

**Brad Little** 

Governor

# **Jeff Raybould**

Chairman St. Anthony At Large

**Roger W. Chase** 

Vice-Chairman Pocatello **District** 4

# 1. Roll Call

Jo Ann Cole-Hansen

*Secretary* Lewiston At Large

**Dale Van Stone** Hope District 1

**Albert Barker Boise District 2** 

#### **Dean Stevenson**

Paul **District 3** 

**Peter Van Der Meulen** 

Hailey At Large

# **Brian Olmstead**

**Twin Falls** At Large

\* Action Item: A vote regarding this item may be made this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item.

#### Americans with Disabilities

The meeting will be held telephonically. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email jennifer.strange@idwr.idaho.gov or by phone at (208) 287-4800.

AGENDA

**IDAHO WATER RESOURCE BOARD** 

**Special Board Meeting No. 9-22** Tuesday, September 6, 2022 1:00 p.m. (MT)

Water Center Conference Room 602 C & D / Online Zoom Meeting 322 E. Front St. BOISE

**Board Members & the Public may participate via Zoom** Click here to join our Zoom Meeting Dial in Option: 1(253) 215-8782 Meeting ID: 840 2967 8286 Passcode: 018492

- 2. Administrative Rules\*
- 3. Other Items
- 4. Adjourn

# BEFORE THE IDAHO WATER RESOURCE BOARD

# IN THE MATTER OF THE BOARD'S 2022 ZERO-BASED REGULATION NEGOTIATED RULEMAKING OF IDAPA 37

RESOLUTION TO PUBLISH FIVE IDAPA 37 CHAPTERS AS PROPOSED RULES IN THE OCTOBER 5, 2022, IDAHO ADMINISTRATIVE BULLETIN VOL. 22-10

1 WHEREAS, the Idaho Water Resource Board ("IWRB") is the executive branch entity with 2 statutory oversight and authority over 12 chapters of Administrative Rules in IDAPA 37;

3 WHEREAS, Governor Little's Executive Order 2020-01 Zero Based Regulation ("Executive 4 Order") directs each agency to comprehensively review all rules under its authority and "if 5 applicable" to promulgate new rules to take their place where necessary, and to conduct this 6 zero-based review ("ZBR") over a five year period from 2021 to 2025;

7 WHEREAS, the IWRB adopted a five-year ZBR rulemaking schedule that identifies the 8 review of the following rules by the end of the second year, or 2022:

- 9 IDAPA 37.02.03 Water Supply Bank Rules;
  - IDAPA 37.03.04 Drilling for Geothermal Resources Rules;
- 11 IDAPA 37.03.05 Mine Tailings Impoundment Structures Rules;
- 12 IDAPA 37.03.06 Safety of Dams Rules; and
- 13 IDAPA 37.03.10 Driller Licensing Rules.

WHEREAS, the Executive Order directs any "agency wishing to renew a rule chapter beyond [its ZBR] review date" to promulgate a new rule chapter after conducting a "retrospective analysis" of the rule;

WHEREAS, the IWRB has conducted retrospective analyses of its Water Supply Bank Rules,
Drilling for Geothermal Resources Rules, Mine Tailings Impoundment Structures Rules, Safety of
Dams Rules, and Driller Licensing Rules and concluded they are all needed to carry out the IWRB's
statutory duties and responsibilities fairly, efficiently, and consistently;

21 WHEREAS, the Executive Order directs agencies to "start the new rulemaking from a zero-22 base, and not seek to simply reauthorize their existing rule chapter without a critical and 23 comprehensive review";

24 WHEREAS, the IWRB's notices of intent to promulgate rules for each chapter clearly 25 stated its intent to "repeal and promulgate rules" "consistent with Executive Order 2020-01: 26 Zero-Based Regulation" and where the IWRB has conformed to all ZBR processes and 27 requirements throughout the rulemaking process;

Resolution No.

10

28 WHEREAS, the Executive Order directs agencies to "publish a notice of intent to 29 promulgate rules and hold, at a minimum, two public hearings that are designed to maximize 30 public participation in the rulemaking process";

WHEREAS, the IWRB published notice of negotiated rulemaking for its Water Supply Bank
Rules and Drilling for Geothermal Resources Rules in Admin. Bulletin Vol. 22-3, its Driller Licensing
Rules in Admin. Bulletin Vol. 22-4, and its Mine Tailing Impoundment Structures Rules and Safety
of Dams Rules in Admin. Bulletin Vol. 22-5;

WHREAS, the IWRB held two public hearings or more as part of its negotiated rulemaking of the Water Supply Bank Rules, Mine Tailings Impoundment Structures Rules, Safety of Dams Rules, and Well Driller Licensing Rules during the springs and summer of 2022, and will hold a second public hearing for the Drilling for Geothermal Resources Rules if requested after publication of the proposed rule on October 2022;

40 WHEREAS, the Executive Order directs agencies to promulgate new rule chapters that 41 "reduce the overall regulatory burden, or remain neutral, as compared to the previous chapter";

42 WHEREAS, in combination, the Water Supply Bank Rules, Drilling for Geothermal 43 Resources Rules, Mine Tailings Impoundment Structures Rules, Safety of Dams Rules, and Well 44 Driller Licensing Rules were reduced by more than 4,500 words, resulting in a combined reduction 45 of 15.5%;

NOW, THEREFORE BE IT RESOLVED that the IWRB adopts the following proposed rules and
directs that they be adopted as submitted to the Idaho Office of Administrative Rules
Coordinator:

- 49 37.02.03, Water Supply Bank Rules;
- 50 37.03.04, Drilling for Geothermal Resources Rules;
- 37.03.05, Mine Tailings Impoundment Structures Rules;
- 52 37.03.06, *Safety of Dams Rules*; and
- **37.03.10**, *Well Driller Licensing Rules*.
- 54 NOW, THEREFORE BE IT RESOLVED that the IWRB authorizes the notice and publication
- 55 of the above proposed rules.

DATED this 6<sup>th</sup> day of September, 2022.

JEFF RAYBOULD, Chairman Idaho Water Resource Board

ATTEST

JO ANN COLE-HANSEN, Secretary Idaho Water Resource Board

Resolution No. \_\_\_\_\_

# IWRB/IDWR Proposed Five-Year Rulemaking Schedule, September 22, 2020

## Year 1

Rule No.	Title	Date	Page Count	Word Count	
37.01.01	Rules of Procedure of the IDWR	2000	35	6,440	
37.03.06	Safety of Dams Rules	1993	17	7,708	
37.02.01	Comprehensive State Water Plan Rules	1993	8	3,123	
37.03.07	Stream Channel Alteration Rules 61.01, 61.03	1993	1	83	
		Total	61	17,354	17%

# Year 2

Rule No.	Title	Date	Page Count	Word Count	
37.02.03	Water Supply Bank Rules	1997	9	3,450	
37.03.10	Well Driller Licensing Rules	2000	15	6,416	
37.03.04	Drilling for Geothermal Resources Rules	1993	13	6,197	
37.03.05	Mine Tailings Impoundment Structures Rules	1993	12	4,850	
		Total	49	20,913	20%

# Year 3

Rule No.	Title	Date	Page Count	Word Count	
37.03.08	Water Appropriation Rules	1993	24	10,718	
37.03.03	Rules and Minimum Standards for the Construction	2013	26	10,488	
	and Use of Injection Wells				
		Total	50	21,206	21%

# Year 4

Rule No.	Title	Date	Page Count	Word Count	
37.03.01	Adjudication Rules	2009	11	4,968	
37.03.02	Beneficial Use Examination Rules	2012	13	5,107	
37.03.09	Well Construction Standards and Rules	2009	40	13,225	
		Total	64	23,300	23%

# Year 5

Rule No.	Title	Date	Page Count	Word Count	
37.03.11	Conjunctive Management Rules	1994	13	6,405	
37.03.12	IDWR Water Distribution Rules - Water District 34	1994	9	3,692	
37.03.07	Stream Channel Alteration Rules, entire chapter	1993	27	7,681	
37.02.04	Shoshone Bannock Tribal Water Supply Bank Rules	1994	7	1,772	
		Total	56	19,550	19%
		Grand Total:	280	102,323	100%

Summary of Rulemaking Changes and Reductions

		Existing Word	Draft Word	Change in	% Change in	
IDAPA	Name	Count	Count	Word Count	Word Count	Note
37.02.03	Water Supply Bank	3,440	3,199	-241	-7.0%	August 31 Proposed Rule Draft
37.03.04	Drilling for Geothermal Resources	6,312	4,878	-1,434	-22.7%	1st Draft Rule, Final Draft
37.03.05	Mine Tailings Impoundment Structures	5,013	5,021	8	0.2%	Assumes 2 minor changes
37.03.06	Safety of Dams	8,084	7,156	-928	-11.5%	2nd Draft Rule, w/o MTIS Rules
37.03.10	Well Driller Licensing	6,616	4,652	-1,964	-29.7%	2nd Draft Rule, Final Draft
		29,465	24,906	-4,559	-15.5%	

#### IDAPA 37 – IDAHO DEPARTMENT OF WATER RESOURCES IDAHO WATER RESOURCE BOARD

#### 37.02.03 - WATER SUPPLY BANK RULES OF THE IDAHO DEPARTMENT OF WATER RESOURCES

#### DOCKET NO. 37-0203-2201 (NEW CHAPTER, FEE RULE)

#### NOTICE OF RULEMAKING - PROPOSED RULE

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized pursuant to §§ 42-1762, 42-1734(19), and 42-1805(8), Idaho Code.

**PUBLIC HEARING SCHEDULE:** Public hearing(s) concerning this rulemaking will be scheduled if requested in writing by twenty-five (25) persons, a political subdivision, or an agency, not later than October 19, 2022.

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made not later than five (5) days prior to the hearing, to the agency address below.

**DESCRIPTIVE SUMMARY:** The following is a non-technical explanation of the substance and purpose of the proposed rule.

The Idaho Department of Water Resources (IDWR) and the Idaho Water Resource Board (IWRB) (the "Agencies") initiated this rulemaking in compliance with <u>Executive Order No. 2020-01</u>, Zero-Based Regulation (ZBR) (EO 2020-01), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, must be reviewed by the promulgating agency over a five-year period. This review is being conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at <u>https://adminrules.idaho.gov/forms\_menu.html</u>. This rule chapter was scheduled for review in 2022.

With this Notice, the Agencies propose a new chapter of water supply bank rules. The new chapter is approximately 7% shorter than the existing water supply bank rule chapter due to both internal agency analysis and external stakeholder negotiation, commentary, and editing. Changes to the rule come through a combination of (a) removal of obsolete provisions (such as outdated "order of consideration" processes), (b) removal of unnecessary provisions (such as definitions for "year" and "person"), and (c) modifications to existing rules regulating the processing of water supply bank leases and rentals.

Pursuant to the ZBR process, this Notice represents the promulgation of a new rule chapter. As a result, the proposed rule does not contain strike-out/underline text in legislative format. The old rule has been repealed and replaced in its entirety. However, the development of the proposed rule text through two publicly-released preliminary rule draft iterations may be viewed at: <u>https://idwr.idaho.gov/legal-actions/rules/procedure-rules.html</u>. At the same website, the Agencies also developed and published rulemaking support documents, which provide the Agencies' recommendations on rulemaking, rulemaking analysis, and responses to substantive comments received through the negotiated rulemaking process.

Citizens of the state of Idaho, water users, governmental agencies, and environmental groups may be interested in commenting on the proposed rule text. After consideration of public comments received in response to this Proposed Rule, the Agencies will present the final rule text to the Idaho Legislature in the late fall of 2022.

FEE SUMMARY: The following is a specific description of the fee or charge imposed:

Idaho Code §§ 42-1761, 42-1762, and 42-1765 authorizes the Idaho Water Resource Board to generate revenue through the operation of water supply bank and rental pools and to collect "lease" and "rental" fees in association with water supply bank and rental pool transactions. This Proposed Rule does not change current water supply bank and rental pool fees.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year: N/A.

**NEGOTIATED RULEMAKING:** Pursuant to § 67-5220(1), Idaho Code, negotiated rulemaking was conducted. The Notice of Intent to Promulgate Rules – Negotiated Rulemaking was published in the March 2, 2022, Idaho Administrative Bulletin, Vol. 22-3, pages 24-25.

**INCORPORATION BY REFERENCE:** Pursuant to § 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: N/A.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Mathew Weaver at <u>mathew.weaver@idwr.idaho.gov</u>, (208) 287-4800.

Anyone can submit written comments regarding this proposed rule by mail to the address below or by email sent to <u>rulesinfor@idwr.idaho.gov</u>. The Department will consider all written comments received by the undersigned on or before October 26, 2022.

Dated this 2nd day of September 2022

Gary Spackman, Director Idaho Department of Water Resources 322 E. Front Street PO Box 83720 Boise, ID 83720 Phone: (208) 287-4800

#### 37.02.03 – WATER SUPPLY BANK RULES

#### 000. LEGAL AUTHORITY.

Section 42-1762, Idaho Code.

#### **001. SCOPE.**

These rules govern the Board's operation and management of a Water Supply Bank as provided for in Sections 42-1761 to 42-1766, Idaho Code. These rules are to be used by the Board in considering the purchase, sale, lease or rental of natural flow or stored water, the use of any funds generated therefrom, and the appointment of local committees to facilitate the lease and rental of water from a rental pool. ()

#### 002. -- 009. (RESERVED)

#### 010. **DEFINITIONS.**

01. Board. T	he Idaho Water Resource Board.	(7-1-21)T
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**02. Board's Water Supply Bank**. The water exchange market operated directly by the Board to facilitate marketing of water rights. (7-1-21)T

**03. Director**. The Director of the Idaho Department of Water Resources. (7-1-21)T

**04. Department**. The Idaho Department of Water Resources. (7-1-21)T

**05.** Lease. To convey by contract a water right to the Board's water supply bank or stored water to a rental pool operated by a local committee. (7-1-21)T

**06. Local Committee**. A committee designated by the Board to facilitate marketing of stored water by operating a rental pool pursuant to Section 42-1765, Idaho Code.

**07. Natural Flow**. Water or the right to use water that exists in a spring, stream, river, or aquifer at a certain time and which is not the result of the storage of water flowing at a previous time. (7-1-21)T

**08. Person**. Any individual, partnership, corporation, association, governmental subdivision, or public or private organization or entity of any character. (())

**09. Rent**. To convey by contract a water right or stored water from the Board's water supply bank or rental pool.

( )

(

)

10. Rental Pool. A market operated by a local committee for exchange of stored water. ( )

11. Stored Water. Water made available by detention in surface reservoirs or storage space in a surface reservoir. (7-1-21)T

12. Water Right. The legal right to divert and use or to protect in place the public waters of the state of Idaho, including any storage entitlement, where such right is evidenced by a decree, a permit or license issued by the Department.

**13.** Water Supply Bank. The water exchange market operated by the Board pursuant to Sections 42-1761 through 42-1766, Idaho Code, and these rules and is a general term which includes the Board's water supply bank and rental pools. (7-1-21)T

#### 011. -- 024. (RESERVED)

#### 025. ACOUISITION OF WATER RIGHTS FOR THE BOARD'S WATER SUPPLY BANK.

General. The Board may purchase, lease, accept as a gift or otherwise obtain rights to natural flow 01 or stored water and credit them to the Board's water supply bank. These water rights may then be divided or combined into more marketable blocks, if there is no injury to other right holders or enlargement of use of the water rights, and the change is in the local public interest. Any person proposing to sell or lease water rights, or to amend an existing lease contract, or to make water available through the water supply bank for the purposes of Section 42-1763B, Idaho Code, shall file a completed application with the Director on forms established by the Department and include additional information required by the Board or Director to evaluate the proposed transaction. The completed application shall state the period a water right is offered for lease, or the period that storage water will be released for fish migration purposes in accordance with Section 42-1763B, Idaho Code, and the payment terms, if any, requested by the applicant. ( )

02. **Application**. Submitted with the completed application shall be: (7-1-21)T

Evidence that the water right has been recorded through a court decree or a permit or license a. issued by the Department. If the right is included in an ongoing adjudication, a copy of the claim is required; (

Proof that the applicant currently owns the water right or has the owner's authorization to submit b. the application. If the right to the use of the water, or the use of the diversion works or irrigation system is represented by shares of stock in a company or corporation, or if such works or system is owned or managed by an irrigation district, the written consent of such company, corporation, or irrigation district to the proposed sale or lease must accompany the application; )

Information that the water right has not been lost through forfeiture as defined in Section 42c. 222(2), Idaho Code, or through abandonment; ( )

d. Evidence demonstrating the relative availability of water to satisfy the water right; and ( )

A lease application filing fee of two hundred fifty dollars (\$250) per water right up to a maximum e. total of five hundred dollars (\$500.00) for overlapping water rights which have a common place of use or common diversion rate or diversion volume. )

Inadequate Application If an application is not complete, the Director will correspond with the 03. applicant to obtain the needed information. Failure to submit the requested information within thirty (30) days will be cause for the Director to void the application.

