IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

Water Quality Division

58.01.11 – Ground Water Quality Rule

To whom does this rule apply?
This rule applies to any individual or entity that conducts an activity with the potential to degrade ground water.

What is the purpose of this rule?
Under Section 39-120, Idaho Code, the Department of Environmental Quality is designated as the primary agency to coordinate and administer ground water quality protection programs for the state. This rule establishes minimum requirements for protection of ground water quality through standards and an aquifer categorization process. The requirements of this rule shall serve as a basis for the administration of programs which address ground water quality. This rule does not in and of itself create a permit program.

What is the legal authority for the agency to promulgate this rule?
This rule implements the following statutes passed by the Idaho Legislature:

Health and Safety -
Environmental Quality:

- Section 39-105, Idaho Code – Powers and Duties of the Director
- Section 39-107, Idaho Code – Board-Composition – Officers – Compensation – Powers – Subpoena – Depositions – Review - Rules
- Section 39-119, Idaho Code – Collection of Fees for Services
- Section 39-120, Idaho Code – DEQ Primary Administrative Agency
- Section 39-126, Idaho Code – Duties of State and Local Units of Government

Who do I contact for more information on this rule?

Paula Wilson
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706
Phone: (208) 373-0418
Fax: (208) 373-0481
Email: paula.wilson@deq.idaho.gov
www.deq.idaho.gov

Table of Contents

58.01.11 – Ground Water Quality Rule

000. Legal Authority. 3
001. Title And Scope. 3
002. Administrative Appeals. 3
003. Written Interpretations. 3
004. -- 005. (Reserved) 3
006. Policies. 3
007. Definitions. 4
008. -- 010. (Reserved) 6
011. Incorporation By Reference. 6
012. -- 149. (Reserved) 6
150. Implementation. 6
151. -- 199. (Reserved) 7
200. Ground Water Quality Standards. 7
201. -- 299. (Reserved) 11
300. Categorized Aquifers Of The State. 12
301. Management Of Activities With The Potential To Degrade Aquifers. 12
302. -- 349. (Reserved) 12
350. Procedures For Categorizing Or Recategorizing An Aquifer. 12
351. -- 399. (Reserved) 14
400. Ground Water Contamination. 14
401. Mining. 16
402. -- 999. (Reserved) 18

000. LEGAL AUTHORITY.
The Idaho Legislature has given the Board of Environmental Quality authority to promulgate the Ground Water Quality Rule pursuant to Sections 39-105, 39-107, 39-120, and 39-126, Idaho Code. The authority to formulate and adopt rules as are necessary and feasible to protect the environment and health of the citizens of the state is vested in the Director and Board pursuant to Sections 39-105 and 39-107, Idaho Code. Under Section 39-120, Idaho Code, the Board is authorized to adopt, by rule, ambient ground water quality standards. Under Section 39-126, Idaho Code, all state agencies shall incorporate the Ground Water Quality Plan, adopted by the legislature, in the administration of their programs and are granted authority to promulgate rules to protect ground water quality as necessary to administer such programs. (3-20-20)T

001. TITLE AND SCOPE.

01. Title. This rule is titled IDAPA 58.01.11, Rules of the Department of Environmental Quality, IDAPA 58.01.11, "Ground Water Quality Rule." (3-20-20)T

02. Scope. Under Section 39-120, Idaho Code, the Department of Environmental Quality is designated as the primary agency to coordinate and administer ground water quality protection programs for the state. This rule establishes minimum requirements for protection of ground water quality through standards and an aquifer categorization process. The requirements of this rule shall serve as a basis for the administration of programs which address ground water quality. This rule does not in and of itself create a permit program. (3-20-20)T

002. ADMINISTRATIVE APPEALS.
Persons may be entitled to appeal agency actions authorized under this chapter pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality." (3-20-20)T

003. WRITTEN INTERPRETATIONS.
The Department of Environmental Quality may have written statements which pertain to the interpretation of the rules of this chapter. If available, such written statements can be inspected and copied, at cost, at the Department of Environmental Quality, 1410 North Hilton, Boise, ID 83706-1255. (3-20-20)T

004. -- 005. (RESERVED)

006. POLICIES.
It is the intent of the Department to implement, through this rule, the following policies from the Protection and Prevention Sections of the Idaho Ground Water Quality Plan, adopted by the legislature, 1992 Session Law, Chapter 310, Page 922. These policies are: (3-20-20)T

01. Ground Water Quality Protection. It is the policy of the state of Idaho to maintain and protect the existing high quality of the state's ground water. (3-20-20)T

02. Existing and Projected Future Beneficial Uses. The policy of the state of Idaho is that existing and projected future beneficial uses of ground water shall be maintained and protected, and degradation that would impair existing and projected future beneficial uses of ground water and interconnected surface water shall not be allowed. (3-20-20)T

03. Categorization of Ground Water. The policy of the state of Idaho is to provide differential protection for the state's ground water resources. A ground water categorization system should be established for aquifers or portions of aquifers. The categorization system should be based on vulnerability of the ground water, existing and projected future beneficial uses of the ground water, existing quality of the ground water, and social and economic considerations. (3-20-20)T

04. Ground Water Quality Standards. The policy of the state of Idaho is to establish ground water quality standards for biological, radiological, and chemical constituents. (3-20-20)T

05. Prevention of Ground Water Contamination. The policy of the state of Idaho is to prevent contamination of ground water from all regulated and nonregulated sources of contamination to the maximum extent practical. (3-20-20)T

06. Mining. The policy of the state of Idaho is to protect ground water and allow for the extraction of minerals above and within ground water. (3-20-20)T

