;	
353			()	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
354			(B)	Abandoned holes; or	
355			` '	,	
356			(C)	Mineral exploration or other drilling, or mineral development.	
357			` /		
358	(b)	The u	ındergro	ound water in the receiver;	
359					
360		(i)	Is not	t an economically available source of water or is unusable;	
361					
362		(ii)	Is con	nfined by strata overlying and underlying the receiver; and	
363					
364		(iii)	Is cla	ssified as Class VI groundwater by this chapter.	
365					
366	(c)	The d	lischarg	ge or waste:	
367					
368		(i)		not create or result in a hazard to health or impair existing rights, and	
369	is not prohib	ited froi	m subsu	urface disposal by Federal or State law or regulation;	
370					

371		(ii)	Will not degrade or decrease the availability of mineral resources,	
372	including oil	and gas;		
373				
374		(iii)	Is compatible with the receiver and ambient water; and	
375				
376		(iv)	Can be controlled at all times.	
377	Sectio	n 7.	Testing Procedures.	
378				
379	(a)	For de	termination of the parameters involved in the standards, analysis will be in	
380	accord with te	est proce	edures as defined pursuant to: Title 40, Code of Federal Regulations, Part	
381	136, or any m	odificat	ions thereto. For test procedures not listed in the Code of Federal	
382	Regulations, t	est proc	redures outlined in EPA Methods for Chemical Analysis of Water and	
383	Wastes (Marc	h, 1979	); or Standard Methods for the Examination of Water and Wastewaters	
384	(1975); or, A.	S.T.M.	Standards, Part 31 (1979), Water shall be used.	
385				
386	(b)		alytical technique for total uranium (as U) shall be the fluorometric method	
387	as referenced in Methods for Determination of Radioactive Substances in Water and Fluvial			
388		_	es of Water - Resource Investigations of the U.S. Geological Survey, Book	
389	5, Chapter A-	5 (1977)	).	
390				
391	(c)		standard methods of testing have not been established, the suitability of	
392	testing proced	lures sha	all be determined by the Department.	
393	Sectio	n 8.	Limit of Detection.	
394				
395	Where the sta	ndard is	below the lower limit of detection given in EPA Methods for Chemical	
396	-		d Wastes (March, 1979), or Standard Methods for the Examination of	
397	Water and Wa	astewate	ers (1975), or, A.S.T.M. Standards, Part 31 (1979), Water, the standard shall	
398	be the lower limit of detection, unless otherwise provided by the Environmental Quality Council.			