04. Criteria. The board will consider the following in determining whether to accept a water right into its water supply bank: )

Whether the applicant is the current owner, title holder, or contract water user of the water right a. offered to the Board's water supply bank or has authority to act on behalf of the owner; ( )

b. Whether all necessary consents have been filed with the Board; (7-1-21)T

Whether the information available to the Board indicates that the water right may have been c. abandoned or forfeited; ( )

d. Whether the offering price or requested rental rate is reasonable; (7-1-21)T

Whether acquisition of the water right will be contrary to the State Water Plan; (7-1-21)T e.

f. Whether the application is in the local public interest as defined in Section 42-202B, Idaho Code; (

)

g. The likelihood of selling or renting the water right from the Board's water supply bank; and ( )

i. Other factors as determined by the Board. (7-1-21)T

05. Resolution of Board. The Board may by resolution accept an application to sell or lease water rights to the Board's water supply bank, or otherwise make water available through the water supply bank. An application to lease together with the resolution accepting it becomes a lease. Water rights associated with a lease are placed into the Board's water supply bank upon adoption of the resolution. A resolution accepting an application to sell water rights to the Board's water supply bank will provide authority for the chairman of the Board to enter an agreement to purchase the water rights. The resolution may include conditions of approval, including but not limited to, the following:

a. A condition providing the length of time the water right will be retained in the Board's water supply bank; (7-1-21)T

**b.** A condition describing the terms for payment to the owner of the water right and the sale or rental price from the Board's water supply bank; and (7-1-21)T

**c.** Other conditions as the Board determines appropriate, including a condition recognizing that water is available through the water supply bank pursuant to the provisions of Section 42-1763B, Idaho Code, for purposes of fish migration. ( )

06. Placement of Water Right. Effect of placement of a water right into the Board's water supply bank. (7-1-21)T

**a.** Upon acceptance of a water right into the Board's water supply bank, the owner of the water right is not authorized to continue the diversion and use of the right while it is in the Board's water supply bank. ( )

**b.** A water right which has been accepted shall remain in the Board's water supply bank for the period designated by the Board unless removed by resolution of the Board. (7-1-21)T

c. The owner of the water right shall remain responsible to take actions required to claim the water right in an adjudication or other legal action concerning the water right and to pay taxes, fees, or assessments related to the water right. (7-1-21)T

**d.** The forfeiture provisions of Section 42-222(2), Idaho Code are tolled during the time the water right is in the Board's water supply bank, pursuant to the provisions of Section 42-1764, Idaho Code.

#### 026. -- 029. (RESERVED)

#### 030. SALE OR RENTAL OF WATER RIGHTS FROM THE BOARD'S WATER SUPPLY BANK.

**01. General**. The Board may in its discretion initiate the process to sell or rent water rights from the Board's water supply bank. An application to rent, or to amend an existing rental, shall be on forms established by the Director and shall include such additional information as required by the Board or Director to evaluate the proposed rental. The sale or rental price shall be the price, if any, as determined by the Board. ()

**02. Application.** Submitted with the completed application shall be:

**a**. Evidence of authority or permission to use water at the proposed place of use, to divert water at the proposed point of diversion, and to deliver water through the proposed conveyance system, including a canal, lateral, or ditch, for delivery of water; ( )

**b**. The proposed beneficial use of water and the quantity of water to be diverted during the rental, including the number of acres to be irrigated if the application is for irrigation; ( )

**c.** A map of sufficient scale to show the proposed points of diversion and proposed places of use, including the number of acres to be irrigated if the application is for irrigation; and ( )

**d.** If the rental application proposes to change the nature of use of a specific water right, evidence sufficient to establish historical consumptive use, as defined in Section 42-202B, Idaho Code, of the right proposed to be rented.

**03. Inadequate Application**. If an application is not complete, the Director will correspond with the applicant to obtain the needed information. Failure to submit the requested information within thirty (30) days will be cause for the Director to void the application.

**04.** Notice. The Director may give notice of an intended rental as he deems necessary, provided that prior to approving any application for purchase, or for rental for a period of more than five (5) years, he shall give notice as required in Section 42-222(1), Idaho Code. (7-1-21)T

**05. Consideration**. All applications received on or prior to November 1 of the calendar year prior to the proposed rental start date will be considered as having been received at the same time. Applications received after November 1 may be considered only if sufficient water remains in the Board's water supply bank. ( )

## 06. Application Evaluation Criteria.

a.	The Director will evaluate applications using the following:	(	)
i.	Whether the proposal would constitute an enlargement of the water right;	(	)
ii.	Whether the water will be put to a beneficial use;	(	)
			c

iii. Whether the water supply available from applicable rights in the Board's water supply bank is sufficient for the use intended;

iv.	Whether the proposal is in the local public interest; and	(	)	
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v. Other factors as determined by the Director or the Board. ( )

**b.** The Department may request additional information from a lessor or rental applicant as needed to evaluate the proposed rental relative to the criteria stated in this section. If the information requested from a lessor is not received within thirty (30) days, the Department may consider a different lease to satisfy the proposed rental. If the information requested from a rental applicant is not received within thirty (30) days, the Director may void the rental application.

**c.** For applications submitted pursuant to Section 42-1763B, Idaho Code, the Director will only make an evaluation as to whether the proposed use of water will cause injury to other water rights. ()

**d**. The Director may defer the evaluation of potential injury to other water rights conditioned upon the right of any affected water right holder to petition the Director pursuant to Section 42-1766, Idaho Code, to revoke or modify the rental approval upon a showing of injury. ()

e. The Director shall consider in determining whether to approve a rental of water for use outside of the state of Idaho those factors enumerated in Section 42-401(3), Idaho Code, except that this evaluation is not required for applications submitted pursuant to Section 42-1763B, Idaho Code. ()

**07. Authorized to Rent**. The Director is authorized to rent water rights offered by the Board from the Board's water supply bank for a period up to five (5) years, but shall submit applications for purchase, or rental for a

period of more than five (5) years to the Board for action. The Director will advise the Board on applications which require Board approval under Rule Subsection 025.06 whether he can approve the application in whole or in part or with conditions to comply with Section 42-1763, Idaho Code. (7-1-21)T

**08. Board Review**. The Board will review applications for purchase, or which propose the rental of water rights for a duration of more than five (5) years, and may approve, approve with conditions, or reject the applications as the Board determines to best meet the purposes of Section 42-1761, Idaho Code and promote the interest of the people of the state of Idaho. ( )

## 031. -- 034. (RESERVED)

## 035. HANDLING OF MONEY ASSOCIATED WITH THE BOARD'S WATER SUPPLY BANK.

**01.** Fees collected pursuant to Rules 025 and 030 from the acquisition, sale, or rental of water rights for or from the Board's water supply bank do not apply to rental pools described in Rule 040 and will be handled as follows:

a. Credited Amount. Ten percent (10%) of the gross amount received from the sale or rental of a water right from the Board's water supply bank and the entire lease application fee received pursuant to Rule 025 shall be credited to the Water Administration Account created by Section 42-238a, Idaho Code, or to the federal grant fund if the payment is received from a federal agency, for administrative costs of operating the Water Supply Bank.

**b.** Excess Funds. Any funds in excess of the amount needed to compensate the owner of the water right in accordance with the resolution accepting the water right into the Board's water supply bank and the administrative charge of Rule Subsection 035.01.a shall be credited to the Water Management Account created by Section 42-1760, Idaho Code, for use by the Board.

## 036. -- 039. (RESERVED)

# 040. APPOINTMENT OF LOCAL RENTAL POOL COMMITTEES.

**01. Board Meetings for Committee Appointments.** The Board may at any regular or special meeting consider appointing an entity to serve as a local committee to facilitate the lease and rental of stored water. At least ten (10) days prior to the meeting, the entity seeking appointment shall provide to the Director information concerning the organization of the entity, a listing of its officers, a copy of its bylaws and procedures, if applicable, a copy of the proposed local committee procedures, pursuant to which the local committee would facilitate the lease and rental of stored water, together with a copy of each general lease and rental form proposed to be used by the local committee. The local committee procedures must be approved by the Board and provide for the following:

)

**a.** Determination of priority among competing applicants to lease stored water to the rental pool and to rent stored water from the rental pool; (7-1-21)T

**b.** Determination of the reimbursement schedule for those leasing stored water into the rental pool; (7-1-21)T

c.	Determination of the rental price charge to those renting stored water from the rental po	ool;
		(7-1-21)T

d.	Determination of the administrative charge to be assessed by the local committee;	(7-1-21)T
		(, = = -)-

e. Allocation of stored water leased to the bank but not rented; (7-1-21)T

**f.** Notification of the Department and the watermaster of any rentals where stored water will be moved from the place of use authorized by the permit, license, or decree establishing the stored water right;

(7-1-21)T

**g.** Submittal of applications to rent water from the rental pool for more than five (5) years to the Board for review and approval as a condition of approval by the local committee; (7-1-21)T

h. Prevention of injury to other water rights; (7-1-21)T

i. Protection of the local public interest, except for applications submitted pursuant to Section 42-1763B, Idaho Code;

**j.** Consistency with the conservation of water resources within the state of Idaho, except for applications submitted pursuant to Section 42-1763B, Idaho Code; and ()

**k.** Management of rental pool funds as public funds pursuant to the Public Depository Law, Chapter 1, Title 57, Idaho Code. (7-1-21)T

**02. Local Committee Procedures**. The local committee procedures shall provide that a surcharge of ten percent (10%) of the rental fee charged per acre foot of stored water rented from the rental pool shall be assessed and credited to the revolving development account and the water management account established in Sections 42-1752 and 42-1760, Idaho Code, in such proportion as the Board in its discretion shall determine. Such moneys, together with moneys accruing to or earned thereon, shall be set aside, and made available until expended, to be used by the Board for the purposes of Section 42-1761, Idaho Code, unless the surcharge is prohibited by statute, compact or inter-governmental agreement. (7-1-21)T

**03. Review by Director**. The Director will review the local committee procedures and submit them along with the Director's recommendation to the Board. The lease and rental form must receive the Director's approval. The Board may designate the applying entity as the local committee for a period not to exceed five (5) years. A Certificate of Appointment will be issued by the Board. The Board may extend the appointment for additional periods up to five (5) years, upon written request of the local committee. The Board may revoke a designation upon request of the local committee, or after a hearing pursuant to the promulgated Rules of Practice and Procedure of the Board, if the Board determines that the local committee is no longer serving a necessary purpose or is not abiding by its own approved procedures, these rules or applicable statutes. (7-1-21)T

**04. Annual Report**. The local committee shall report annually on the activity of the rental pool on forms provided by the Board. (7-1-21)T

**05. Submission of Amendments to Procedures to Board**. Amendments to the approved procedures of an appointed local committee which change the amount charged for the rental of stored water shall be submitted to the Board by April 1st of any year. The amendment will be considered approved by the Board unless specifically disapproved at the first regular Board meeting following the amendment action of the local committee. The Board may, upon good cause being determined by the Board, specifically approve of amendments submitted after April 1 of any year. (7-1-21)T

041. -- 999. (RESERVED)

#### IDAPA 37 – IDAHO DEPARTMENT OF WATER RESOURCES IDAHO WATER RESOURCE BOARD

#### **37.03.04 – DRILLING FOR GEOTHERMAL RESOURCES RULES**

#### DOCKET NO. 37-0304-2201 (NEW CHAPTER, FEE RULE)

#### NOTICE OF RULEMAKING – PROPOSED RULE

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized pursuant to §§ 42-1734(19), 42-1805(8), and 42-4010, Idaho Code.

**PUBLIC HEARING SCHEDULE:** Public hearing(s) concerning this rulemaking will be scheduled if requested in writing by twenty-five (25) persons, a political subdivision, or an agency, not later than October 19, 2022.

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made not later than five (5) days prior to the hearing, to the agency address below.

**DESCRIPTIVE SUMMARY:** The following is a non-technical explanation of the substance and purpose of the proposed rule.

The Idaho Department of Water Resources (IDWR) and the Idaho Water Resource Board (IWRB) (the "Agencies") initiated this rulemaking in compliance with <u>Executive Order No. 2020-01</u>, Zero-Based Regulation (ZBR) (EO 2020-01), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, must be reviewed by the promulgating agency over a five-year period. This review is being conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at <u>https://adminrules.idaho.gov/forms\_menu.html</u>. This rule chapter was scheduled for review in 2022.

With this Notice, the Agencies propose a new chapter of drilling for geothermal resources rules. The new chapter is approximately 23% shorter than the existing drilling for geothermal resources rule chapter due to both internal agency analysis and external stakeholder negotiation, commentary, and editing. Changes to the rule come through a combination of (a) removal of obsolete provisions (such as the classification and treatment of "confidential" agency well construction records), (b) removal of unnecessary provisions (such as the definition and use of the term "production well"), and (c) modifications to existing rules regulating the processing of permits for the drilling of wells to use geothermal resources.

Pursuant to the ZBR process, this Notice represents the promulgation of a new rule chapter. As a result, the proposed rule does not contain strike-out/underline text in legislative format. The old rule has been repealed and replaced in its entirety. However, the development of the proposed rule text through two publicly-released preliminary rule draft iterations may be viewed at: <u>https://idwr.idaho.gov/legal-actions/rules/procedure-rules.html</u>. At the same website, the Agencies also developed and published rulemaking support documents, which provide the Agencies' recommendations on rulemaking, rulemaking analysis, and responses to substantive comments received through the negotiated rulemaking process.

Citizens of the state of Idaho, water users, governmental agencies, and environmental groups may be interested in commenting on the proposed rule text. After consideration of public comments received in response to this Proposed Rule, the Agencies will present the final rule text to the Idaho Legislature in the late fall of 2022.

**FEE SUMMARY:** The following is a specific description of the fee or charge imposed:

IDAPA 37.03.04 governs the regulation of geothermal resource exploration and development and ensures that such activities occur in the public interest. The Rule allows Idaho's geothermal policy, "to maximize the benefits to the entire state which may be derived from the utilization of our geothermal resources, while minimizing the detriments and costs of all kinds which could results from their utilization" is met. The Rule also requires fees for geothermal exploratory wells, production wells, injection wells, and amendments to permits, as set forth in Idaho Code §§ 42-4003 and 42-4011.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year: N/A.

**NEGOTIATED RULEMAKING:** Pursuant to § 67-5220(1), Idaho Code, negotiated rulemaking was conducted. The Notice of Intent to Promulgate Rules – Negotiated Rulemaking was published in the March 2, 2022, Idaho Administrative Bulletin, Vol. 22-3, pages 25-26.

**INCORPORATION BY REFERENCE:** Pursuant to § 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: N/A.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Mathew Weaver at <u>mathew.weaver@idwr.idaho.gov</u>, (208) 287-4800.

Anyone can submit written comments regarding this proposed rule by mail to the address below or by email sent to <u>rulesinfor@idwr.idaho.gov</u>. The Department will consider all written comments received by the undersigned on or before October 26, 2022.

Dated this 2nd day of September 2022

Gary Spackman, Director Idaho Department of Water Resources 322 E. Front Street PO Box 83720 Boise, ID 83720 Phone: (208) 287-4800

# may be found in any position and at any depth below the surface of the earth, present in, resulting from, or created

Geothermal Resource. The natural heat energy of the earth, the energy in whatever form which

13.

Page 1

#### 37.03.04 – DRILLING FOR GEOTHERMAL RESOURCES RULES

#### 000. LEGAL AUTHORITY (RULE 0). Section 42-4001 through Section 42-4015, Idaho Code. ( ) 001. TITLE AND SCOPE (RULE 1). These rules establish the framework for the drilling, operation, maintenance, and abandonment of all geothermal wells in the state. ) 002. -- 009. (RESERVED) **DEFINITIONS (RULE 10).** 010. For these rules, the following definitions apply. ) Applicant. Any person applying to the Department of Water Resources for a permit for the 01. construction and operation of any well or injection well. 02. **Board**. The Idaho Water Resource Board. ) ( 03. BOPE. An abbreviation for Blow Out Prevention Equipment which is designed to be attached to the casing in a geothermal well to prevent a blow out of the drilling mud. ) **Completion**. A well is completed thirty (30) days after drilling operations have ceased unless a **04**. suspension of operation is approved by the Director, or thirty (30) days after it has commenced producing a geothermal resource, whichever occurs first, unless drilling operations are resumed before the end of the thirty (30) day period or at the end of the suspension. ) 05. Conductor Pipe. The first and largest diameter string of casing to be installed in the well. This casing extends from land surface to a depth great enough to keep surface waters from entering and loose earth from falling in the hole and to provide anchorage for blow out prevention equipment prior to setting surface casing. 06. **Department**. The Idaho Department of Water Resources. ) 07. Director. The Director of the Idaho Department of Water Resources. ) Drilling Logs. The recorded description of the lithologic sequence encountered in drilling a well. 08. ( ) 09. Drilling Operations. The actual drilling, redrilling, or recompletion of the well for production or injection including the running and cementing of casing and the installation of well head equipment. Drilling operations do not include perforating, logging, and related operations after the casing has been cemented. 10. Exploratory Well. A well drilled for the discovery or evaluation of geothermal resources. ) ( 11. Geothermal Area. The same general land area which in its subsurface is underlain or reasonably appears to be underlain by geothermal resources from or in a single reservoir, pool, or other source or interrelated sources, as such area or areas may be designated from time to time by the Director. ( ) 12. Geothermal Field. An area which contains a well or wells capable of commercial production of geothermal resources. )

by, or which may be extracted from such natural heat and all minerals in solution or other products obtained from the material medium of any geothermal resource. Groundwater having a temperature of two hundred twelve (212) degrees Fahrenheit or more in the bottom of a well shall be classified as a geothermal resource. Geothermal resources are found and hereby declared sui generis, being neither a mineral resource nor a water resource but they are also found and hereby declared closely related to and possibly affecting and affected by water and mineral resources in many instances.