007. DEFINITIONS.

01. Agricultural Chemical. Any pesticide, nutrient or fertilizer used for the benefit of agricultural production or pest management. (3-20-20)T

02. Aquifer. A geological unit of permeable saturated material capable of yielding economically significant quantities of water to wells and springs. (3-20-20)T

03. Beneficial Uses. Various uses of ground water in Idaho including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, aquacultural water supplies, and mining. A beneficial use is defined as actual current or projected future uses of ground water. (3-20-20)T

04. Best Available Method. Any system, process, or method which is available to the public for commercial or private use to minimize the impact of point or nonpoint sources of contamination on ground water quality. (3-20-20)T

05. Best Management Practice. A practice or combination of practices determined to be the most effective and practical means of preventing or reducing contamination to ground water and interconnected surface water from nonpoint and point sources to achieve water quality goals and protect the beneficial uses of the water. (3-20-20)T

06. Best Practical Method. Any system, process, or method that is established and in routine use which could be used to minimize the impact of point or nonpoint sources of contamination on ground water quality. (3-20-20)T

07. Board. The Idaho Board of Environmental Quality. (3-20-20)T

08. Cleanup. The removal, treatment or isolation of a contaminant from ground water through the directed efforts of humans or the removal or treatment of a contaminant in ground water through management practice or the construction of barriers, trenches and other similar facilities for prevention of contamination, as well as the use of natural processes such as ground water recharge, natural decay and chemical or biological decomposition. (3-20-20)T

09. Constituent. Any chemical, ion, radionuclide, synthetic organic compound, microorganism, waste or other substance occurring in ground water. (3-20-20)T

10. Contaminant. Any chemical, ion, radionuclide, synthetic organic compound, microorganism, waste or other substance which does not occur naturally in ground water or which naturally occurs at a lower concentration. (3-20-20)T

11. Contamination. The direct or indirect introduction into ground water of any contaminant caused in whole or in part by human activities. (3-20-20)T

12. Crop Root Zone. The zone that extends from the surface of the soil to the depth of the deepest crop root and is specific to a species of plant, group of plants, or crop. (3-20-20)T

13. Degradation. The lowering of ground water quality as measured in a statistically significant and reproducible manner. (3-20-20)T

14. Department. The Department of Environmental Quality. (3-20-20)T

15. Extraction. Physical removal of ore or waste rock from mineral-bearing deposits. Extraction does not include processing, which is the removal of target minerals from ores by physical or chemical methods. (3-20-20)T

16. Ground Water. Any water of the state which occurs beneath the surface of the earth in a saturated geological formation of rock or soil. (3-20-20)T

17. Ground Water Quality Standard. Values, either numeric or narrative, assigned to any constituent for the purpose of establishing minimum levels of protection. (3-20-20)T

18. Highly Vulnerable Ground Water. Ground water characterized by a relatively high potential for contaminants to enter and/or be transported within the flow system. Determinations of ground water vulnerability will include consideration of land use practices and aquifer characteristics. (3-20-20)T

19. Irreplaceable Source. A ground water source serving a beneficial use(s) where the reliable delivery of comparable quality and quantity of water from an alternative source in the region would be economically infeasible or precluded by institutional constraints. (3-20-20)T

20. Mine Operator. Any person authorized to engage in mining activities, including without limitation those authorized by law, lease, contract, permit, or plan of operation. It does not include a governmental agency that grants mineral leases or similar contracts or permits unless the agency is engaged in mining activities. (3-20-20)T

21. Mining Activity. Recovery of a mineral from mineral-bearing deposits, which includes reclamation, extraction, excavation, overburden placement, disposal of tailings resulting from processing, and disposal of mineral extraction wastes, including tailings that are the result of extraction, waste rock, and other extraction wastes uniquely associated with mining. (3-20-20)T

22. Mining Area. The area on or within which one (1) or more mining activities occur. The Department shall determine the boundaries of the mining area as provided in Section 401. Distinct mining activities may constitute separate mining areas. (3-20-20)T

23. Natural Background Level. The level of any constituent in the ground water within a specified area as determined by representative measurements of the ground water quality unaffected by human activities. (3-20-20)T

24. Person. Any individual, association, partnership, firm, joint stock company, joint venture, trust, estate, political subdivision, public or private corporation, state or federal governmental department, agency or instrumentality, or any legal entity which is recognized by law as the subject of rights and duties. (3-20-20)T

25. Point of Compliance. The vertical surface where the Department determines compliance with ground water quality standards as provided in Subsection 400.05 and Section 401. (3-20-20)T

26. Practical Quantitation Level. The lowest concentration of a constituent that can be reliably quantified among laboratories within specified limits of precision and accuracy during routine laboratory operating conditions. Specified limits of precision and accuracy are the criteria listed in the calibration specifications or quality control specifications of an analytical method. (3-20-20)T

27. Projected Future Beneficial Uses. Various uses of ground water, such as drinking water, aquaculture, industrial, mining or agriculture, that are practical and achievable in the future based on hydrogeologic conditions, water quality, future land use activities and social/economic considerations. (3-20-20)T

28. Recharge Area. An area in which water infiltrates into the soil or geological formation from, including but not limited to precipitation, irrigation practices and seepage from creeks, streams, and lakes, and percolates to one (1) or more aquifers. (3-20-20)T

29. Reclamation. The process of restoring an area affected by a mining activity to its original or another beneficial use, considering previous uses, possible future uses, and surrounding topography. The objective is to re-establish a diverse, self-perpetuating plant community, and to minimize erosion, remove hazards, and maintain water quality. (3-20-20)T

30. Remediation. Any action taken (1) to control the source of contamination, (2) to reduce the level of contamination, (3) to mitigate the effects of contaminants, and/or (4) to minimize contaminant movement. Remediation includes providing alternate drinking water sources when needed. (3-20-20)T

31. Site Background Level. The ground water quality at the hydraulically upgradient site boundary. (3-20-20)T

008. -- 010. (RESERVED)

011. INCORPORATION BY REFERENCE.
Codes, standards and regulations may be incorporated by reference in this rule pursuant to Section 67-5229, Idaho Code. Such incorporation by reference shall constitute full adoption by reference, including any notes or appendices therein, unless expressly provided otherwise in this rule. Codes, standards or regulations adopted by reference throughout this rule are available in the following locations: (3-20-20)T

01. Department of Environmental Quality. Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255. (3-20-20)T

02. Law Library. State Law Library, 451 W. State Street, P.O. Box 83720, Boise, ID 83720-0051. (3-20-20)T

03. U.S. Government Printing Office. U.S. Government Printing Office, Superintendent of Documents, Washington, D.C. 20402, or U.S. Government Bookstore, Room 194 Federal Bldg., 915 Second Ave., Seattle, WA 98174. (3-20-20)T

012. -- 149. (RESERVED)

150. IMPLEMENTATION.
This rule establishes minimum requirements to maintain and protect ground water quality. This rule applies to all activities with the potential to degrade ground water quality. (3-20-20)T

01. Ground Water Quality Standards. The numerical and narrative standards in Sections 200 and 301 identify minimum levels of protection for ground water quality and shall be used as a basis for: (3-20-20)T

a. Evaluating or comparing ground water quality when developing or modifying best available methods, best management practices, or best practical methods; (3-20-20)T

b. Identifying permit conditions; (3-20-20)T

c. Establishing cleanup levels; and (3-20-20)T

d. Determining appropriate actions when ground water quality standards are exceeded. (3-20-20)T

02. Aquifer Categorization. Aquifers of the state shall be categorized based on vulnerability of the ground water, existing and projected future beneficial uses of the ground water, existing water quality, and social and economic considerations. There shall be three aquifer categories, Sensitive Resource, General Resource, and Other Resource, to provide different levels of protection. The level of protection required for each category and application of standards to these categories are shown in Table I.

Table 1. Level of Protection and Application of Standards to Aquifer Categories

Category	Level of Protection	Application of Standards
Sensitive Resource	Apply best management practices and best available methods. This category provides the highest level of ground water protection.	May apply stricter standards than in Section 200.
General Resource	Apply best management practices and best practical methods to the maximum extent practical.	Apply numerical and narrative standards in Section 200.

Table 1. Level of Protection and Application of Standards to Aquifer Categories		
Category	**Level of Protection**	**Application of Standards**
Other Resource	Apply best management practices and best practical methods to the maximum extent practical.	May apply less strict standards than in Section 200.

(3-20-20)T

a. All aquifers where there are activities with the potential to degrade ground water quality are categorized in Section 300. Those aquifers where no activities with the potential to degrade ground water quality are occurring will remain uncategorized until such activities are commenced. If no action is taken to categorize an aquifer when an activity(ies) with the potential to degrade ground water quality is initiated, the aquifer will automatically be categorized as General Resource. (3-20-20)T

b. Categorization should be considered when an activity with the potential to degrade ground water quality is proposed over an aquifer or portion of an aquifer which presently has no such activities and, based on the criteria in Section 350, the aquifer may be most appropriately categorized as Sensitive Resource or Other Resource. (3-20-20)T

c. Recategorization should be considered when information on vulnerability of the ground water, existing and projected future beneficial uses of the ground water, existing quality of the ground water, and social and economic considerations, in conjunction with one or more of the criteria in Section 350, demonstrates that the aquifer or portion of an aquifer may be more appropriate in another category. (3-20-20)T

03. Ground Water-Surface Water Interconnection. The beneficial uses of interconnected surface water shall be recognized when evaluating ground water quality protection. The implementation of water quality programs shall ensure that the quality of ground water that discharges to surface water does not impair the identified beneficial uses of the surface water and that surface water infiltration does not impair beneficial uses of ground water. (3-20-20)T

04. Interagency Coordination. The Department will coordinate with other federal, state, and local agencies to pursue interagency agreements when necessary to ensure implementation of this rule for activities which have the potential to degrade ground water quality. (3-20-20)T

151. -- 199. (RESERVED)

200. GROUND WATER QUALITY STANDARDS.
The following numerical and narrative standards apply to all ground water of the state and shall not be exceeded unless otherwise allowed in this rule. (3-20-20)T

01. Numerical Ground Water Quality Standards. (3-20-20)T

a. The Primary Constituent Standards are based on protection of human health and are identified in Table II.

Table II - Primary Constituent Standards		
Chemical Abstract Service Number	**Constituent**	**Standard (mg/l unless otherwise specified)**
7440-36-0	Antimony	0.006
7440-38-2	Arsenic	0.05

Table II - Primary Constituent Standards		
Chemical Abstract Service Number	**Constituent**	**Standard (mg/l unless otherwise specified)**
1332-21-4	Asbestos	7 million fibers/l longer than 10 um
7440-39-3	Barium	2
7440-41-7	Beryllium	0.004
7440-43-9	Cadmium	0.005
7440-47-3	Chromium	0.1
7440-50-8	Copper	1.3
57-12-5	Cyanide	0.2
16984-48-8	Fluoride	4
7439-92-1	Lead	0.015
7439-97-6	Mercury	0.002
*[1]	Nitrate (as N)	10
*[1]	Nitrite (as N)	1
*[1]	Nitrate and Nitrite (both as N)	10
7782-49-2	Selenium	0.05
7440-28-0	Thallium	0.002
15972-60-8	Alachlor	0.002
1912-24-9	Atrazine	0.003
71-43-2	Benzene	0.005
50-32-8	Benzo(a)pyrene (PAH)	0.0002
75-27-4	Bromodichloromethane (THM)	0.1
75-25-2	Bromoform (THM)	0.1
1563-66-2	Carbofuran	0.04
56-23-5	Carbon Tetrachloride	0.005
57-74-9	Chlordane	0.002
124-48-1	Chlorodibromomethane (THM)	0.1
67-66-3	Chloroform(THM)	0.002
94-75-7	2,4-D	0.07
75-99-0	Dalapon	0.2
103-23-1	Di(2-ethylhexyl) adipate	0.4
96-12-8	Dibromochloropropane	0.0002
541-73-1	Dichlorobenzene m-	0.6