14. Injection Well. Any special well, converted producing well, or reactivated or converted abandoned well employed for injecting material into a geothermal area or adjacent area to maintain pressures in a geothermal reservoir, pool, or other source, or to provide new material or to serve as a material medium therein, or for reinjecting any material medium or the residue thereof, or any by-product of geothermal resource exploration or development into the earth. ( )

**15. Intermediate Casing**. The casing installed within the well to seal out brackish water, caving zones, etc., below the bottom of the surface casing. Such casings may either be lapped into the surface casing or extend to land surface.

**16. Material Medium**. Any substance including, but not limited to, naturally heated fluids, brines, associated gasses and steam in whatever form, found at any depth and in any position below the surface of the earth, which contains or transmits the natural heat energy of the earth, but excluding petroleum, oil, hydrocarbon gas, or other hydrocarbon substances.

17. Notice of Intent (NOI). A written statement to the Director that the applicant intends to do work.

**18. Observation Well**. A small diameter well drilled strictly for monitoring purposes. In no case shall an observation well be completed for production of geothermal resources or for use as an injection well.

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**19. Operator**. Any person drilling, maintaining, operating, pumping, or in control of any well. The term operator also includes owner when any well is or has been or is about to be operated by or under the direction of the owner.

**20. Owner**. The owner of the geothermal lease or well and includes operator when any well is operated or has been operated or is about to be operated by any person other than the owner. ( )

**21. Permit**. A permit issued pursuant to these rules for the construction and operation of any well or ( )

22. Person. Any individual natural person, general or limited partnership, joint venture, association, cooperative organization, corporation, whether domestic or foreign, agency or subdivision of this or any other state or municipal or quasi-municipal entity whether or not it is incorporated.

**23. Production Casing**. The casing or tubing through which a geothermal resource is produced. This casing extends from the producing zone to land surface.

**24. Surface Casing**. The first casing run after the conductor pipe to anchor blow out prevention equipment and to seal out all existing groundwater zones. ( )

**25. Suspension of Operations**. The cessation of drilling, redrilling, or alteration of casing before the well is officially abandoned or completed. All suspensions must be authorized by the Director. ()

26. Waste. Any physical waste including, but not limited to: ( )

**a.** Underground waste resulting from inefficient, excessive, or improper use, or dissipation of geothermal energy, or of any geothermal resource pool, reservoir, or other source; or the locating, spacing, constructing, equipping, operating, or producing of any well in a manner which results, or tends to result in reducing

**b.** The inefficient above-ground transporting and storage of geothermal energy; and the locating, spacing, equipping, operating, or producing of any well or injection well in a manner causing or tending to cause unnecessary or excessive surface loss or destruction of geothermal energy; ()

c. The escape into the open air from a well of steam or hot water more than what is reasonably necessary in the efficient development or production of a well. ()

27. Well or Geothermal Resource Well. Any excavation or other alteration in the earth's surface or crust by means of which the energy of any geothermal resource or its material medium is sought or obtained. ( )

# 011. -- 024. (RESERVED)

## 025. DRILLING (RULE 25).

**01. General**. All wells shall be drilled to protect or minimize damage to the environment, waters usable for all beneficial purposes, geothermal resources, life, health, or property.

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## 02. Permits and Notices.

**a.** Permit to Drill for Geothermal Resources. Any person, owner, or operator who proposes to construct or alter a well to produce or explore for geothermal resources or to construct or alter an injection well shall first apply to the Director for permit. If the owner or operator plans to deepen, redrill, plug, or perform any operation that will in any manner alter the well, an application shall be filed with the Director and written approval must be received prior to beginning work. Application for permit shall be on a form approved by the department. ( )

**b.** Application for Permit to Convert to Injection. If the owner plans to convert an existing geothermal well into an injection well with no change of mechanical condition, an application for permit shall be filed with the Director and written approval must be received prior to beginning injection. Application for permit shall be made on a form approved by the department.

**c.** Amendment of Permit. No well may be owned or operated by any person whose name does not appear on the permit or permit application and no changes in departure from the procedures, location, data, or persons specified on the face of a permit shall be allowed until an amendment to such permit is approved by the Director. Application for amendment shall be made on a form approved by the department.

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**d.** Notice to Other Agencies. Notice of applications, permits, orders, or other actions received or issued by the Director may be given to any other agency or entity which may have information, comments, or jurisdiction over the activity involved. The Director may execute a memorandum of understanding with other agencies to eliminate duplication of applications or other efforts. ()

e. No application shall be accepted by the Director until the filing fee required by § 42-4003(5), Idaho Code has been deposited with the Director.

03. Bonds.

**a.** The Director shall require every operator or owner who engages in the construction, alteration, testing, operation, or abandonment of the well to provide to the Director evidence of good and sufficient security in the form and amounts required by Idaho Code § 42-4005(f).

**b.** Bonds remain in force for the life of the well or wells and may not be released until the well or wells are properly abandoned, or another valid bond is substituted therefor. Any person who acquires the ownership

or operation of any well or wells shall within thirty (30) days after acquisition provide to the Director evidence of good and sufficient security in the form and amounts required by Idaho Code § 42-4005(f).

04. Well Spacing.

**a.** Any well drilled for the discovery and production of geothermal resources or as an injection well shall be located more than one hundred (100) feet from and within the outer boundary of the parcel of land on which the well is situated, or more than one hundred (100) feet from a public road, street, or highway dedicated prior to the commencement of drilling. This requirement may be modified or waived by the Director upon written request.

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**b.** For several contiguous parcels of land in one or different ownerships that are operated as a single geothermal field, the term outer boundary line means the outer boundary line of the land included in the field. In determining the contiguity of any such parcels of land, no street, road, or alley lying within the lease or field shall be determined to interrupt such contiguity. ( )

**c.** The Director shall approve the proposed well spacing programs or prescribe such modifications to the programs as he deems necessary for proper development giving consideration to such factors as, but not limited to, topographic characteristics of the area, hydrologic, geologic, and reservoir characteristics of the area, the number of wells that can be economically drilled to provide the necessary volume of geothermal resources for the intended use, minimizing well interference, unreasonable interference with multiple use of lands, and protection of the environment.

**d.** Directional Drilling. Where the surface of the parcel of land containing one acre or more is unavailable for drilling, the surface well location may be located upon property which may or may not be contiguous. Such surface well locations shall not be less than twenty-five (25) feet from the outer boundary of the parcel on which it is located, nor less than twenty-five (25) feet from an existing street or road. The production or injection interval of the well shall not be less than one hundred (100) feet from the outer boundary of the parcel into which it is drilled. Directional surveys must be filed with the Director for all wells directionally drilled.

# 05. Casing.

**a.** General. All wells shall be cased in such a manner as to protect or minimize damage to the environment, usable ground waters, geothermal resources, life, health, and property. The permanent well head completion equipment shall be attached to the production casing or to the intermediate casing if production casing does not reach the surface. No permanent well head equipment may be attached to any conductor or surface casing alone. The specification for casing strength shall be determined by the Director on a well-to-well basis. All casing reaching the surface shall provide adequate anchorage for blow out prevention equipment, hole pressure control, and protection for natural resources. Sufficient casing shall be run to reach a depth below all known or reasonably estimated groundwater levels to prevent blow outs or uncontrolled flows. The following casing requirements are general but should be used as guidelines in submitting applications for permit to drill. The casing schedule may consist of multiple casing strings (i.e., surface casing, intermediate casing, production casing) provided drilling depth does not exceed ten times the depth of last cemented casing. (()

**b.** Conductor Pipe. A minimum of forty (40) feet of conductor pipe shall be installed. The annular space is to be cemented solid to the surface. A twenty-four (24) hour cure period for the grout must be allowed prior to drilling out the shoe unless additives sufficient, as determined by the Director, are used to obtain early strength. An annular blow out preventer shall be installed on all exploratory wells and on development wells when deemed necessary by the department.

**c.** Surface Casing. The surface casing hole shall be logged with an induction electrical log or equivalent or gamma-neutron log before running casing. This requirement may be waived by the Director. Permission to waive this requirement must be granted by the Director in writing prior to running surface casing. This casing shall provide for control of formation fluids, protection of usable groundwater, and for adequate anchorage for blow out prevention equipment. All surface casing shall be cemented solid to the surface. A twenty-four (24) hour cure period shall be allowed prior to drilling out the shoe of the surface casing unless additives sufficient, as

ii. In areas where subsurface geological conditions are variable or unknown, surface casing shall be in accordance with specifications as outlined in a. above. The casing must be seated through a sufficient series of low permeability, competent lithologic units such as claystone, siltstone, basalt, etc., to ensure a solid anchor for blow out prevention equipment and to protect usable groundwater from contamination. Additional casing may be required if the first string has not been cemented through a sufficient series of such beds, or a rapidly increasing thermal gradient or formation pressures are encountered. ()

iii. The temperature of the return drilling mud shall be monitored continuously during the drilling of the surface casing hole. Either a continuous temperature-monitoring device shall be installed and maintained in a working condition or the temperature shall be read manually. In either case, the return temperature shall be entered into the logbook on thirty (30) foot increments.

iv. BOPE capable of shutting in the well during any operation shall be installed on the surface casing and maintained ready for use at all times. BOPE pressure tests shall be performed by the operator for department personnel on all exploratory wells prior to drilling out the shoe of the surface casing. The decision to perform BOPE pressure tests on other types of wells shall be made on a well-to-well basis by the Director. The Director must be notified five (5) days in advance of a scheduled pressure test. Permission to proceed with the test sooner may be given verbally by the Director upon request by the operator. ()

**d.** Intermediate Casing. Intermediate casing shall be required for protection against anomalous pressure zones, cave-ins, washouts, abnormal temperature zones, uncontrollable lost circulation zones or other drilling hazards. Intermediate casing strings when installed shall be cemented solidly to the surface or to the top of the casing.

e. Production Casing. Production casing may be set above or through the producing or injection zone and cemented either below or just above the objective zones. Sufficient cement shall be used to exclude overlying formation fluids from the geothermal zone, to segregate zones, and to prevent movement of fluids behind the casing into possible fresh groundwater zones. Production casing shall either be cemented solid to the surface or lapped into the intermediate casing if run. If the production casing is lapped into an intermediate casing, the casing overlap shall be at least fifty (50) feet, the lap shall be cemented solid, and the lap shall be pressure tested to ensure its integrity.

**06. Electric Logging**. All wells except observation wells shall be logged with an induction electrical log or equivalent or gamma-neutron log from the bottom of the hole to the bottom of the conductor pipe. This requirement may be modified or waived by the Director upon written request. ( )

# 026. ALTERNATIVE METHODS (RULE 26).

**01.** To accommodate the use of advanced or new technology, and in consideration of methods not specifically addressed in these rules, the Director may consider specific proposals for alternative methods of drilling and constructing geothermal resource wells.

# 027. -- 029. (RESERVED)

# 030. RECORDS (RULE 30).

**01. General**. The owner of any well shall keep or cause to be kept a careful and accurate log, core record, temperature logs, and history of the drilling of the well. These records shall be kept in the nearest office of the owner or at the well site and together with all other reports of the owner and operator regarding the well shall be subject to inspection by the Director during business hours. All records unless otherwise specified must be filed with the Director within thirty (30) days of completion of the well. ()

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#### 02. Records to Be Filed with the Director.

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**a.** Drilling Logs and Core Record. Include the lithologic characteristics and depths of formations encountered, the depth and temperatures of water-bearing and steam-bearing strata, the temperatures, chemical compositions and other chemical and physical characteristics of fluids encountered as ascertained. The core record shall show the depth, lithologic character, and fluid content of the obtained cores. (())

**b.** Well History. The well history shall describe in detail all significant daily operations carried out and equipment used during all phases of drilling, testing, completion, and abandonment of any well.

**c.** Well Summary Report. The well summary report shall accompany the core record and well history reports. It is designed to show data pertinent to the condition of a well at the time of completion of work done.

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**d.** Production Records. The owner of any well producing geothermal resources shall file with the Director on or before the 20th day of each month for the preceding month a statement of production utilized in such a form as the Director may designate. Copies of monthly geothermal energy report forms are available from the Director; however, production data can be submitted on non-department forms if previously approved by the Director.( )

**e.** Injection Records. The owner of any well injecting geothermal fluids or wastewater for any purpose shall file with the Director on or before the twentieth day of each month for the preceding month a report of the injection in such form as the Director may designate. Copies of monthly injection report forms are available from the Director. Injection data may be submitted on non-department forms if previously approved by the Director.

**f.** Electric Logs and Directional Surveys. When conducted, electric logs and directional surveys shall be filed with the Director within sixty (60) days of completion, cessation of drilling operations, excluding any approved suspension of operations, or abandonment of any well. Like copies shall be filed upon recompletion of any well. Upon a showing of hardship, the Director may extend the time within which to comply for a period not to exceed six (6) additional months.

# 031. -- 034. (RESERVED)

# 035. BLOW OUT PREVENTION (RULE 35).

**01.** BOPE must be capable of controlling the well under known and unknown reservoir conditions. ( )

**a.** If reservoir conditions are unknown, data loggers shall be installed to continuously monitor and record the following conditions until the well has been drilled to total depth. ( )

i.	Drilling mud temperature (in and out).	(	)
ii.	Drilling mud pit level.	(	)
iii.	Drilling mud pump volume.	(	)
iv.	Drilling mud weight.	(	)
v.	Drilling rate.	(	)
vi.	Hydrocarbon and hydrogen sulfide gas volume (with alarm).	(	)

**b.** Annular BOPE with a minimum working pressure of one thousand (1,000) PSI shall be installed on the surface casing. If unusual conditions are anticipated, a BOPE may be required on the conductor pipe.

**c.** If drilling mud temperature out, reaches one hundred twenty-five (125) Degrees C (Celsius), drilling operations shall cease, drilling mud circulation will continue and the Director must be notified immediately. The operator must obtain the Director's approval of his proposed course of action prior to resuming drilling operations.

**d.** When reservoir conditions are known, a gate valve with a minimum working pressure rating of three hundred (300) PSI may be installed on the well head. ( )

e. When reservoir conditions are known, the temperature of the return mud shall be monitored continuously. Either a continuous temperature monitoring device shall be installed and maintained in working condition or the temperature shall be read manually. In either case, return mud temperatures shall be entered into the logbook for each thirty (30) feet of depth drilled.

**f.** The Director may approve BOPE modifications upon written request by the applicant. BOPE requirements under these rules may be modified by the Director depending upon the knowledge of the area. Such requirements may be set forth on the approved application for permit to drill a geothermal well or made in the field by Department personnel monitoring construction of the well.

#### **036. -- 039.** (**RESERVED**)

#### 040. INJECTION WELLS (RULE 40).

**01. Construction**. The owner of a proposed injection well or series of injection wells shall provide the Director with such information he deems necessary for evaluation of the impact of such injection on the geothermal reservoir and other natural resources. Such information shall include existing reservoir conditions, method of injection, source of injection fluid, estimates of daily amount of material medium to be injected, zones or formations affected, and analysis of fluid to be injected and of the fluid from the intended zone of the injection. Such information shall be on a form approved or provided by the Director. ()

#### 02. Surveillance.

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**a.** When an owner proposes to drill or modify an injection well or convert a producing or idle well to an injection well, he shall be required to demonstrate to the Director by means of a test that the casing has complete integrity. This test shall be conducted in a method approved by the Director. (())

**b.** To establish the integrity of the annular cement above the shoe of the casing, the owner shall make sufficient surveys within thirty (30) days after injection is started into a well to prove that all the injected fluid is confined to the intended zone of injection. Thereafter, such surveys shall be made at least every two (2) years or more often if necessary. The Director shall be notified forty-eight (48) hours in advance of such surveys in order that a representative may be present if deemed necessary. If in the Director's opinion such tests are not necessary, he may grant a waiver excepting the operator from such tests.

**c.** Department personnel may inspect the well site periodically after the well has been placed on injection. The Director may notify the operator or owner if any remediation work is necessary. Any remediation work must be performed within ninety (90) days of notification by the Director. The Director may rescind approval of the injection well for failure to perform necessary work.

# 041. -- 044. (RESERVED)

# 045. ABANDONMENT (RULE 45).

01. **Objectives**. The objectives of abandonment are to block interzonal migration of fluids to:

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a.	Prevent contamination of fresh water or other natural resources;	(	)
b.	Prevent damage to geothermal reservoirs;	(	)
c.	Prevent loss of reservoir energy;	(	)
d.	Protect life, health, environment, and property.	(	)

**02. General Requirements**. The following are general requirements which are subject to review and modification for individual wells or field conditions. ( )

**a.** A NOI to abandon geothermal resource wells is required to be filed with the Director five (5) days prior to beginning abandonment procedures. A permit to abandon may be given verbally by the Director provided the operator submits a written abandonment request on a form approved by the Director within twenty-four (24) hours of the verbal request.