Table II - Primary Constituent Standards		
Chemical Abstract Service Number	**Constituent**	**Standard (mg/l unless otherwise specified)**
95-50-1	Dichlorobenzene o-	0.6
106-46-7	1,4(para)-Dichlorobenzene or Dichlorobenzene p-	0.075
107-06-2	1,2-Dichloroethane	0.005
75-35-4	1,1-Dichloroethylene	0.007
156-59-2	cis-1, 2-Dichloroethylene	0.07
156-60-5	trans-1, 2-Dichloroethylene	0.1
75-09-2	Dichloromethane	0.005
78-87-5	1,2-Dichloropropane	0.005
117-81-7	Di(2-ethylhexyl)phthalate	0.006
88-85-7	Dinoseb	0.007
85-00-7	Diquat	0.02
145-73-3	Endothall	0.1
72-20-8	Endrin	0.002
100-41-4	Ethylbenzene	0.7
106-93-4	Ethylene dibromide	0.00005
1071-83-6	Glyphosate	0.7
76-44-8	Heptachlor	0.0004
1024-57-3	Heptachlor epoxide	0.0002
118-74-1	Hexachlorobenzene	0.001
77-47-4	Hexachlorocyclopentadiene	0.05
58-89-9	Lindane	0.0002
72-43-5	Methoxychlor	0.04
108-90-7	Monochlorobenzene	0.1
23135-22-0	Oxamyl (Vydate)	0.2
87-86-5	Pentachlorophenol	0.001
1918-02-1	Picloram	0.5
1336-36-3	Polychlorinated biphenyls (PCBs)	0.0005
122-34-9	Simazine	0.004
100-42-5	Styrene	0.1
1746-01-6	2,3,7,8-TCDD (Dioxin)	3.0 x 10-8
127-18-4	Tetrachloroethylene	0.005

Table II - Primary Constituent Standards		
Chemical Abstract Service Number	**Constituent**	**Standard (mg/l unless otherwise specified)**
108-88-3	Toluene	1
*[1]	Total Trihalomethanes [the sum of the concentrations of bromodichloromethane, dibromochloromethane, tribromomethane (bromoform), and trichloromethane (chloroform)]	0.1
8001-35-2	Toxaphene	0.003
93-72-1	2,4,5-TP (Silvex)	0.05
120-82-1	1,2,4-Trichlorobenzene	0.07
71-55-6	1,1,1-Trichloroethane	0.2
79-00-5	1,1,2-Trichloroethane	0.005
79-01-6	Trichloroethylene	0.005
75-01-4	Vinyl Chloride	0.002
1330-20-7	Xylenes (total)	10
*[1]	Gross alpha particle activity (including radium -226, but excluding radon and uranium)	15 pCi/l
*[1]	Combined beta/photon emitters	4 millirems/year effective dose equivalent
*[1]	Combined Radium - 226 and radium 228	5 pCi/l
*[1]	Strontium 90	8 pCi/l
*[1]	Tritium	20,000 pCi/l
*[1]	Total Coliform[2]	1 colony forming unit/100 ml
	Escherichia coliform (E. coli)	Less than 1 viable colony or colony forming unit/100 ml using any EPA approved method
	Fecal coliform	Less than 1 viable colony or colony forming unit/100 ml using any EPA approved method
Table Footnotes		
*[1]No Chemical Abstract Service Number exists for this constituent.		
[2] An exceedance of the primary ground water quality standard for total coliform is not a violation of these rules. If the primary ground water quality standard for total coliform is exceeded, additional analysis for fecal coliform or E. coli will be conducted. An exceedance of the primary ground water quality standards for either fecal coliform or E. coli is a violation of these rules.		

(3-20-20)T

b. The Secondary Constituent Standards are generally based on aesthetic qualities and are identified in Table III.

TABLE III - SECONDARY CONSTITUENT STANDARDS	
Constituent	**Standard (mg/l unless otherwise specified)**
Aluminum	0.2
Chloride	250
Color	15 Color Units
Foaming Agents	0.5
Iron	0.3
Manganese	0.05
Odor	3.0 Threshold Odor Number
pH	6.5 to 8.5 (no units apply)
Silver	0.1
Sulfate	250
Total Dissolved Solids	500
Zinc	5

(3-20-20)T

c. Sample preservation and analytical procedures to determine compliance with the standards identified in Subsection 200.01 shall be in accordance with the following, except that cyanide shall be analyzed as weak acid dissociable cyanide using a method approved by the Department: (3-20-20)T

i. Environmental Protection Agency, Code of Federal Regulations, Title 40, Parts 141 and 143, revised as of July 2001; or (3-20-20)T

ii. Another method approved by the Department. (3-20-20)T

02. Narrative Ground Water Quality Standards. Contaminant concentrations, alone or in combination with other contaminants or properties, shall not cause the ground water to be hazardous, deleterious, carcinogenic, mutagenic, teratogenic, or toxic. Determinations of specific numerical levels when applying this standard shall be based on: (3-20-20)T

a. Best scientific information currently available on adverse effects of the contaminant(s); (3-20-20)T

b. Protection of a beneficial use; or (3-20-20)T

c. Practical quantitation levels for the contaminant(s), if they exceed the levels identified in Subsection 200.02.a. or 200.02.b. (3-20-20)T