**b.** All wells abandoned shall be monumented with four (4) inch diameter pipe ten (10) feet in length of which four (4) feet shall be above ground. The remainder shall be embedded in concrete. The name, number, and location of the well shall be shown on the monument. Alternate methods of monumentation may be approved by the Director where land surface use indicates the above-described method is not satisfactory.

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с.	Heavy drilling fluid or other seal material approved by the Director shall be used to	) replace	any
water in the hole and to fill all portions of the hole not plugged with cement. ( )			
	1 1 00		,
d.	All cement plugs with a possible exception of the surface plug shall be pumped into t	the hole fi	rom
the bottom up	o through drill pipe or tubing.	(	)

e. All open annuli shall be filled with cement to the surface. ( )

**f.** A minimum of one hundred (100) feet of cement shall be emplaced straddling the interface or transition zone at the base of groundwater aquifers. ( )

g. One hundred (100) feet of cement shall straddle the shoe plug on all casings including conductor ()

**h.** A surface plug of either neat cement or cement shall be emplaced from the top of the casing to at least fifty (50) feet below the top of the casing.

i. All casing shall be cut off at least five (5) feet below land surface.

**j.** Cement plugs shall extend at least fifty (50) feet over the top of any liner installed in the well.

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**k.** Other abandonment procedures may be approved by the Director if the owner can demonstrate that the geothermal resource, groundwaters, and other natural resources will be protected. Such approval must be given in writing by the Director prior to the beginning of any abandonment procedures.

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**l.** An abandonment report must be submitted to the department within five (5) days after the completion of the abandonment.

#### 046. -- 049. (RESERVED)

050. MAINTENANCE (RULE 50).

**01. General**. All well heads, separators, pumps, mufflers, manifolds, valves, pipelines, and other equipment used to produce geothermal resources shall be maintained in good condition in order to prevent loss of or damage to life, health, property, and natural resources.

**02. Corrosion**. All surface well head equipment and pipelines and subsurface casing and tubing will be subject to periodic corrosion surveillance to safeguard health, life, property, and natural resources.

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**03. Tests**. The Director may require such tests or remediation necessary to prevent damage to life, health, property, and to protect geothermal and groundwater resources. Such tests may include, but are not limited to, casing tests, cementing tests, and equipment tests.

## 051. -- 059. (RESERVED)

# 060. HEARINGS ON DENIED, LIMITED, OR CONDITIONED PERMIT OR OTHER DECISIONS OF THE DIRECTOR (RULE 60).

Pursuant to Idaho Code §§ 42-4004(c) and 42-4005(d), any applicant who is granted a limited or conditioned permit, or who is denied a permit or any person aggrieved by a decision of the Director may seek a hearing on said action of the Director by serving on the Director written notice and request for a hearing before the Board within thirty (30) days of service of the Director's decision. Said hearing will be set, conducted, and notice given as set forth in the Rules promulgated by the Board under the provisions of Title 67, Chapter 52, Idaho Code. Any applicant may appeal the decision of the Board to the District Court within thirty (30) days of service of the decision.

#### 061. -- 064. (RESERVED)

## 065. ENFORCEMENT (RULE 65).

01. Enforcement by Director. When the Director determines that any person is in substantial violation of any provisions of the Geothermal Resources Act (Chapter 40, Title 42, Idaho Code) or of any rule, permit, certificate, condition of approval or order issued or promulgated pursuant to the Geothermal Resources Act, the Director may commence an administrative enforcement action by issuing a written notice of violation in accordance with the provisions of Idaho Code §42-1701B. The Director may enforce any provision of the Geothermal Resources Act or any order or regulation issued or adopted pursuant thereto by an appropriate action in the district court. The Director may bring action in the District Court to enjoin noncompliance with any provision of this act.

# **066. --999.** (**RESERVED**)

#### IDAPA 37 – IDAHO DEPARTMENT OF WATER RESOURCES IDAHO WATER RESOURCE BOARD

#### 37.03.05 - MINE TAILINGS IMPOUNDMENT STRUCTURES RULES

#### DOCKET NO. 37-0305-2201 (NEW CHAPTER, FEE RULE)

#### NOTICE OF RULEMAKING – PROPOSED RULE

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized pursuant to §§ 42-1710 and 42-1714, Idaho Code.

**PUBLIC HEARING SCHEDULE:** Public hearing(s) concerning this rulemaking will be scheduled if requested in writing by twenty-five (25) persons, a political subdivision, or an agency, not later than October 19, 2022.

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made not later than five (5) days prior to the hearing, to the agency address below.

**DESCRIPTIVE SUMMARY:** The following is a non-technical explanation of the substance and purpose of the proposed rule.

The Idaho Department of Water Resources (IDWR) and the Idaho Water Resource Board (IWRB) (the "Agencies") initiated this rulemaking in compliance with <u>Executive Order No. 2020-01</u>, Zero-Based Regulation (ZBR) (EO 2020-01), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, must be reviewed by the promulgating agency over a five-year period. This review is being conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at <u>https://adminrules.idaho.gov/forms\_menu.html</u>. This rule chapter was scheduled for review in 2022.

With this Notice, the Agencies propose a new chapter of mine tailings impoundment structures rules. The new chapter is approximately the same length as the existing mine tailings impoundment structures rules. Only one change from the existing rule is proposed in this rule. The change addresses fixing an inconsistency between current statutory requirements and outdated requirements in the old rule concerning the inspection intervals of mine tailings impoundment structures. Rules 10.13 and 40.01 were updated to reconcile the inconsistency.

Pursuant to the ZBR process, this Notice represents the promulgation of a new rule chapter. As a result, the proposed rule does not contain strike-out/underline text in legislative format. The old rule has been repealed and replaced in its entirety. However, the development of the proposed rule text through two publicly-released preliminary rule draft iterations may be viewed at: <u>https://idwr.idaho.gov/legal-actions/rules/procedure-rules.html</u>. At the same website, the Agencies also developed and published rulemaking support documents, which provide the Agencies' recommendations on rulemaking, rulemaking analysis, and responses to substantive comments received through the negotiated rulemaking process.

Citizens of the state of Idaho, water users, governmental agencies, and environmental groups may be interested in commenting on the proposed rule text. After consideration of public comments received in response to this Proposed Rule, the Agencies will present the final rule text to the Idaho Legislature in the late fall of 2022.

**FEE SUMMARY:** The following is a specific description of the fee or charge imposed:

IDAPA 37.03.05 establishes acceptable construction standards and governs IDWR's design and technical review of mine tailing and water impoundment structures. The Rule also supports the collection of a fee to review plans, drawings, and specifications pertaining to any mine tailings impoundment structure.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year: N/A.

**NEGOTIATED RULEMAKING:** Pursuant to § 67-5220(1), Idaho Code, negotiated rulemaking was conducted. The Notice of Intent to Promulgate Rules – Negotiated Rulemaking was published in the May 4, 2022, Idaho Administrative Bulletin, Vol. 22-5, page 84-85.

**INCORPORATION BY REFERENCE:** Pursuant to § 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: N/A.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Mathew Weaver at <u>mathew.weaver@idwr.idaho.gov</u>, (208) 287-4800.

Anyone can submit written comments regarding this proposed rule by mail to the address below or by email sent to <u>rulesinfor@idwr.idaho.gov</u>. The Department will consider all written comments received by the undersigned on or before October 26, 2022.

Dated this 2nd day of September 2022

Gary Spackman, Director Idaho Department of Water Resources 322 E. Front Street PO Box 83720 Boise, ID 83720 Phone: (208) 287-4800

# 37.03.05 - MINE TAILINGS IMPOUNDMENT STRUCTURES RULES

#### 000. LEGAL AUTHORITY (RULE 0). These rules are adopted pursuant to Section 42-1714, Idaho Code. (7 - 1 - 93)001. **TITLE AND SCOPE (RULE 1).** 01. Title. (7 - 1 - 93)02. Scope. (7 - 1 - 93)

These rules and standards will only apply to structures upon which construction, lift construction, a. enlargement, or alteration is underway on or after July l, 1978. Under no circumstances shall these rules be construed to deprive or limit the Director of the Department of Water Resources of any exercise of powers, duties and jurisdiction conferred by law, nor to limit or restrict the amount or character of data, or information which may be required by the Director from any owner of a mine tailings impoundment structure for the proper administration of the law. (7-1-93)

The design requirements listed are intended as a guide to establish acceptable standards of b. construction. They are not intended to restrict the application of other sound design principles by engineers. The Director will evaluate any deviation from the standards hereinafter stated as they pertain to the safety of any given mine tailings impoundment structure. Engineers are encouraged to submit new ideas which will advance the art and provide for the public safety. (7 - 1 - 93)

#### 002. WRITTEN INTERPRETATION (RULE 2).

#### 003. **ADMINISTRATIVE APPEALS (RULE 3).**

#### 004. -- 009. (RESERVED)

#### 010. **DEFINITIONS (RULE 10).** Unless the context otherwise requires the following definitions govern these rules

to therwise requires, the following definitions govern these rules.	(7-1-93)	
Board. The Idaho Water Resource Board.	(7-1-93)	
Director. The Director of the Idaho Department of Water Resources.	(7-1-93)	
Department. The Idaho Department of Water Resources.	(7-1-93)	
<b>04. Mine Tailings Impoundment Structure</b> . Any artificial embankment which is or will be more than thirty (30) feet in height measured from the lowest elevation of the toe to the maximum crest elevation constructed		
	<ul><li>Director. The Director of the Idaho Department of Water Resources.</li><li>Department. The Idaho Department of Water Resources.</li><li>Mine Tailings Impoundment Structure. Any artificial embankment which is or will be</li></ul>	

th for the purpose of storing mine tailings slurry. (7 - 1 - 93)

05. Mine Tailings Slurry. All slurry wastes from a mineral processing or mining operation. (7-1-93)

06. Mine Tailings Storage Capacity. The total storage volume of the impoundment when filled with tailings to the maximum approved design storage elevation. (7 - 1 - 93)

07. Borrowed Fill Embankment. Any embankment constructed of borrowed earth materials and which is designed for construction by conventional earth moving equipment. (7 - 1 - 93)

08. **Reservoir**. Any basin which contains or will contain the material impounded by the mine tailings impoundment structure. (7 - 1 - 93)

09. **Owner**. Includes any of the following who own, control, operate, maintain, manage, or propose to

(7 1 02)

construct a mine tailings impoundment structure or reservoir.

**a.** The state of Idaho and any of its departments, agencies, institutions and political subdivisions;

(7-1-93)

(7 - 1 - 93)

**b.** The United States of America and any of its departments, bureaus, agencies and institutions; provided that the United States of America shall not be required to pay any of the fees required by Section 42-1713, Idaho Code, and shall submit plans, drawings and specifications as required by Section 42-1721, Idaho Code, for information purposes only; (7-1-93)

c.	Every municipal or quasi-municipal corporation;	(7-1-93)
d.	Every public utility;	(7-1-93)
e.	Every person, firm, association, organization, partnership, business, trust, corporation or	company; (7-1-93)

**f.** The duly authorized agents, lessees, or trustees of any of the foregoing; (7-1-93)

**g.** Receivers or trustees appointed by any court for any of the foregoing. (7-1-93)

**10.** Alterations, Repairs or Either of Them. Only such alterations or repairs as may directly affect the safety of the mine tailings impoundment structure or reservoir, as determined by the Director. (7-1-93)

**11. Enlargement**. Any change in or addition to an existing mine tailings impoundment structure or reservoir, which raises or may raise the storage capacity of the structure, as defined in Rule Subsection 010.06.

(7-1-93)

(7 - 1 - 93)

#### 12. Days Used in Establishing Deadlines. Calendar days including Sundays and holidays. (7-1-93)

13. Certificate of Approval. A certificate issued by the Director for the mine tailings impoundment structure listing restrictions imposed by the Director, and without which no new mine tailings impoundment structures shall be allowed to impound mine tailings slurry or water and no existing impoundment shall be allowed to impound water or continue deposition of mine tailings slurry. The structure will be recertified following the site inspection scheduled according to the Hazard Classification assigned by the Department, unless the Director determines that the structure is unsafe. (8-1-22)

**14. Engineer**. A registered professional engineer, licensed as such by the state of Idaho. (7-1-93)

#### 011. -- 024. (RESERVED)

## 025. AUTHORITY OF REPRESENTATIVE (RULE 25).

When plans, drawings and specifications are filed by another person on behalf of an owner, written evidence of authority to represent the owners shall be filed with the plans, drawings and specifications. (7-1-93)

# 026. -- 029. (RESERVED)

#### 030. FORMS (RULE 30).

Forms required by these rules.

**01. Samples of Forms**. Samples of all forms required by these rules are available from the Department to interested parties upon request. (7-1-93)

**02.** Form 1721. Construction of a mine tailings impoundment structure requires the filing of Form 1721. (7-1-93)

#### 031. -- 034. (RESERVED)

## 035. PLANS, DRAWINGS, AND SPECIFICATIONS (RULE 35).

The following provisions shall apply in submitting plans, drawings, and specifications. (7-1-93)

**01. Submission of Plans, Drawings, and Specification**. Any owner who shall desire to construct, or enlarge, or alter or repair any mine tailings impoundment structure shall submit duplicate copies of plans, drawings, and specifications prepared by an engineer for the proposed work to the Director with required fees. An owner who desires to construct a continuously raised tailings impoundment structure shall submit duplicate copies of plans, drawings, and specifications prepared by an engineer, showing the stages of lift height, by periods of time, and ultimate design height. (7-1-93)

**02. Application for and Receipt of Written Approval.** Construction of a new mine tailings impoundment structure or enlargement, or non-emergency alteration or repairs on existing mine tailings impoundment structures shall not be commenced until the owner has applied and obtained written approval of the plans, drawings, and specifications covering the work. In emergency situations, the owner shall make the required alterations or repairs necessary to relieve the emergency, and notify the Director. (7-1-93)

**03. Preparation and Submission of Plans**. Plans must be prepared on a good grade of tracing linen or a good quality vellum or mylar. Transparent copies reproducible by standard duplicating processes, if accurate, legible and permanent, will be accepted. Plans may initially be submitted in the form of nonreproducible paper prints. After reviewing the plans, the Director will notify the owner of any required changes. (7-1-93)

**04.** Scale of Plans and Drawings. Plans and drawings shall be of sufficiently large scale with an adequate number of views and proper dimensions, so that drawings may be readily interpreted and studied. (7-1-93)

**05. Dimensions of Plans**. All sheets for a set of plans shall have an outside dimension of twenty-four by thirty-six  $(24 \times 36)$  inches. A margin of two (2) inches on the left-hand end and a margin of one-half (1/2) inch on the other three sides must be provided, making the available work space twenty-three (23) x thirty-three and one-half  $(33 \ 1/2)$  inches. (7-1-93)

**06. Plans**. The plans shall include the following: (7-1-93)

**a.** A topographic map of the mine tailings impoundment structure site showing the location of the proposed mine tailings impoundment structure by section, township and range, and location of spillway or diversion structures, outlet works, and all borings, test pits, borrow pits; (7-1-93)

**b.** A profile along the mine tailings impoundment structure axis showing the locations, elevations, and depths of borings or test pits, including logs of bore hole and/or test pits; (7-1-93)

**c.** A maximum cross-section of the mine tailings impoundment structure showing elevation and width of crest, slopes of upstream and downstream faces, thickness of any proposed riprap, zoning of the earth embankment (if any), location of cutoff and bonding trenches, elevations, size and type of decant systems, valves, operating mechanism, and dimensions of all other essential structural elements such as cutoff walls, filters, embankment zones, etc.; (7-1-93)

**d.** Detailed drawings describing the outlet system, i.e., decant line, barge pump system, siphon system; (7-1-93)

e. If a spillway is used, a curve showing the discharge capacity in cubic feet per second of the spillway vs. gage height of the storage pool level above the spillway crest up to the maximum high-water level, and the formula used in making such determinations; (7-1-93)

**f.** If a stream diversion is created, a tabulation of the discharge capacity in cubic feet per second of any diversion works and of the diversion channel vs. flow depth through the diversion works or channel up to maximum capacity of the system, and the formulas used in making such determinations; (7-1-93)

**g.** Where staged construction will take place and no spillway exists, a curve showing maximum safe operating level for the tailings as a function of embankment height and the design criteria used to arrive at this;

(7-1-93)

**h.** Detailed plans, including cross-sections and profile, of the spillway or diversion works and any associated channels; (7-1-93)

i. Plans for monitoring and/or recovering seepage from the reservoir in those instances where safety of the impoundment may be affected; (7-1-93)

j. An operation plan; (7-1-93)

**k.** An emergency procedure plan for protection of life and property; (7-1-93)

**I.** An abandonment plan that assures the Director to his satisfaction that, upon completion of the mining operation, the site will be in a safe maintenance-free condition. (7-1-93)

**07. Specifications**. Specifications shall include provisions acceptable to the Director for adequate observation, inspection and control of the work by a registered professional engineer during the period of construction. (7-1-93)

**08. Provision Included with Plans**. The specifications shall provide that the plans and specifications may not be materially changed without prior written consent of the Director. (7-1-93)

**09. Provisions Included with Specifications**. The specifications shall provide that certain stages of construction shall not proceed without the approval of the Director. Those stages requiring approval are as follows: (7-1-93)

**a.** After clearing and excavation of foundation and prior to placing any fill material; (7-1-93)

**b.** After installation of the decant conduit and any proposed collars and before placing any backfill material around conduit; (7-1-93)

**c.** After construction is completed (first stage starter dike if staged construction) and before any water or mine tailings slurry is stored in the reservoir; (7-1-93)

**d.** Before each successive enlargement of the impoundment structure; (7-1-93)

e. After each stage of enlargement of the impoundment structure is completed and before storage is allowed to exceed the level approved for the previous approved stage; (7-1-93)

**f.** At such other times as determined necessary by the Director. The Director will, within seven (7) days after notification by the engineer, inspect and if satisfactory, approve the completed stage of construction. Owners are encouraged to give prior notice to the Department, so that the inspection can be scheduled to prevent delays. (7-1-93)

**10. Inspections, Examinations, and Tests**. All materials and workmanship may be subject to inspection, examination and test by the Director at any and all reasonable times during manufacture and/or construction and at any and all places where such manufacture and/or construction are carried on. (7-1-93)

11. **Rejection of Defective Material**. The Director shall have the right to require the owner or engineer to reject defective material and workmanship or require its correction. Rejected workmanship shall be corrected and rejected material shall be replaced with proper material. (7-1-93)

12. Suspension of Work. The Director may order the engineer to suspend any work that may be subject

to damage by climatic conditions.

**13. Responsibility of Engineer**. These provisions shall not relieve the engineer of his responsibility to assure that construction is accomplished in accordance to approved plans and specifications or to suspend work on his own motion. (7-1-93)

14. Detailing Provisions of Specifications. The specifications shall state in sufficient detail, all provisions necessary to ensure that construction is accomplished in an acceptable manner and provide needed control for construction to ensure that a safe structure is constructed. (7-1-93)

15. Required Information. The following information shall be submitted with the plans and specifications. (7-1-93)

**16. Engineer's Report**. An engineer's report giving details necessary for analysis of the structure and appurtenances. Included as a part of the report where applicable shall be the following: (7-1-93)

a.	Formulas and assumptions used in designs;	(7-1-93)
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**b.** Hydrologic data used in determining runoff from the drainage areas; (7-1-93)

**c.** Engineering properties of each type of material to be used in the embankment and of the foundation areas; (7-1-93)

**d.** Stability analysis, including an evaluation of overturning, sliding, upstream and downstream slopes and foundation stability; (7-1-93)

e. Geologic description of reservoir area, including evaluation of landslide potential; (7-1-93)

**f.** Chemical analysis of all materials composing the slurry; (7-1-93)

**g.** Earthquake design loads must be evaluated at all sites located east of Range 22 E., Boise Meridian. This area corresponds to Seismic Zone 3 as designated by the Recommended Guidelines of the National Dam Safety Program. Earthquake analysis may be required at other impoundment structure sites if deemed necessary by the Director; (7-1-93)

**h.** A seepage analysis of the embankment and reservoir bottom; (7-1-93)

i. A hydraulic analysis of the outlet system and spillway, diversion work or diversion channel;

(7-1-93)

**j.** Engineering properties and the weathering characteristics of the proposed tailings to be stored in the impoundment; (7-1-93)

**k.** Other information which would aid in evaluating the safety of the design. (7-1-93)

**17.** Filing of Additional Information. The Director may require the filing of such additional information which in his opinion is necessary to assess safety or waive any requirement herein cited if in his opinion it is unnecessary. (7-1-93)

#### 036. -- 039. (RESERVED)

# 040. BONDING (RULE 40).

An active surety bond or other means of acceptable surety payable to the Director of the Department of Water Resources shall be on file with the Director throughout the active life of the tailings disposal site. The purpose of this bond is to provide a means by which the tailings impoundment can be placed in a safe maintenance-free condition if abandoned by the owner without conforming to an abandonment plan approved by the Director. (7-1-93)

**01.** Filing of Bond. The bond shall be filed prior to any issuance by the Director of a certificate of approval for use of the mine tailings impoundment structure to impound mine tailings slurry and shall run for the approval period covered on the certificate of approval. (8-1-22)

**02. Provisions of Bond**. Bond provisions shall provide that the surety may be held liable for a period of up to five (5) years following notice of default on the bond. (7-1-93)

**03. Amount of Bond**. The bond amount will be set by the Director and is subject to revision each time it is renewed. The owner must obtain approval for the amount of his surety bond prior to each renewal. (7-1-93)

**04. Cost Estimate Submitted by Engineer**. In order to provide a basis for setting the bond amount, the engineer shall submit a cost estimate acceptable to the Director, together with conceptual details needed to arrive at the estimate, for abandonment of the facility at each proposed stage of its construction. (7-1-93)

**05. Current Costs for Abandonment**. Bond amount will be based on current costs for abandonment of the facility based on the approved cost estimate for abandonment at the present construction condition or the next approved proposed stage, whichever represents the larger bond amount. (7-1-93)

**06. Determination of Bond Amount**. If the final abandonment is determined to be the most costly condition, the owner may elect to use this as a basis for bonding throughout the life of the project. The Director may, however, revise the bonding amount to reflect updated costs when he feels it is necessary in order to maintain a realistic bond. (7-1-93)

**07. Filing Initial Bond**. The initial bond shall be filed upon completion of the first stage of construction and before the required certificate of approval is issued to allow storage of mine tailings slurry in the impoundment. No certificate of approval shall be renewed prior to filing by the owner of a bond renewal in an amount approved by the Director. (7-1-93)

**08.** Filing Copy of Performance Bond. Upon the filing of a copy of a performance bond with the Director, covering the terms and conditions of a state of Idaho mineral lease or an approved reclamation plan, in which these documents specify compliance with a plan of restoration of all mining operations, including the tailings impounding structure, the Director may determine the bond required of this section has been met, if the amount of the bond accurately reflects the cost associated with the abandonment plan provided by the owner. (7-1-93)

#### 041. -- 044. (RESERVED)

#### 045. MINE TAILINGS IMPOUNDMENT STRUCTURES DESIGN CRITERIA (RULE 45).

The following minimum design criteria shall be used for all mine tailings impoundment structures designed for installation in Idaho. These limitations are intended to serve as guidelines for a broad range of circumstances, and engineers should not consider them as a restriction to the use of other sound design criteria. Deviation from this established criteria will be considered by the Director in approving plans and specifications. (7-1-93)

#### 01. Embankment Slopes.

(7-1-93)

**a.** For construction of borrowed fill embankments, in the absence of a stability analysis, the slopes shall be:

Upstream slope	2:1 or flatter
Downstream slope	2:1 or flatter

(7-1-93)

**b.** Construction by the upstream method shall not be used in the area of the state east of Range 22 E.,

Boise Meridian, unless the engineer can provide evidence that the construction and operation of the tailings impoundment will achieve a relative density of sixty percent (60%) or greater in the embankment and tailings to prevent liquefaction during earthquake loading. (7-1-93)

**c.** Safety factors for the embankment shall be at least one and five-tenths (1.5) for static loads and a minimum of one (1) for the static plus the appropriate earthquake load. (7-1-93)

**d.** To insure sufficient permeability and stability of the embankment, designs will require utilizing materials other than the tailings, when the tailings materials: (7-1-93)

i. Contain greater than seventy-five percent (75) passing the #200 standard U.S. sieve, or fifty percent (50%) passing the #325 standard U.S. sieve; (7-1-93)

ii.	Contain phosphate clays;	(7-1-93)

iii. The design calls for the water to be impounded against the embankment; (7-1-93)

iv. Have other properties which makes them unsuitable for use as construction materials. (7-1-93)

e. Embankments designed for the storage of hazardous levels of radioactive materials shall, in addition to any requirements of these regulations, meet the criteria outlined in the Nuclear Regulatory Commission Regulatory Guide 3.11 and the Idaho Radiation Control Regulations administered by the Idaho Department of Environmental Quality. (7-1-93)

**f.** The design shall consider the need for drains and/or operational procedures to promote consolidation and insure that a low phreatic surface is maintained within the embankment. Drainage pipe shall not be used beneath embankments where excessive or differential settlement may cause failure of the pipes and subsequent piping of the tailings or embankment. When the quality of the mine tailings slurry is such that it will adversely affect the quality of the existing groundwater, the design should be coordinated with the Department and the Department of Environmental Quality to insure that all applicable permits are obtained. (7-1-93)

**g.** Instrumentation of the embankment and/or foundation will be required to insure that the structure is functioning satisfactorily. Standpipe piezometers with an inside diameter greater than one-half (1/2) inch will not be acceptable for use in fine-grained or cohesive soils in order to minimize response time. (7-1-93)

**h.** Tailings impoundment structures which are constructed using the tailings shall not be constructed or raised during freezing weather to prevent frost lenses in the embankment. Sufficient freeboard must be provided during the summer construction season if the disposal operation is to continue during the winter. (7-1-93)

i. If tailings are to be discharged during times of freezing weather and the embankment is to be constructed using either the upstream or centerline method, the pond shall be of sufficient size to insure that any ice formed in the tailings pond area melts during the next warm season. (7-1-93)

02. Top Width Embankment.

(7-1-93)

**a.** In the absence of a stability analysis, the minimum top width for mine tailings impoundment structures shall be:

W = 2 (H to 1/2 power) + 4, minimum W = Top width	
H = Embankment height	(7-1-93)
The minimum top width for any tailings embankment is ten (10) feet.	(7-1-93)

03.	Cutoff Trenches or Walls.	(	(7-1	1-9	<del>)</del> 3
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b.

**a.** Cutoff trenches, if needed, shall be used to bond the fill through relatively pervious material to an impervious stratum or zone. The bond area shall extend up the abutments to the maximum high water or tailings impoundment elevation. Cutoff (keylock) trenches which are to be backfilled with compacted fill shall be wide enough to allow the free movement of excavation and compaction equipment. Side slopes shall be no steeper than 1:1 for depths up to twelve (12) feet, and no steeper than one and one-half (1 1/2) to one (1) for greater depths to provide for proper compaction. Flatter slopes may be required for safety and stability. (7-1-93)

**b.** Concrete cutoff walls may be used to bond fills to smooth rock surfaces in a similar manner as cutoff trenches and they shall be entrenched in the rock to a depth approximately one-half (1/2) the thickness of the cutoff wall. Concrete cutoff walls shall be doweled into the rock a minimum of twelve (12) inches with a maximum spacing of eighteen (18) inches for three-quarter (3/4) inch steel dowels. Concrete walls shall have a minimum projection of three (3) feet perpendicular to the rock surface and shall have a minimum thickness of twelve (12) inches. (7-1-93)

# 04. Borrowed Fill Embankment. (7-1-93)

a. The approved earth materials (silt soils are seldom acceptable) shall be zoned as shown in the plans and placed in the embankment in continuous, approximately level layers. Compaction shall be based on ASTM D-698 for cohesive soils and a minimum compaction of ninety-five percent (95%) of the laboratory Standard Proctor dry density is required. Compaction of cohesionless soils shall insure a relative density of sixty percent (60%) or greater. (7-1-93)

**b.** An acceptable working range of moisture content for the fill material shall be established and (7-1-93)

**c.** The material shall be compacted by means of a loaded sheepsfoot roller, vibratory roller, or other acceptable means, to the required density. (7-1-93)

**d.** No rock shall be left in the fill material which has a maximum dimension exceeding the lift thickness. The fill material shall be free of brush and organic materials. (7-1-93)

**e.** The fill shall be carried up simultaneously the full design width of the structure, and the top of the fill shall be kept substantially level at all times or slope slightly toward the reservoir. (7-1-93)

**f.** No frozen or cloddy fill material shall be used, and no material shall be place upon frozen, muddy or unscarified surfaces. (7-1-93)

**g.** All materials used in the embankment shall meet all the stability and seepage requirements as shown by a design analysis of the structure and shall be properly installed to meet these requirements. (7-1-93)

#### 05. Riprap.

(7 - 1 - 93)

**a.** All dams shall be protected from wave action. In cases where water is stored directly against the mine tailings impoundment structure or where wave action at maximum pool level during design inflow events would affect the integrity of the embankment, the Director may require use of riprap or other protective measures.

**b.** If riprap is used the design shall specify the rock size and extent of blanket required to prevent erosion. (7-1-93)

# **06. Outlet Systems**. (7-1-93)

**a.** Reservoirs must safely handle the design inflow for all areas draining into the reservoir. This may be done either by storing the entire design inflow or by having an outlet system or combination of systems adequate to safely pass the design inflow. If the tailings reservoir is situated on a stream channel, an outlet system or an approved alternative system capable of meeting downstream flow requirements must be provided. (7-1-93)

**b.** The minimum design inflow for all reservoirs shall be the flood with one percent (1%) probability of occurrence. The Director may require a greater design inflow be used in instances of high hazard, for larger mine tailings impoundment structures, or when the inflow is to be entirely stored in the reservoir during the flood period.

(7-1-93)

**c.** The outlet system may be composed of one (1) or a combination of the following: decant line, spillway, stream channel diversion to bypass the reservoir. The system will be determined by individual reservoir conditions. Unless removal of the mine tailings impoundment structure and reservoir is part of the abandonment plan, the outlet system shall be maintained in perpetuity, unless it is demonstrated that an outlet system is not needed. (7-1-93)

**d.** Outlet systems will not be allowed if their use would release toxic, highly turbid, radioactive or otherwise hazardous flows from the reservoir. In these cases the design inflow must either be entirely stored or diverted around the reservoir. (7-1-93)

e. All spillways shall be stabilized to discharge flow through the use of concrete, masonry, riprap or sod, if not constructed in resistant rock. (7-1-93)

**f.** Wherever possible, the spillway shall be constructed independent of the impoundment structure. It shall lead the water far enough away from the mine tailings impoundment structure so as not to endanger the structure. (7-1-93)

**g.** A diversion system must not subject the mine tailings impoundment structure to erosion during the design inflow event. All stream diversions shall conform to the minimum standards for stream channel alterations as written by this Department. (7-1-93)

**h.** Decant conduits, if under the embankment, shall be laid on a firm, stable foundation and normally must not be placed on fill. They shall have a minimum inside diameter of twelve (12) inches and one (1) of the following provisions included in the design: (7-1-93)

i. The owner shall have the conduit inspected by photographic or video tape equipment and a copy of the inspection provided to the Department, if a problem is suspected; or (7-1-93)

ii. The conduit shall be completely plugged with concrete and/or suitable material, for that portion which extends through the embankment, if a nonrepairable problem occurs within the conduit. The conduit shall consist of material which has been shown to possess the qualities necessary to perform in the environment of the specific tailings impoundment. The design life of the conduit shall be greater than the life of the mine tailings impoundment structure. The portion of the conduit through the embankment shall be completely filled with concrete, or other suitable material, and the riser portion of the conduit capped, upon abandonment of the mine tailings impoundment structure. (7-1-93)

**i.** All decant conduits, if under the embankment, shall have a seepage path through the impervious zone at least equivalent in length to the maximum head above the downstream end of the system. Only one third (1/3) the horizontal distance through the impervious zone will be utilized when calculating the length of the seepage path.

Collars may be used to satisfy this requirement, but all collars shall extend a minimum of three (3) feet outside the conduit. Collars shall be spaced at intervals of at least seven (7) times their height and no collar may be closer to the outer surface of the impervious zone than the distance it extends out from the conduit. (7-1-93)

j. More than two (2) decant conduits are not to be used, unless special conditions warrant. (7-1-93)

**07. Freeboard**. A minimum freeboard of two (2) feet plus wave height (H) shall be provided on the crest of the mine tailings impoundment structure during passage of the design inflow.