03. Natural Background Level. If the natural background level of a constituent exceeds the standard in this section, the natural background level shall be used as the standard. (3-20-20)T

201. -- 299. (RESERVED)

300. CATEGORIZED AQUIFERS OF THE STATE.
Aquifers or portions of aquifers in the state are categorized as follows: (3-20-20)T

01. Sensitive Resource. (3-20-20)T

a. Spokane Valley -- Rathdrum Prairie Aquifer. (3-20-20)T

i. In addition to the ground water quality standards in Section 200, the following narrative standard applies: the aquifer shall not be degraded, as it relates to beneficial uses, as a result of point source or nonpoint source activity unless it is demonstrated by the person proposing the activity that such change is justifiable as a result of necessary economic or social development. (3-20-20)T

02. General Resource. All aquifers or portions of aquifers where there are activities with the potential to degrade ground water quality of the aquifer, unless otherwise listed in Subsection 300.01 or 300.03. Once an activity with the potential to degrade the ground water quality of an uncategorized aquifer or portion of an aquifer is initiated, the uncategorized aquifer shall automatically become General Resource unless petitioned into the Sensitive Resource or Other Resource category. (3-20-20)T

03. Other Resource. (3-20-20)T

301. MANAGEMENT OF ACTIVITIES WITH THE POTENTIAL TO DEGRADE AQUIFERS.

01. Sensitive Resource Category Aquifers. (3-20-20)T

a. Activities with the potential to degrade Sensitive Resource aquifers shall be managed in a manner which maintains or improves existing ground water quality through the use of best management practices and best available methods except when a point of compliance is set pursuant to Section 401. (3-20-20)T

b. Numerical and narrative standards identified in Section 200 shall apply to aquifers or portions of aquifers categorized as Sensitive Resource. In addition, stricter numerical and narrative standards, for specified constituents, may be adopted pursuant to Section 350 on a case by case basis and listed in Section 300. (3-20-20)T

02. General Resource Category Aquifers. (3-20-20)T

a. Activities with the potential to degrade General Resource aquifers shall be managed in a manner which maintains or improves existing ground water quality through the use of best management practices and best practical methods to the maximum extent practical except when a point of compliance is set pursuant to Section 401. (3-20-20)T

b. Numerical and narrative standards identified in Section 200 shall apply to aquifers or portions of aquifers categorized as General Resource. (3-20-20)T

03. Other Resource Category Aquifers. (3-20-20)T

a. Activities with the potential to degrade Other Resource aquifers shall be managed in a manner which maintains existing ground water quality, except for those identified constituents which may have a less stringent standard, through the use of best management practices and best practical methods to the maximum extent practical except when a point of compliance is set pursuant to Section 401. (3-20-20)T

b. Numerical and narrative standards identified in Section 200 shall apply to aquifers or portions of aquifers categorized as Other Resource. In addition, less strict numerical and narrative standards, for specified constituents, may be adopted pursuant to Section 350 on a case by case basis and listed in Section 300. (3-20-20)T

302. -- 349. (RESERVED)

350. PROCEDURES FOR CATEGORIZING OR RECATEGORIZING AN AQUIFER.
The following process shall be used for categorizing or recategorizing an aquifer. (3-20-20)T

01. Criteria for Aquifer Categories. The following criteria shall be considered when a petition to categorize or recategorize aquifers or portions of aquifers is submitted to the Board: (3-20-20)T

a. For Sensitive Resource aquifers: (3-20-20)T

i. The ground water in an aquifer or portion of an aquifer is of a better quality than the ground water quality standards in Section 200 and maintenance of this quality is needed to protect an identified beneficial use(s); (3-20-20)T

ii. The ground water in an aquifer or portion of an aquifer is considered highly vulnerable; (3-20-20)T

iii. The ground water in an aquifer or portion of an aquifer represents an irreplaceable source for the identified beneficial use(s); (3-20-20)T

iv. The ground water quality in an aquifer or portion of an aquifer has been degraded and there is a need for additional protection measures to maintain or improve the water quality or prevent impairment of a beneficial use; (3-20-20)T

v. The ground water within an aquifer or portion of an aquifer is shown to be hydrologically interconnected with surface water and additional protection is needed to maintain the quality of either surface or ground water. Hydrologic interconnections can include either natural or induced ground water recharge or discharge areas; or (3-20-20)T

vi. The ground water within an aquifer or portion of an aquifer demonstrates other criteria which justify the need for additional protection. (3-20-20)T

b. For General Resource aquifers: (3-20-20)T

i. An activity with the potential to degrade ground water quality is initiated over an aquifer or portion of an aquifer which presently has no such activities; (3-20-20)T

ii. The ground water in an aquifer or portion of an aquifer is currently being used for drinking water or another beneficial use which requires similar protection; or (3-20-20)T

iii. The ground water in an aquifer or portion of an aquifer has a projected future beneficial use of drinking water or another beneficial use which requires similar protection. (3-20-20)T

c. For other resource aquifers: (3-20-20)T

i. The ground water quality within an aquifer or portion of an aquifer does not meet one or more of the ground water quality standards in Section 200; and allowing the ground water quality to remain at this level does not impair existing or projected future beneficial uses within the aquifer or portion of an aquifer; (3-20-20)T

ii. The projected ground water quality within an aquifer or portion of an aquifer will not meet one or more of the ground water quality standards in Section 200 as a result of activities over or within the aquifer or portion of an aquifer; and allowing the proposed degradation will not impair existing or projected future beneficial uses; (3-20-20)T

iii. Human caused conditions or sources of contamination have resulted in ground water quality standards in Section 200 being exceeded, and the contamination cannot be remedied for economical or technical reasons, or remediation would cause more environmental damage to correct than to leave in place; or (3-20-20)T

iv. The ground water within an aquifer or portion of an aquifer demonstrates other criteria which justify the need for categorization as an Other Resource. (3-20-20)T

02. Petition Process. The Department or any other person may petition the Board to initiate rulemaking to categorize or recategorize an aquifer or portion of an aquifer pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality." In addition to the information required in a

rulemaking Petition pursuant to IDAPA 58.01.23, the following information shall be submitted in writing by the Petitioner for the identified aquifer or portion of an aquifer: (3-20-20)T

a. Current category, if applicable; (3-20-20)T

b. Proposed category and an explanation of how one or more of the criteria in Subsection 350.01 are met; (3-20-20)T

c. An explanation of why the categorization or recategorization is being proposed; (3-20-20)T

d. Location, description and areal extent; (3-20-20)T

e. General location and description of existing and projected future ground water beneficial uses; (3-20-20)T

f. Documentation of the existing ground water quality; (3-20-20)T

g. Documentation of aquifer characteristics, where available, including, but not limited to: (3-20-20)T

i. Depth to ground water; (3-20-20)T

ii. Thickness of the water bearing section; (3-20-20)T

iii. Direction and rate of ground water flow; (3-20-20)T

iv. Known recharge and discharge areas; and (3-20-20)T

v. Geology of the area; (3-20-20)T

h. Identification of any proposed standards, for specified constituents, which would be stricter or less strict than the ground water quality standards in Section 200, or any standards to be applied in addition to those in Section 200; and a rationale for the proposed standards. (3-20-20)T

03. Preliminary Department Review. Prior to submission of a petition to the Board to categorize or recategorize an aquifer, any person may seek a preliminary review of the petition from the Department. The Department shall respond to the petitioner with comments within forty-five (45) days. (3-20-20)T

351. -- 399. (RESERVED)

400. GROUND WATER CONTAMINATION.

01. Releases Degrading Ground Water Quality. No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or disposal of a contaminant into the environment in a manner that: (3-20-20)T

a. Causes a ground water quality standard to be exceeded; (3-20-20)T

b. Injures a beneficial use of ground water; or (3-20-20)T

c. Is not in accordance with a permit, consent order or applicable best management practice, best available method or best practical method. (3-20-20)T

02. Measures Taken in Response to Degradation. (3-20-20)T

a. Except when a point of compliance is set pursuant to Section 401, when a numerical standard is not exceeded, but degradation of ground water quality is detected and deemed significant by the Department, the Department shall take one (1) or more of the following actions: (3-20-20)T

i. Require a modification of regulated activities to prevent continued degradation; (3-20-20)T

ii. Coordinate with the appropriate agencies and responsible persons to develop and implement prevention measures for activities not regulated by the Department; (3-20-20)T

iii. Allow limited degradation of ground water quality for the constituents identified in Subsection 200.01.a. if it can be demonstrated that: (3-20-20)T

(1) Best management practices, best available methods or best practical methods, as appropriate for the aquifer category, are being applied; and (3-20-20)T

(2) The degradation is justifiable based on necessary and widespread social and economic considerations; or (3-20-20)T

iv. Allow degradation of ground water quality up to the standards in Subsection 200.01.b., if it can be demonstrated that: (3-20-20)T

(1) Best management practices are being applied; and (3-20-20)T

(2) The degradation will not adversely impact a beneficial use. (3-20-20)T

b. The following criteria shall be considered when determining the significance of degradation: (3-20-20)T

i. Site specific hydrogeologic conditions; (3-20-20)T

ii. Water quality, including seasonal variations; (3-20-20)T

iii. Existing and projected future beneficial uses; (3-20-20)T

iv. Related public health issues; and (3-20-20)T

v. Whether the degradation involves a primary or secondary constituent in Section 200. (3-20-20)T

03. Contamination Exceeding a Ground Water Quality Standard. The discovery of any contamination exceeding a ground water standard that poses a threat to existing or projected future beneficial uses of ground water shall require appropriate actions, as determined by the Department, to prevent further contamination. These actions may consist of investigation and evaluation, or enforcement actions if necessary to stop further contamination or clean up existing contamination, as required under the Environmental Protection and Health Act, Section 39-108, Idaho Code. (3-20-20)T

04. Agricultural Chemicals. Agricultural chemicals found in intermittently saturated soils within the crop root zone will not be considered ground water contaminants as long as the chemicals remain within the crop root zone, and have been applied in a manner consistent with all appropriate regulatory requirements. (3-20-20)T

05. Site-Specific Ground Water Quality Levels or Points of Compliance. The Department may allow site-specific ground water quality levels, for any aquifer category, that vary from a standard(s) in Section 200 or Section 300, or may allow site-specific points of compliance, based on consideration of effects to human health and the environment, for: (3-20-20)T

a. Remediation conducted under the Department's oversight; (3-20-20)T

b. Permits issued by the Department; (3-20-20)T

c. Situations where the site background level varies from the ground water quality standard; (3-20-20)T

d. Dissolved concentrations of secondary constituents listed in Section 200 of this rule. The