H = 1.95 (F to 1/2 power)F = Fetch in miles across water surface at a design maximum level. (7-1-93)

**08. Records**. All instrumentation shall be read and recorded on a regular basis, and all records must be available for inspection by Department personnel on request. (7-1-93)

#### **09.** Inspection and Completion Reports. (7-1-93)

**a.** It is the responsibility of the engineer to submit test reports along with periodic inspection and progress reports to the Director. (7-1-93)

**b.** Upon completion of each approved stage of construction, a letter shall be sent to the Director, giving a short, narrative account covering all items of work. As-built plans shall be submitted to the Director if the completed project was substantially changed from the plans originally approved. (7-1-93)

10. Abandonment. An abandonment plan which provides a stable, maintenance-free condition when the mine tailings impoundment is no longer being regularly maintained by the owner or the owner has ceased to use the site for disposal of mine tailings slurry, shall be submitted to the Director by the owner. The plan shall provide a safe condition by providing for removal of the tailings, or construction of a maintenance-free spillway or diversion works where needed to accommodate runoff. The plan shall include provisions to prevent water storage behind, and erosion of, the mine tailings impoundment structure and the impounded tailing. A conceptual plan which includes an engineering design report, detailed enough to provide the required cost estimate for bonding purposes, will be required prior to the approval of the proposed project. Detailed construction plans must be approved by the Director prior to implementation of any abandonment work. The Director shall notify the owner upon acceptance of completion of abandonment in accordance with the approved plan. (7-1-93)

#### 046. -- 049. (RESERVED)

#### 050. DAMS STORING TAILING AND WATER (RULE 50).

Construction of dams intended to store water in excess of the water being decanted in the tailing placement operation shall also meet the requirements for water storage reservoirs specified in the Department's Rules for the Safety of Dams. The Director may waive any or all of these requirements if, in the opinion of the Director, sound engineering design supplied by the owner indicates such requirements are not applicable. (7-1-93)

#### 051. -- 054. (RESERVED)

#### 055. PROVISIONS OF CHAPTER 17, TITLE 42, IDAHO CODE (RULE 55).

The provisions of Sections 42-1709 through 42-1721, Idaho Code, are a part of these rules. (7-1-93)

**056. -- 999.** (**RESERVED**)
#### IDAPA 37 – IDAHO DEPARTMENT OF WATER RESOURCES IDAHO WATER RESOURCE BOARD

#### 37.03.06 - SAFETY OF DAMS RULES

#### DOCKET NO. 37-0306-2201 (NEW CHAPTER, FEE RULE)

## NOTICE OF RULEMAKING – PROPOSED RULE

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized pursuant to §§ 42-1710 and 42-1714, Idaho Code.

**PUBLIC HEARING SCHEDULE:** Public hearing(s) concerning this rulemaking will be scheduled if requested in writing by twenty-five (25) persons, a political subdivision, or an agency, not later than October 19, 2022.

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made not later than five (5) days prior to the hearing, to the agency address below.

**DESCRIPTIVE SUMMARY:** The following is a non-technical explanation of the substance and purpose of the proposed rule.

The Idaho Department of Water Resources (IDWR) and the Idaho Water Resource Board (IWRB) (the "Agencies") initiated this rulemaking in compliance with <u>Executive Order No. 2020-01</u>, Zero-Based Regulation (ZBR) (EO 2020-01), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, must be reviewed by the promulgating agency over a five-year period. This review is being conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at <u>https://adminrules.idaho.gov/forms\_menu.html</u>. This rule chapter was scheduled for review in 2022.

With this Notice, the Agencies propose a new chapter of safety of dams rules. The new chapter is approximately 12% shorter than the existing safety of dams rule chapter due to both internal agency analysis and external stakeholder negotiation, commentary, and editing. Changes to the rule come through a combination of (a) removal of obsolete provisions (such as removal of unique design requirements for small dams), (b) removal of unnecessary provisions (such as the definition and use of the term "active storage" and "water storage elevation"), (c) reconciling inconsistencies between current statutory requirements and outdated requirements in the old rule concerning the inspection intervals of some dams, and (d) modifications to existing rules governing the size limits, hazard categories, and design requirements for various dams.

Pursuant to the ZBR process, this Notice represents the promulgation of a new rule chapter. As a result, the proposed rule does not contain strike-out/underline text in legislative format. The old rule has been repealed and replaced in its entirety. However, the development of the proposed rule text through two publicly-released preliminary rule draft iterations may be viewed at: <u>https://idwr.idaho.gov/legal-actions/rules/procedure-rules.html</u>. At the same website, the Agencies also developed and published rulemaking support documents, which provide the Agencies' recommendations on rulemaking, rulemaking analysis, and responses to substantive comments received through the negotiated rulemaking process.

Citizens of the state of Idaho, water users, governmental agencies, and environmental groups may be interested in commenting on the proposed rule text. After consideration of public comments received in response to this Proposed Rule, the Agencies will present the final rule text to the Idaho Legislature in the late fall of 2022.

**FEE SUMMARY:** The following is a specific description of the fee or charge imposed:

IDAPA 37.03.06 establishes acceptable standards for construction of dams and establishes guidelines for safety evaluation of new or existing dams. The Rule applies to all new dams, to existing dams to be enlarged, altered or repaired, and maintenance of certain existing dams, as specifically provided in the Rule. This chapter also establishes the collection of a fee to review plans, drawings, and specifications pertaining to the construction, enlargement, alteration, or repair of small high-risk, intermediate, or large dams.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year: N/A.

**NEGOTIATED RULEMAKING:** Pursuant to § 67-5220(1), Idaho Code, negotiated rulemaking was conducted. The Notice of Intent to Promulgate Rules – Negotiated Rulemaking was published in the May 4, 2022, Idaho Administrative Bulletin, Vol. 22-5, page 86-87.

**INCORPORATION BY REFERENCE:** Pursuant to § 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: N/A.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Mathew Weaver at <u>mathew.weaver@idwr.idaho.gov</u>, (208) 287-4800.

Anyone can submit written comments regarding this proposed rule by mail to the address below or by email sent to <u>rulesinfor@idwr.idaho.gov</u>. The Department will consider all written comments received by the undersigned on or before October 26, 2022.

Dated this 2nd day of September 2022

Gary Spackman, Director Idaho Department of Water Resources 322 E. Front Street PO Box 83720 Boise, ID 83720 Phone: (208) 287-4800

## 37.03.06 – SAFETY OF DAMS RULES

#### 1. LEGAL AUTHORITY. These rules are adopted pursuant to Chapter 17, Section 42-1714, Idaho Code. ( ) 2. TITLE AND SCOPE. 1. Title. These rules are titled IDAPA 37.03.06, "Safety of Dams Rules." ) 2. Scope. ) ( a. These rules establish acceptable standards for design and construction, and guidelines for evaluating the safety of new or existing dams. The rules apply to all new construction including existing structures considered for enlargement, alteration, modification, or repair as specifically provided in the rules. The Director will evaluate any deviation from the standards hereinafter stated as they pertain to the safety of any given dam. The standards listed herein are not intended to restrict the application of other sound engineering design principles that will provide for the public safety. ( ) b. Under no circumstances shall these rules be construed to deprive or limit the Director of any exercise of powers, duties and jurisdiction conferred by law, nor to limit or restrict the amount or character of data, or information which may be required by the Director from any owner of a dam or for the proper administration of the law. ( ) 3. **ADMINISTRATIVE APPEALS.** Any person aggrieved by an action of the Director and who has not previously been afforded an

Any person aggreved by an action of the Director and who has not previously been afforded an opportunity for a hearing on the matter is entitled to a hearing before the Director to contest the action pursuant to the provisions of Section 42-1701A(3), Idaho Code, and the Department's adopted Rules of Procedure.

# 4. -- 009. (RESERVED)

# 10. **DEFINITIONS.**

Unless the context otherwise requires, the following definitions govern these rules. ( )

1. Alterations or Repairs. Any activity that may affect the safety or integrity of a dam. Alterations and repairs do not include routine maintenance items. ( )

2. Appurtenant Structures. Ancillary features (e.g., outlets, tunnels, gates, valves, spillways, auxiliary barriers, etc.) used for operation of a dam, which are owned or for which the owner has responsible control.

3. Artificial barrier or embankment. Any structure constructed to impede, obstruct, or store ( )

**4. Borrowed Fill Embankment.** Any embankment constructed of borrowed earth materials, and which is designed for construction by conventional earth moving equipment. ( )

5. Certificate of Approval. A certificate issued by the Director for all existing dams listing restrictions imposed by the Director, and without which none shall be allowed to impound water.

6. Conduit. A pipe or other constructed conveyance within a dam designed to release water or liquid ( )

7. **Core.** A zone of relatively low permeability material within an embankment. ( )

**8. Cutoff Trench.** An excavation later to be filled with impervious material during construction of a dam to limit seepage beneath the structure and through the foundation. ( )

9. Dam. Any artificial barrier together with appurtenant works, which is or will be ten (10) feet or more in height and has or will have an impounding capacity at maximum storage elevation of fifty (50) acre-feet or more. Height of a dam is defined as the vertical distance from the natural bed of the stream or watercourse at the downstream toe of the barrier, as determined by the Director, or from the lowest elevation of the outside limit of the barrier, if it is not across a stream channel or watercourse, to the maximum water storage elevation. Under Section 42-1711, Idaho Code, the following are not included as regulated dams or are not considered dams for the purposes of sections 42-1710 through 42-1721, Idaho Code:

a. Barriers in a canal used to raise or lower water therein or divert water therefrom.

b. Fills or structures determined by the Director to be designed primarily for highway or railroad traffic.

c. Fills, retaining dikes or structures less than twenty (20) feet in height, which are under jurisdiction of the Department of Environmental Quality or the Department of Agriculture, determined by the Director to be designed primarily for retention or treatment of municipal, livestock, or domestic wastes, or sediment and wastes from produce washing or food processing plants. ( )

d.	Levees, that store water regardless of storage capacity.	(	)

10.Days. Calendar days including Sundays, Saturdays, and holidays.( )

11. Department. The Idaho Department of Water Resources. ( )

**12. Design Evaluation.** The engineering analysis required to evaluate the performance of a dam relative to earthquakes, floods, or other site-specific conditions anticipated to affect the safety or operation of the dam, or appurtenant facilities.

**13. Director.** The Director of the Department of Water Resources. ( )

 14.
 Embankment. An artificial barrier constructed of earth, sand, rock, or gravel used to impound water.

 ()
 ()

**15. Emergency Action Plan (EAP).** A written plan with instructions to be taken to reduce the potential for property damage and loss of life in an area affected by a dam failure or uncontrolled release of stored contents.

( )

**16. Enlargement.** Any change in or addition to an existing dam which raises or may raise the elevation of the contents impounded by the dam.

17. Factor of Safety. A ratio of available shear strength to shear stress, required for stability. ( )

**18. Flashboards.** Structural members of timber, concrete, steel, or other erosion resistant material placed across a channel or entrance to a spillway to temporarily raise the surface level of the reservoir. ( )

**19. Flood.** An increase in water surface elevation due to naturally occurring runoff or other rise in water levels that result in the inundation of areas not normally covered by water. As defined herein floods may be expressed in terms of average annual probability of exceedance, corresponding to values which may be described as flow rate, volume, or elevation (i.e., stage).

**20.** Flood Surcharge. A variable volume of water temporarily detained in a reservoir, in the space (or part thereof) that is filled by excess runoff or flood water, above the approved design maximum storage elevation. Flood surcharge is passed through the reservoir and discharged downstream until the reservoir level has been drawn down to the design maximum storage elevation.

**21. Freeboard.** Vertical height between the maximum design water surface elevation and the lowest elevation along the top of the dam. Freeboard can include a provision for variables such as wave height, flood surcharge, settlement, and flashboards.

**22. Hazard.** The potential consequences to downstream life and property resulting from a dam failure and uncontrolled release of water, exclusive of the size or the physical condition of the dam. Hazard Classifications shall be assigned to new and existing dams based on the severity of failure consequences to life and property.

23. Hydraulics. The conveyance of liquid through pipes and channels. ( )

24. Hydrology. The study of precipitation, snowmelt, and runoff in relation to land surfaces. ( )

**25. Inflow Design Flood (IDF).** The flood specified for designing a dam, or appurtenant facility. Commonly expressed inflow design flood(s) include peak rate(s) of flow and volume(s) associated with floods having an annual exceedance probability of 1% (i.e., Q100) and 0.2% (i.e., Q500), and the PMF (probable maximum flood).

**26.** Intermediate Dams. Artificial barriers twenty (20) feet or more in height but less than forty (40) feet and capable of storing one hundred (100) acre-feet of water or more but less than four thousand (4,000) acre-feet.

**27. Large Dams.** Artificial barriers forty (40) feet or more in height or capable of storing four thousand (4,000) acre-feet or more of water.

**28.** Levee. A retaining structure alongside a natural lake which has a length two hundred (200) times greater than its greatest height measured from the lowest elevation of the toe to the maximum crest elevation of the retaining structure.

**29.** Lift Construction. Embankment enlargement by raising the elevation of the structure on a continuous or recurring basis. Such practice will be considered under construction until the structure reaches its final crest elevation.

**30. Maximum Water Storage Elevation.** The maximum design elevation of the water surface or stored contents which can be impounded by the dam.

**31. Operation Plan.** A specific plan that promotes the safe operation of the dam for its intended purpose, and which provides specific limits and procedures for controlling inflow, storage, and/or release of water or slurry.

**32. Owner.** Includes any of the following who own, control, operate, maintain, manage, or propose to construct a dam, or reservoir:

a. The state of Idaho and its departments, agencies, institutions, and political subdivisions; ()

b. The United States of America and any of its departments, bureaus, agencies and institutions; provided that the United States of America shall not be required to pay any of the fees required by Section 42-1713, Idaho Code, and shall submit plans, drawings and specifications as required by Section 42-1712, Idaho Code, for information purposes only; ()

c.	Every municipal or quasi-municipal corporation;	(	)	
d.	Every public utility:	(	)	

e.	Every person, firm, association, organization, partnership, business trust, corporation, or company		
		(	)
f.	The duly authorized agents, lessees, or trustees of any of the foregoing; or	(	)

g. Receivers or trustees appointed by any court for any of the foregoing. ( )

**33. Professional Engineer.** A person licensed as a professional engineer by the Idaho Board of Licensure of Professional Engineers and Professional Land Surveyors under chapter 12, title 54, Idaho Code. For the purposes of this rule, the use of the term engineer implies a professional engineer consistent with this definition.

( )

**34. Release Capacity.** The ability of a dam to pass excess water through the spillway(s) and outlet works.

- **35. Reservoir.** Any basin which contains or will contain the water impounded by a dam. ( )
- **36. Small Dams.** Artificial barriers ten (10) feet or more in height but less than twenty (20) feet in height and that store fifty (50) acre-feet or more but less than one hundred (100) acre-feet of water. ( )

**37. Spillway.** A constructed channel over, through, or around a dam, which is designed to accommodate the inflow design flood and thus prevent overtopping by the reservoir. ()

**38.** Storage Capacity. The total storage in acre-feet at the maximum design storage elevation. ( )

## 11. -- 014. (RESERVED)

## 15. AUTHORITY OF REPRESENTATIVE.

When plans, drawings, and specifications are filed by another person on behalf of an owner, written evidence of authority to represent the owner shall be filed with the plans, drawings, and specifications.

## 16. -- 019. (RESERVED)

## 20. DAM SIZE CLASSIFICATION.

**1. Size Classification.** The following table defines the height and storage capacity limits used by the Department to classify dams regulated for the benefit of public safety:

Size Classification	Height		Storage Capacity
Small Dams and Reservoirs	Ten (10) feet or more but less than twenty (20) feet	and	Fifty (50) acre-feet or more but less than one hundred (100) acre-feet.
Intermediate Dams and Reservoirs	Twenty (20) feet or more but less than forty (40) feet	and	One hundred (100) acre-feet or more but less than four thousand (4,000) acre-feet.
Large Dams or Reservoirs	Forty (40) feet or more	or	Four thousand (4,000) acre-feet or more.
	•		( )

## 2. Determination of Size. The Director shall determine the size category of a new or existing dam.

( )

## 21. -- 024. (RESERVED)

## 25. HAZARD CLASSIFICATION.

**1. Hazard Classification.** The following table describes categories of hazard used by the Department to classify dams relative to the potential failure consequences estimated for downstream locations. The listed hazard

categories are meant to serve as guidelines for implementing design, construction, and operation criteria, subject to final interpretation by the Director. ( )

Hazard Category	Downstream Development	Estimated Loss of Life	Economic Losses
Low	Undeveloped property, no permanent or permanently occupied structures for human habitation.	No loss of life	Low probability for economic loss or damage to or disruption of essential infrastructure.
Significant	No concentrated urban development, 1 or more permanent structures for human habitation within the flood zone that are potentially inundated with flood water at a depth of two (2) feet or less.	development, 1 or more permanent structures for unan habitation within the od zone that are potentially undated with flood water at	Significant damage to agricultural, commercial, or industrial facilities; damage to or the disruption of transportation, utilities, or other public facilities or values including environmental loss.
High	Urban development, or any structure for permanent or temporary human habitation which are potentially inundated with flood water at a depth greater than two (2) feet	High probability for loss of life	Major damage to agricultural, commercial, or industrial facilities; damage to or the disruption of transportation, utilities, or other public facilities or values including prolonged environmental loss.

2. Determination of Hazard Classification. The Director shall determine the hazard category of a new or existing dam. Any dam classified as Significant or High hazard regardless its height and storage capacity shall meet the requirements specified in Rule 35, 45, 50, 55, and 60 of these rules. ( )

# 26. -- 029. (RESERVED)

## 30. FORMS.

Forms required by these rules are available from the Department to interested parties upon request.

# 31. -- 034. (RESERVED)

# 35. DESIGN REPORTS, DRAWINGS, AND SPECIFICATIONS.

The following provisions shall apply when submitting plans, drawings, reports, and specifications for dams to the Director for design review and approval, prior to commencing construction. ( )

**1. Submission of Duplicate Plans, Drawings and Specifications.** Any owner desiring to construct, enlarge, alter, or repair any dam, shall submit duplicate plans, drawings and specifications prepared by an engineer for the proposed work to the Director with required fees for approval prior to commencing construction. ()

2. Applying for and Obtaining Written Approval. Construction of a new dam, or the enlargement, alteration, or repair of such shall not commence until the owner has applied for and obtained written approval of the plans, drawings, and specifications from the Director.

**3. Preparation and Submission of Plans.** Plans and drawings shall be of a sufficient scale with an adequate number of views showing proper dimensions, so that the plans and drawings may be readily interpreted and so that the structure and appurtenances can be built in conformance with the approved design. Plans and drawings shall be submitted in both printed and digital format, with the printed version consisting of paper size 11 x 17 inches. After reviewing the plans, the Director will notify the owner of any required changes. ( )

4. Information Included with Plans. Plans for new dams or the enlargement, alteration, or repair of such shall include as much of the following information as determined necessary by the Director to adequately

describe the enlargement, alteration, or repair and the effect on the existing structure or its appurtenances: ( )

a. A topographic map of the project site showing the location of the proposed construction by section, township and range, and location of all borings, test pits, borrow pits and other locations of samples obtained for field or laboratory testing;

b. A profile depicting the locations, elevations, and depths of borings or test pits, including the visual illustration of logs of bore holes, test pits, or borrow pits; ( )

c. A cross-section of the structure at maximum section showing elevation and width of crest, slopes of upstream and downstream faces, thickness of riprap, zoning of earth embankment, location of cutoff and bonding trenches, elevations and dimensional heights, size and type of conduits, valves, operating mechanism, and dimensions of all other essential elements deemed to be necessary for properly constructing the approved design; ()

d. Detailed drawings showing plans, cross and longitudinal sections of appurtenant features such as but not limited to the spillway, training walls, outlet conduits, valves, gates, trash rack, and control works; ()

e. A curve or table showing the capacity of the reservoir or tailings impoundment in acre-feet vs. gauge height referenced to a common project datum and the computations used in making such determinations; ()

f. A curve or table showing the outlet discharge capacity in cubic feet per second vs. gauge height of reservoir storage level, and the computations used in making such determinations; ( )

g. A curve or table showing the spillway discharge capacity in cubic feet per second vs. gauge height of the reservoir or flood surcharge level above the spillway crest and the computations used in making such determinations;

h. Detailed drawings of spillway structure(s), including cross-sections of the channel entrance and exit points to and from the spillway and a spillway profile; ( )

i. Plans for flow measuring devices capable of providing an accurate determination of the flow of the stream above or below the reservoir, and a permanent reservoir or staff gauge near the outlet of the reservoir plainly marked in feet and tenths of a foot referenced to an approved datum; and ()

j. Plans or drawings of instruments recommended by the owner or engineer to monitor the performance of the dam to assure safe operation, or as may be required by the Director as deemed necessary to monitor any structure for benefit of public safety regardless of size. ()

**5. Specifications.** The engineer shall prepare specifications that include instructions for construction of the approved design in accordance with accepted engineering and industry standards of care, including provisions for adequate observation, inspection, and control of the work by an engineer during the period of construction. ( )

6. Changes to the Approved Design. The approved design shall not be materially changed without prior written consent of the Director. Design changes which may affect the stability, size, or integrity of the structure, while construction is underway, shall be submitted for the Director's review and approval. In emergency situations, the owner shall make the required alterations or repairs necessary to relieve the emergency, and subsequently notify the Director of all alterations or repairs implemented. ()

7. **Inspections.** The owner shall allow inspections by the Department to assure the dam and appurtenant structures are constructed in conformance with the approved plans and specifications, or as may be revised by the engineer and approved by the Director if there are unforeseen conditions discovered during site preparation or construction which potentially jeopardize the future integrity and safety of the project works. The Department may request of the owner that certain stages of construction not proceed without inspection and approval by the Director.

8. Inspection, Examination and Testing of Materials. All materials and workmanship shall be subject to review, inspection, examination, or testing by the Director.

**9. Rejection of Defective Material.** The Director may order the owner or engineer to reject defective material. The owner shall correct rejected workmanship and replace rejected material with approved material. ( )

**10. Suspension of Work.** The Director may order the engineer to suspend any work that is or is likely to be subject to damage by inclement weather conditions. ( )

**11. Responsibility of Engineer.** These provisions shall not relieve the engineer of their responsible charge to assure that construction is accomplished in accordance with their approved plans and specifications as mandated by Sections 54-1202(10) and (15), Idaho Code, or to unilaterally suspend work as deemed necessary. ( )

12. Design Report. Owners proposing to construct, enlarge, alter, or repair a dam shall submit an engineering or design evaluation report to accompany the plans and specifications. The engineering report shall include as much of the following information as necessary to present the technical basis for the design and to describe the analyses used to evaluate performance of the structure and appurtenances. ()

a. All technical reference(s), equations, calculations, and assumptions used in the design. ( )

b. Hydrologic data used in determining runoff from the drainage areas, reservoir flood routing pertinent to the project location, and hydraulic evaluations of the outlet(s) and the spillway(s) as may be required for approval of the design plans and specifications. ( )

c. Investigation of site and subsurface conditions, to include the engineering properties of the foundation area and of each type of material to be encountered or used in the construction of the project works. ( )

d. A stability analysis, including an evaluation of overturning, sliding, slope, and foundation stability and a seepage analysis;

i. An evaluation of seismic design loads may be included in the stability analysis for all dams as deemed necessary by the Director for benefit of public safety. The evaluation required for the design of large dams or high hazard structures shall use the maximum ground acceleration which could affect the dam site as established by deterministic or probabilistic analyses.

ii. Seismic analyses may be waived by the Director for new or existing dams if the consequence of failure is demonstrated to be sufficiently low or the critical features of design are demonstrated to be sufficiently conservative to allow minor deformation(s) without releasing the contents of the impounding structure. ()

e. Geologic description of reservoir area, including evaluation of landslide potential; ()

f. Engineering properties and the weathering characteristics of the contents proposed for storage in the impoundment, if applicable; ( )

g. Other information which would aid in evaluating the safety of the design; ( )

**13.** Additional Information/Waiver. The Director may require the filing of such additional information which in his opinion is necessary for the benefit of public safety or waive any requirement in these rules if available data demonstrates that it is unnecessary.

14. Alternate Plans. The Director may accept plans and specifications for dams, or portions thereof prepared for other agencies which are determined to meet the requirements of Rule 35, including but not limited to the following:

a.	An operation plan;	(	)

b.	An emergency action plan to help protect downstream of life and property; or	(	)	,
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## **36. -- 044.** (**RESERVED**)

## 45. EMERGENCY ACTION AND OPERATION PLANS.

An Emergency Action Plan (EAP) is required for all Significant and High Hazard dams. The EAP shall establish emergency procedures for notification and response during unexpected or non-routine events that occur naturally, or in response to mechanical issues, or due to intentional vandalism/ terrorism. The EAP may be a component of an Operation Plan that includes comprehensive guidelines and procedures for inspection, operation, maintenance, and monitoring of instruments required to record performance of the structure during normal operating cycles, critical filling, or flood periods, or as may be necessary for evaluating the effects of an earthquake. Before the initial filling of a reservoir, the owner shall file with the Director an EAP for review and approval. The Director may waive the EAP requirement of individual Significant Hazard Dam upon a determination that the flood inundation zone resulting from the potential failure or uncontrolled release of contents impounded by the structure will not damage downstream property.

## 46. -- 049. (RESERVED)

## 50. NEW DAMS AND RESERVOIRS.

The following criteria shall be used by the Director as a basis to evaluate the design of new embankment dams and reservoirs. These guidelines are intended for a broad range of circumstances, and engineers should not consider them as a restriction to the use of other sound engineering design principles. Exclusion from these established criteria will be considered by the Director on a case-by-case basis during design review of plans, drawings, reports, and specifications submitted for approval prior to commencing construction. Structures which are or will be constructed of other materials, for example concrete, timber, steel, or combinations thereof shall comply with these criteria as found appropriate by the Director, and with other engineering design methods and construction standards of care approved by the Director.

1. **Embankment Stability.** Slope stability analyses shall determine the appropriate upstream and downstream slopes. Unless a discrete slope stability analysis determines otherwise, the embankment slopes of earthen dams shall comply with the following:

Upstream slope	3:1 or flatter
Downstream slope	2.5:1 or flatter

( )

)

a. Embankments shall be designed, constructed, and maintained to assure stability under static loads and prevent instability due to seepage or uplift forces, rapid drawdown conditions, and applied seismic loads.

b. The design analysis shall consider the need for installing filters, including but not limited to chimney drains, blanket drains, or toe drains, to avoid developing saturated conditions and protect against piping of the embankment fill material. Transmission of seepage through the embankment, abutments, and foundation shall be controlled to prevent internal erosion or the removal of material and instability where seepage emerges. ( )

c. The minimum factor of safety for a steady state loading condition shall be 1.5. The minimum factor of safety for rapid drawdown loading shall be 1.2. The minimum factor of safety for seismic loading shall be 1.0.

d. Seismic Stability. ( )

i. The stability of an embankment subjected to earthquake ground motions may be analyzed by the engineer using either a dynamic response or pseudo-static analyses. Pseudo-static analyses are acceptable for embankment dams and foundations composed of non-liquifiable soils that preclude the generation of excess pore water pressures due to shaking. Otherwise, the stability analysis shall employ a dynamic response method. ( )

ii. Slope deformation analyses are required for structures that are constructed of cohesionless soils exhibiting fine grain-size gradation and/or on foundations that may be subject to liquefaction. ( )

iii. The design analyses for large and high hazard dams shall include a geologic and seismic report. The

seismic report shall identify the location of faults, evaluate landslide potential, and include a history of seismicity. A comparison using deterministic and probabilistic analyses to calculate peak ground acceleration at the dam site may be required for geographic areas of the state showing evidence of seismic faults/faulting, as determined by the Director.

( )

iv. The design analysis for dams that do not meet the size or hazard criteria listed in Rule 50.1.d.iii shall include in the stability analysis peak ground accelerations obtained from Seismic Hazard Maps published by the United States Geologic Survey (USGS) using a minimum return interval of 2 percent (2%) probability of exceedance in fifty (50) years, or greater interval, as determined by the Director. ()

e. Where in the opinion of the Director, embankment design or conditions warrant, the owner may be required to instrument their embankment or foundation. ( )

**2. Top Width.** The minimum top width for any embankment shall be twelve (12) feet to allow safe access by wheeled vehicles or tracked equipment for maintenance or repair. ( )

3. Cutoff Trenches or Walls. Cutoff trenches shall be excavated into competent foundation material to bear on an approved stratum or zone.

a. The cutoff trench shall be backfilled with suitable material free from organic matter and debris and compacted to the specified moisture and density. The cutoff trench shall extend up the sides of both abutments to the design maximum storage elevation. ( )

b. Cutoff trenches shall be wide enough to allow the free movement of excavation and compaction equipment. To provide for proper compaction side slopes shall be no steeper than one to one (1:1) for shallow depths up to twelve (12) feet, and no steeper than one and one half to one (1.5:1) for greater depths. Flatter slopes may be required for safety and stability, as determined by the Director. ()

c. Concrete cutoff walls may be used in a similar manner as cutoff trenches, with the base firmly entrenched in the underlying foundation material. Where suitable bedrock or suitable foundation material exists, concrete cutoff walls shall be doweled with steel rebar a minimum depth and spacing determined by the engineer necessary to create a structural bond with the underlying foundation. Concrete walls shall have a minimum vertical projection above the foundation surface of three (3) feet, oriented perpendicular to the surface, and shall have a minimum thickness of twelve (12) inches. Reinforcement of the concrete may be required in addition to being doweled into suitable foundation material(s).

4. Impervious Core Material. Soils used to construct the inner sectional core of an embankment shall consist of relatively impervious cohesive materials approved by the engineer and compacted in strict accordance with the approved plans and specifications. A minimum ninety-five percent (95%) maximum dry density compacted in accordance with the American Society Testing Materials (ASTM) D-698 is required. The use of other relatively impermeable however non-cohesive material is subject to approval by the Director on a case-by-case basis.

**5. Drains.** Toe, blanket, or chimney drains consisting of approved free draining material or approved manufactured drainage geotextile shall be installed where necessary to maintain the phreatic line at or near the design level(s) within the embankment.

a. Filter design for toe, blanket, or chimney drains, or any combination thereof shall be included in the design plans and specifications submitted by the engineer for review and approval by the Director. ( )

b. Perforated and slotted drainpipes must be four (4) inches diameter or greater and shall be surrounded by permeable drainage material equal to or greater than the outside pipe diameter. The maximum particle size of the drainage material shall be between one-half (1/2) inch to three-fourths (3/4) inch. Underdrains and collection pipes must be constructed of noncorrosive material, taking care to ensure slots and perforations are appropriately sized to avoid long- term migration of the drain material into the pipe. ()

6. **Freeboard.** The elevation of the top of the embankment shall be constructed and maintained above the design flood surcharge level, including the vertical height of wind generated waves estimated for the greatest

distance of open water measured perpendicular to the major axis of the dam. Camber estimated for post-construction settlement shall be included in the design and incorporated in the construction of the top of the embankment. ( )

a. The minimum freeboard shall be two (2) feet plus wave height as calculated for the design spillway flow capacity during passage of the one percent (1%) flood, or greater to equal the surcharge elevation of the reservoir during passage of the inflow design flood. ( )

7. **Riprap.** All embankments which are subject to erosion on either the upstream and downstream slope(s) shall be protected using riprap or other approved material. Pipes, cables, brush, tree growth, dead growth, logs, or floating debris are not acceptable substitutes for approved riprap. The engineer, with approval of the Director, shall determine the extent of slope protection as deemed necessary for existing site, seasonal, and operating conditions.

a. Where rock riprap or other approved material is used for erosion protection on the upstream slope, it shall be placed on an approved thickness of well-graded and free-draining granular bedding material. Riprap or other approved erosion protection material shall extend up the slope a sufficient height. ( )

8. Outlet Conduits. All reservoirs impounding water shall have an outlet conduit of sufficient capacity to prevent interference with natural streamflow through the reservoir to the injury of downstream appropriators. In addition to any natural flow releases, the outlet conduit should be of sufficient capacity to pass at the same time, the maximum water requirement of the owner. A larger outlet conduit may be required to provide adequate release capacity as determined by the Director. ( )

a. Outlet conduits shall be laid on a firm and stable foundation material to avoid the likelihood of differential settlement or consolidation causing the separation or misalignment of the conduit. Outlet conduits shall be encased on all sides by concrete of approved compressive strength and having a minimum thickness of twelve (12) inches. During construction outlet conduits shall be properly aligned on an established grade and adequately supported to prevent movement or damage caused by placement of concrete or by compaction equipment. (()

b. Unless otherwise required, the outlet conduit shall have a minimum inside diameter of twelve (12) inches. The conduits shall consist of approved material and composition as approved by the Director. Exceptions may be made only where conditions warrant, but in no case shall the reasonable life expectancy of the pipe be less than the design life of the embankment. (())

# 9. Gates and Valves.

a. Conduits shall be gated on the upstream end to avoid pressurizing the conduit inside the embankment. Pressurized conduits shall be fitted with both a guard gate and a control gate or valve. ()

b.	All conduits shall be vented directly behind the gate.	(	)

c. All gate stem pedestals shall be securely founded to prevent future movement ( )

d. At least one (1) of the sides of the inlet structure shall be open to allow water to flow into the outlet conduit. The opening shall be covered with a trash rack.

e. Trash racks should be designed to facilitate cleaning of trash and debris. If fish screens are used, they shall be placed over the trash rack and shall be removable for cleaning or be self-cleaning.

10. Outlet Controls. Outlet controls shall be installed at a stable location, on the crest or on an elevated platform, or within an enclosure when required, but secured to prevent unauthorized operation. Reservoirs storing water during the winter and subject to severe freezing conditions shall have inclined gate stems or other controlling mechanical or hydraulic features enclosed in a protective sleeve which is buried beneath the upstream slope to suitable depth, to prevent damage or movement caused by ice.

**11. Release Capacity.** Based on the size of the dam and the downstream hazard classification assigned by the Director, the release capacity shall equal or exceed the inflow design flood as set forth in the following table. Where the table specifies an inflow design flood range, the governing inflow design flood shall be determined by the

professional engineer in responsible charge of design and IDWR based on a site-specific review of the proposed dam, watershed conditions, and downstream hazard potential. The minimum flow capacity of the emergency spillway(s) shall be sized using the one-percent (1%) rate of flow (i.e. Q100 cfs) calculated for the contributing watershed upstream from the dam, plus two (2) feet of freeboard, plus wave height.