Department may allow the use of dissolved concentrations for secondary constituents if the requesting person demonstrates that doing so will not adversely affect human health and the environment; or (3-20-20)T

e. Other situations authorized by the Department in writing. (3-20-20)T

401. MINING.

01. Request for Setting Point(s) of Compliance and Standards Applicable to Mining Activities. At the request of a mine operator, pursuant to this section, the Department shall set a point of compliance, or points of compliance, at which the mine operator shall protect current and projected future beneficial uses of the ground water and meet the ground water quality standards as described in Section 200 or as allowed under Subsection 400.05. Degradation of ground water is allowed at a point of compliance if the mine operator implements the level of protection during mining activities appropriate for the aquifer category as specified in Table 1 of Subsection 150.02. If a request is not made, the mine operator must meet the ground water quality standards as described in Subsection 150.01 in ground water both within and beyond the mining area unless the Department establishes the point(s) of compliance consistent with Subsection 401.03. (3-20-20)T

02. Application Process. (3-20-20)T

a. If the mine operator requests a point of compliance, or points of compliance, the mine operator shall make written application to the Department. The application shall be accompanied by a fee of two thousand five hundred dollars ($2,500). The application shall include the following information in sufficient detail to allow the Department to establish point(s) of compliance: (3-20-20)T

i. Name, location, and mailing address of the mining operation; (3-20-20)T

ii. Name, mailing address, and phone number of the mine operator; (3-20-20)T

iii. Land ownership status of the mining operation (federal, state, private or public); (3-20-20)T

iv. The legal structure (corporation, partnership, etc.) and residence of the mine operator; (3-20-20)T

v. The legal description, to the quarter-quarter section, of the location of the proposed mining operation; (3-20-20)T

vi. Evidence the mine operator is authorized by the Secretary of State to conduct business in the state of Idaho; (3-20-20)T

vii. A general description of the operational plans for the mining operation from construction through final reclamation. This description shall include any proposed phases for construction, operations, and reclamation and a map that identifies the location of all mining activities; (3-20-20)T

viii. A preconstruction topographic site map or aerial photos extending at least one (1) mile beyond the outer limits of the mining area, identifying and showing the location and extent of the following features: (3-20-20)T

(1) All wells, perennial and intermittent springs, adit discharges, wetlands, surface waters and irrigation ditches; (3-20-20)T

(2) All public and private drinking water supply source(s) within one (1) mile of the mining area; (3-20-20)T

(3) All service roads and public roads; (3-20-20)T

(4) All buildings and structures within one (1) mile of the mining area; (3-20-20)T

(5) All special resource waters within one (1) mile of the mining area; and (3-20-20)T

(6) All Clean Water Act Section 303(d) listed streams, and their listed impairments, within one (1)

mile of the mining area; (3-20-20)T

ix. To the extent such information is available, a description and location of underground mine workings and adits and a description of the structural geology that may influence ground water flow and direction; (3-20-20)T

x. Information regarding the relevant factors set forth in Subsection 401.03; and (3-20-20)T

xi. A proposed point of compliance, or points of compliance. (3-20-20)T

b. Within thirty (30) days of receipt of an application, the Department shall issue a written notice to the mine operator indicating: (3-20-20)T

i. That the application is complete; or (3-20-20)T

ii. That the Department is rejecting the application as incomplete. In such a case, the Department shall provide a list of deficiencies. Upon a determination that the application is incomplete, the Department shall refund one-half (1/2) of the application fee. (3-20-20)T

c. The Department shall establish the point(s) of compliance within one hundred eighty (180) days after receipt of a complete application unless the Department determines that additional time is necessary due to unusual circumstances. (3-20-20)T

03. Setting the Point(s) of Compliance. The point(s) of compliance shall be set as close as possible to the boundary of the mining area, taking into consideration the relevant factors set forth in Subsections 401.03.a. through 401.03.h., but in no event shall the point(s) of compliance be within the boundary of the mining area. The mining area boundary means the outermost perimeter of the mining area (projected in the horizontal plane) as it would exist at the completion of the mining activity. The point(s) of compliance shall be set so that, outside the mining area boundary, there is no injury to current or projected future beneficial uses of ground water and there is no violation of water quality standards applicable to any interconnected surface waters. The Department's determination regarding the point(s) of compliance shall be based on an analysis and consideration of all relevant factors including, but not limited to: (3-20-20)T

a. The hydrogeological characteristics of the mining area and surrounding land, including any dilution characteristics of the aquifer and any natural attenuation supported by site-specific data; (3-20-20)T

b. The concentration, volume, and physical and chemical characteristics of contaminants resulting from the mining activity, including the toxicity and persistence of the contaminants; (3-20-20)T

c. The quantity, quality, and direction of flow of ground water underlying the mining area; (3-20-20)T

d. The proximity and withdrawal rates of current ground water users; (3-20-20)T

e. A prediction of projected future beneficial uses; (3-20-20)T

f. The availability of alternative drinking water supplies; (3-20-20)T

g. The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water; and (3-20-20)T

h. Public health, safety, and welfare effects. (3-20-20)T

04. Ground Water Monitoring and Reporting. The Department shall require ground water monitoring and reporting whenever the Department sets the point(s) of compliance. The Department shall not require ground water monitoring that duplicates ground water monitoring required by other state or federal agencies as long as the mine operator provides the data to the Department. (3-20-20)T

a. A ground water monitoring system required under Subsection 401.04 shall be designed to:

(3-20-20)T

i. Represent the quality of background ground water that has not been affected by the mining activity; and (3-20-20)T

ii. Represent the quality of ground water passing the point(s) of compliance in order to determine compliance with ground water quality standards or effectiveness of best management practices. (3-20-20)T

b. When practicable, indicator monitoring wells or other devices may be required. Such indicator wells and other devices shall not be used to determine compliance with the ground water quality standards, but instead may be used to evaluate modeling results, to predict the quality of ground water at the point(s) of compliance, or to determine the effectiveness of best management practices. (3-20-20)T

c. All monitoring wells shall be constructed (well depth, well screen size, well screen interval, gravel pack, etc.) and developed so that ground water samples represent the quality of ground water that is relevant to current and future beneficial uses. (3-20-20)T

05. Coordination with Other State or Federal Agencies/Public Notice. Before setting the point(s) of compliance or requiring ground water monitoring, the Department shall coordinate with and seek recommendations from other state or federal agencies that have regulatory authority over the mining activities. The Department may provide public notice and an opportunity for public comment prior to setting or changing the point(s) of compliance. The Department shall issue a public notice after it sets the point(s) of compliance. (3-20-20)T

06. Limitations. Section 401 addresses only those contaminants that naturally occur in the mining area ground water or in the surrounding rock or soil and are present in concentrations above the natural background level as a result of mining activities. (3-20-20)T

07. Application of Provisions. The provisions set out in Section 401 apply to new mining activities or to an expansion of existing mining activities commencing after July 1, 2009. All consent orders, compliance schedules, and other agreements adopted or issued by the Department prior to July 1, 2009 pertaining to ground water protection at mine sites shall remain in full force and effect. (3-20-20)T

08. Change in Point(s) of Compliance/Ground Water Monitoring. (3-20-20)T

a. A change in the point(s) of compliance may be requested by the mine operator when there is a change in, or new information regarding, the mining activity or any of the factors set forth in Subsection 401.03. A change requested by the mine operator shall include an identification of the new proposed point(s) of compliance, a description of the cause for the change and any data supporting the change. The mine operator's request shall be handled as an application submitted pursuant to Subsection 401.02.a. and shall be subject to all other provisions of Section 401. (3-20-20)T

b. The Department may initiate a change in the point(s) of compliance if there is a change in, or new information regarding, the mining activity or any of the factors set forth in Subsection 401.03, and the Department determines that the change is necessary to ensure there is no injury to current or projected future beneficial uses of ground water and no violation of water quality standards applicable to any interconnected surface waters. The Department shall notify the mine operator in writing of the Department's intent to change the point(s) of compliance. The Department shall make its final decision to change the point(s) of compliance within sixty (60) days of the notice to the mine operator unless the Department and the mine operator agree more time is necessary to make the decision. (3-20-20)T

c. The Department may require additional or new ground water monitoring or indicator wells when the Department changes the point(s) of compliance. The Department may also require additional or different ground water monitoring or indicator wells if the Department determines, based upon a change in or new information regarding the mining activity or any of the factors listed in Subsection 401.03, that the monitoring no longer meets the requirements set forth in Subsection 401.04. The mine operator may also request a change in the monitoring. (3-20-20)T

402. -- 999. (RESERVED)

Subject Index

A

Administrative Appeals 3

C

Categorized Aquifers Of The State 12
- General Resource 12
- Other Resource 12
- Sensitive Resource 12

D

Definitions, IDAPA 58.01.11 4
- Agricultural Chemical 4
- Aquifer 4
- Beneficial Uses 4
- Best Available Method 4
- Best Management Practice 4
- Best Practical Method 4
- Board 4
- Cleanup 4
- Constituent 4
- Contaminant 4
- Contamination 4
- Crop Root Zone 4
- Degradation 4
- Department 4
- Extraction 4
- Ground Water 4
- Ground Water Quality Standard 5
- Highly Vulnerable Ground Water 5
- Irreplaceable Source 5
- Mine Operator 5
- Mining Activity 5
- Mining Area 5
- Natural Background Level 5
- Person 5
- Point of Compliance 5
- Practical Quantitation Level 5
- Projected Future Beneficial Uses 5
- Recharge Area 5
- Reclamation 5
- Remediation 5
- Site Background Level 6

G

General Resource Category Aquifers, Management of Activities With the Potential to Degrade Aquifers 12

Ground Water Contamination 14
- Agricultural Chemicals 15
- Contamination Exceeding a Ground Water Quality Standard 15
- Measures Taken in Response to Degradation 14
- Releases Degrading Ground Water Quality 14
- Site-Specific Ground Water Quality Levels or Points of Compliance 15

Ground Water Quality Standards 7
- Narrative Ground Water Quality Standards 11
- Natural Background Level 11
- Numerical Ground Water Quality Standards 7
  - Primary Constituent Standards 7
  - Secondary Constituent Standards 11

I

Implementation 6
- Aquifer Categorization 6
  - Level of Protection & Application of Standards to Aquifer Categories 6
- Ground Water Quality Standards 6
- Ground Water-Surface Water Interconnection 7
- Interagency Coordination 7

Incorporation By Reference 6

L

Legal Authority 3

M

Management Of Activities With The Potential To Degrade Aquifers 12
- Other Resource Category Aquifers 12
- Sensitive Resource Category Aquifers 12

Mining 16
- Application of Provisions 18
- Application Process 16
- Change in Point(s) of Compliance/ Ground Water Monitoring 18
- Coordination with Other State or Federal Agencies/Public Notice 18
- Ground Water Monitoring & Reporting 17
- Limitations 18
- Request for Setting Point(s) of Compliance & Standards Applicable to Mining Activities 16
- Setting the Point(s) of Compliance 17

P

Policies 3
- Categorization of Ground Water 3
- Existing & Projected Future Beneficial Uses 3
- Ground Water Quality Protection 3
- Ground Water Quality Standards 3
- Mining 3
- Prevention of Ground Water Contamination 3

Procedures For Categorizing Or Recategorizing An Aquifer 12
- Criteria for Aquifer Categories 13
- Petition Process 13
- Preliminary Department Review 14

T

Title & Scope 3

W

Written Interpretations 3