Hazard Classification	Size Classification	Inflow Design Flood (IDF)
Low	All Sizes	Q100
Significant	Small	Q100
	Intermediate	Q100 to Q500
	Large	Q500
High	Small	Q100
	Intermediate	Q500
	Large	Q500 to PMF
		( )

a. All spillways shall be stabilized for the discharge of flow using concrete, masonry, riprap, or sod, if not constructed in resistant rock.

b. For embankment dams, where site conditions allow, the spillway shall be constructed independent of the embankment. The spillway(s) shall guide the discharge of water away from the embankment. ( )

c. The minimum base width of an open-channel spillway shall be ten (10) feet, or greater to allow access by mechanical equipment. Siphon pipes or pumps are not acceptable substitutes for an open-channel spillway.

(

d. The effective flow capacity of spillways shall be undiminished by bridges, fences, pipelines, or other obstructions.

e. The installation of stop logs or flashboards in the spillway is prohibited unless they are part of an approved design and included as an integral part of an approved operation plan. ( )

**12. Reservoir Site.** Prior to filling the reservoir, the site shall be cleared of all woody material, growth or debris that is large enough to lodge in the spillway, or outlet works. ( )

**13. Inspection and Completion Reports.** As construction proceeds, it is the responsibility of the engineer to submit test reports (e.g., soil material analyses, density tests, concrete strength tests, etc.) along with periodic inspection and progress reports to the Director.

a. Upon completion of construction the owner or his engineer shall provide the Director a written narrative account of all items of construction. Record drawings (i.e., as-builts or as-constructed drawings) and revised specifications shall be submitted to the Director to accurately reflect the completed project works. ( )

b. The engineer, acting on behalf of and representing the owner, shall certify that the construction, reconstruction, enlargement, replacement, or repair of the embankment and appurtenances was completed in accordance with the record drawings and specifications. ( )

# 51. -- 059. (RESERVED)

# 60. EXISTING DAMS AND RESERVOIRS.

All dams and reservoirs regulated by the Department shall be operated and maintained to retain the existing structural dimensions, to resist deformations or movement, and to maintain the hydraulic capacity of the outlet works, spillway, and other discharge features as designed and constructed, or as otherwise required by these rules. ()

**1. Analyses Required.** The analyses required by Rule 35 shall apply to all existing dams when the Director specifically requires the analyses. Where applicable, non-embankment dams shall comply with the following criteria.( )

a. Every dam shall have an overflow spillway with a capacity that will pass an inflow design flood of

one percent (1%) probability of occurrence (i.e., Q100) or more, with the reservoir or the impoundment full to the spillway crest while maintaining the freeboard required by Rule 050.06.

b. The Director may lessen or waive the spillway requirement for dams that demonstrate out-ofstream (off-channel) storage. ( )

c. The release capability or discharge capacity can include the combined rates of flow for multiple appurtenances; for example, spillways, outlets, diversion facilities, or other constructed conveyance features. Approved operating procedures which can be shown to utilize upstream storage, diversion, and reservoir flood routing to reduce flood runoff events may also be considered. The remainder of the required release capacity, if any, may be met by the following:

i. Reconstruction, enlargement or addition of spillways, outlets, diversion facilities, or other constructed conveyance features. ( )

ii. A showing acceptable to the Director that potential failure of the dam during a flood of the specified magnitude described in Rule 050.11 would be incrementally small in comparison to the flood being considered, and that the release of reservoir would not substantially increase downstream damages to life and property which are anticipated to result from any natural flood equal to or exceeding that magnitude. ( )

iii. A showing acceptable to the Director that limiting physical factors unique to the project site exist that prevent construction of a spillway or other release capability mechanisms during a flood of the specified magnitude described in Rule 050.11, and provided the owner implements storage operational procedures, or restrictions, or provides for emergency warning to protect life and property. ()

d. Seismic loads shall be evaluated and applied to dam stability. The Director may require that evaluation of seismic loads for large and high hazard structures shall use the maximum ground motion/acceleration generated by the maximum credible earthquake. The Director may accept maximum ground motion/acceleration corresponding to specified return intervals using a probabilistic evaluation of earthquake history in accordance with USGS hazard maps for any existing dam regardless size or hazard potential. (()

e. The Director may accept existing studies relative to requirements of Rule 060.01.a and Rule 060.01.d, if the Director determines the information provided fulfills the requirements of the rules. ()

f. The Director may allow the owner of an existing dam a compliance period to complete structural modifications or implement other improvements deemed necessary to provide the necessary hydraulic capability. ( )

g. The Director may allow the owner of an existing dam a compliance period to complete structural modifications or implement other improvements deemed necessary to resolve seismic stability or safety concerns.

( )

h. Within thirty (30) days after completing the analyses required in Rules 60.01.a or 60.01.d, the owner of an existing dam found deficient by either analyses shall file with the Director a plan and schedule for mitigating the deficiency.

## 2. Other Requirements.

a. Routine maintenance items include the following:

i.	Eradication of rodents and filling animal burrows;	(	)
ii.	Removal of vegetation and debris from the dam;	(	)

- iii. Restoring original dimensions of the dam by the addition of fill material; ( )
- iv. Addition of bedding or riprap material which will not increase the height or storage capacity; ( )
- v. Repair or replacement of gates, gate stems, seals, valves, lift mechanisms or vent pipes with similar

#### equipment; or

lient, or		(	)
vi.	Repair or replacement of wingwalls, headwalls or aprons including spalling concrete.	(	)
b.	The following are not routine maintenance items and are subject to design review and appr to commencing construction:	oval j	prior
i.	Alteration or modification of embankment slopes;	(	)
ii.	Replacement, reconstruction, or extension of outlets;	(	)
iii.	Foundation stabilization;	(	)
iv.	Filter or drain construction or replacement;	(	)
v.	Spillway size alteration or modification;	(	)
vi.	Installation of instrumentation or piezometers; or	(	)
vii.	Release capability or reservoir storage modification.	(	)

( )

c. Items not specifically described in rules 60.02.a and 60.02.b will be determined by the Director as either routine or non-routine upon receipt of a written request from the owner or his representative seeking such a determination. ()

d. Where riprap is required to prevent erosion and to maintain a stable embankment, pipes, cables, brush, tree growth, logs, or floating debris are not acceptable substitutes for rock riprap and granular bedding material. Dams or portions thereof which are stable without riprap, are not required to have riprap. ( )

e. Upon completion of reconstruction of a dam or feature of a dam included in Rule 60.02.b, the owner or his engineer shall provide the Director a written narrative account of all items of work. Record drawings and revised specifications shall be submitted to the Director if the completed project has been substantially changed from the plans and construction specifications originally approved.

f. Upon request, the owner of every dam shall provide his name and address to the Director and shall advise the Director of future changes in ownership. If the owner does not reside in Idaho, the owner shall provide the name and address of the person residing in Idaho who is responsible for the operation, maintenance, and repair of the dam.

## 61. -- 064. (RESERVED)

# 65. DAMS STORING TAILINGS AND WATER

1. Construction of Mine Tailings Impoundment Structures Storing Fifty (50) Acre-Feet of Water or More. New or existing mine tailings impoundment structures intended to store fifty (50) acre-feet or more of water above the surface of the tailings material shall meet the applicable requirements specified in Rules 35, 45, and 60 of these rules and IDAPA 37.03.05 Mine Tailings Impoundment Structure Rules. The Director may waive applicable requirements in Rule 35, 45, or 60 if, in the opinion of the Director, sound engineering design provided by the owner indicates such requirements are not applicable. ()

## **066. -- 999.** (**RESERVED**)

#### IDAPA 37 – IDAHO DEPARTMENT OF WATER RESOURCES IDAHO WATER RESOURCE BOARD

#### 37.03.10 - WELL DRILLER LICENSING RULES

#### DOCKET NO. 37-0310-2201 (NEW CHAPTER, FEE RULE)

## NOTICE OF RULEMAKING – PROPOSED RULE

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized pursuant to §§ 42-238, 42-1734(19), and 42-1805(8), Idaho Code.

**PUBLIC HEARING SCHEDULE:** Public hearing(s) concerning this rulemaking will be scheduled if requested in writing by twenty-five (25) persons, a political subdivision, or an agency, not later than October 19, 2022.

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made not later than five (5) days prior to the hearing, to the agency address below.

**DESCRIPTIVE SUMMARY:** The following is a non-technical explanation of the substance and purpose of the proposed rule.

The Idaho Department of Water Resources (IDWR) and the Idaho Water Resource Board (IWRB) (the "Agencies") initiated this rulemaking in compliance with <u>Executive Order No. 2020-01</u>, Zero-Based Regulation (ZBR) (EO 2020-01), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, must be reviewed by the promulgating agency over a five-year period. This review is being conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at <u>https://adminrules.idaho.gov/forms\_menu.html</u>. This rule chapter was scheduled for review in 2022.

With this Notice, the Agencies propose a new chapter of well driller licensing rules. The new chapter is approximately 30% shorter than the existing well driller licensing rule chapter due to both internal agency analysis and external stakeholder negotiation, commentary, and editing. Changes to the rule come through a combination of (a) removal of obsolete provisions (such as Rule 21 Construction and Use of Holes that are Not Wells), (b) removal of unnecessary provisions (such as the definition and use of the term "responsible charge"), and (c) modifications to existing rules governing the "experience requirements" to obtain a well drilling license.

Pursuant to the ZBR process, this Notice represents the promulgation of a new rule chapter. As a result, the proposed rule does not contain strike-out/underline text in legislative format. The old rule has been repealed and replaced in its entirety. However, the development of the proposed rule text through two publicly-released preliminary rule draft iterations may be viewed at: <u>https://idwr.idaho.gov/legal-actions/rules/procedure-rules.html</u>. At the same website, the Agencies also developed and published rulemaking support documents, which provide the Agencies' recommendations on rulemaking, rulemaking analysis, and responses to substantive comments received through the negotiated rulemaking process.

Citizens of the state of Idaho, water users, governmental agencies, and environmental groups may be interested in commenting on the proposed rule text. After consideration of public comments received in response to this Proposed Rule, the Agencies will present the final rule text to the Idaho Legislature in the late fall of 2022.

FEE SUMMARY: The following is a specific description of the fee or charge imposed:

IDAPA 37.03.10 establishes the requirements and procedures for obtaining and renewing authorization to drill wells in the state of Idaho. The rules also establish the requirements and procedures for obtaining authorization to operate drilling equipment under the supervision of a licensed driller. The licensing rules are applicable to all individuals and companies drilling or contracting to drill wells. The rules also implement the application licensing fees set forth in Idaho Code § 42-238.

FISCAL IMPACT STATEMENT: The following is a specific description, if applicable, of any negative fiscal

impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year: N/A.

**NEGOTIATED RULEMAKING:** Pursuant to § 67-5220(1), Idaho Code, negotiated rulemaking was conducted. The Notice of Intent to Promulgate Rules – Negotiated Rulemaking was published in the April 6, 2022, Idaho Administrative Bulletin, Vol. 22-4, page 51.

**INCORPORATION BY REFERENCE:** Pursuant to § 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: N/A.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Mathew Weaver at <u>mathew.weaver@idwr.idaho.gov</u>, (208) 287-4800.

Anyone can submit written comments regarding this proposed rule by mail to the address below or by email sent to <u>rulesinfor@idwr.idaho.gov</u>. The Department will consider all written comments received by the undersigned on or before October 26, 2022.

Dated this 2nd day of September 2022

Gary Spackman, Director Idaho Department of Water Resources 322 E. Front Street PO Box 83720 Boise, ID 83720 Phone: (208) 287-4800

## 37.03.10 – WELL DRILLER LICENSING RULES

## 000. LEGAL AUTHORITY (RULE 0).

Section 42-238, Idaho Code.

## **001. SCOPE** (**RULE 1**).

**01.** These rules establish the requirements and procedures for obtaining and renewing authorization to drill wells in the state of Idaho. The rules also establish the requirements and procedures for obtaining authorization to operate drilling equipment under the supervision of a licensed driller. The licensing rules are applicable to all individuals and companies drilling or contracting to drill wells. ()

## 002. -- 009. (RESERVED)

010. DEFINITIONS (RULE 10).		
Unless the context otherwise requires, the following definitions govern these rules.	(	)

**01. Abandonment**. See Decommissioned Well. ( )

**02. Applicant**. An individual who submits to the department a complete application for a license or operator's permit or a company that submits a complete application for a license.

**03.** Area of Drilling Concern. An area designated by the director in accordance with Section 42-238, Idaho Code, within which special drilling procedures and equipment are needed to prevent waste or contamination of the ground water. ( )

**04. Board**. The Idaho Water Resource Board. ( )

**05. Bond**. A cash or surety bond obtained by a licensed driller or company (the principal) payable to the director (the obligee) to provide funding for decommissioning or repair should the driller fail to comply with well construction standards, and to allow information to be collected concerning the drilling of the well if the driller fails to submit a timely, accurate driller's report.

**06. Bottom Hole Temperature of an Existing or Proposed Well**. The temperature of the ground water encountered in the bottom of a well or borehole.

**07. Company**. A firm, co-partnership, corporation, or association licensed in accordance with these rules to drill or contract to drill wells.

**08. Compliance History**. An applicant's record of compliance with the laws and rules of Idaho and other states relating to drilling of wells.

**09. Continuing Education**. Education or training pertinent to the drilling industry and the construction, modification or decommissioning of wells.

**10. Continuing Education Committee (CEC)**. A committee whose purpose is to review and approve activities related to continuing education credit. ( )

**11. Decommissioned (Abandoned) Well**. Any well which has been permanently removed from service and filled or plugged in accordance with these rules. A properly decommissioned well will not: ()

**a.** Produce or accept fluids; (

**b.** Serve as a conduit for the movement of contaminants inside or outside the well casing; or

)

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(

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Allow the movement of surface or ground water into unsaturated zones, into another aquifer, or c. between aquifers. )

12. **Department**. The Idaho Department of Water Resources. ( )

13. Director. The director of the Idaho Department of Water Resources or his duly authorized representative.

14. Drilling or Well Drilling. The act of constructing a new well, or modifying the construction, or decommissioning of an existing well. )

15. **Drilling Permit.** Authorization by the department to drill a well as provided in Section 42-235, Idaho Code. )

Drilling Site. The location of the drill rig and immediate area where the drill rig and auxiliary 16. equipment are set up to drill a well. )

17. Global Positioning System (GPS). A global navigational receiver unit and satellite system used to triangulate a geographic position. )

18. License. A certificate issued by the director to an individual or a company upon meeting the requirements of Section 42-238, Idaho Code, and these rules authorizing the drilling of wells permitted in accordance with Section 42-235, Idaho Code. )

Licensed Driller. An individual having a license to drill wells and who is authorized to supervise 19. operators in the state of Idaho to assure compliance with well construction standards. ( )

20. Modify. To deepen a well, increase or decrease the diameter of the casing or the well bore, install a liner, place a screen, perforate existing casing or liners, alter the seal between the casing and the well bore, or alter the well from its original construction. ( )

21. Operator. Any person authorized to operate drilling equipment for a licensed company or licensed driller after obtaining an operator's permit from the Director. ( )

**Operator's Permit.** A certificate issued by the director upon meeting the requirements of Section 22. 42-238, Idaho Code, and these rules authorizing the holder to operate drill equipment. ( )

23. **Principal Driller**. A licensed driller designated by a company to supervise the company's drilling operations and activities. ( )

Start Card. An expedited drilling permit for the construction of cold-water Single Family 24. residential wells. ( )

25. Well. An artificial excavation or opening in the ground more than eighteen (18) feet in vertical depth below land surface by which ground water of any temperature is sought or obtained. The depth of a well is determined by measuring the maximum vertical distance between the land surface and the deepest portion of the well. Any water encountered in the well is obtained for the purpose of these rules. Well also means any waste disposal and injection well as defined by Section 42-3902, Idaho Code. ( )

Well Construction Standards. IDAPA 37.03.09, "Well Construction Standards Rules," adopted 26. by the board. )

Well Driller's Report or Driller's Report. A report required by Section 42-238, Idaho Code, 27.

describing drilling of the well and supplying information required on forms provided by the department.

)

**28.** Well Log. A diary maintained at the drilling site consistent with Section 42-238, Idaho Code.

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**29.** Well Rig or Drill Rig. Any power-driven percussion, rotary, boring, digging, jetting, augering, or any other power-driven mechanical equipment used in the drilling of a well.

## 011. -- 019. (RESERVED)

## 020. LICENSE APPLICABILITY (RULE 20).

**01.** Wells to be Drilled by Licensed Drillers. A well shall only be drilled by a licensed driller, or an operator working under the supervision of a licensed driller except that a property owner, who is not licensed, can construct a well on his property for his own use without the aid of power-driven mechanical equipment. ( )

**02. Operators to Have Permits**. Any person authorized to operate drilling equipment under the supervision of a licensed driller shall possess an operator's permit as provided in these rules. ( )

**03. Company to be Licensed**. No company shall drill or contract to drill a well or wells unless the company has been issued a license and has employed a principal driller as described in accordance with these rules.

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**04. Decommissioning Wells**. Only licensed drillers and operators may decommission wells, except that wells may be decommissioned by the owner after receiving a specific waiver from the Director. ( )

## 021. -- 029. (RESERVED)

# 030. OBTAINING A DRILLER'S LICENSE (RULE 30).

# 01. Experience Requirements.

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**a.** An applicant for a driller's license shall submit evidence to establish a minimum of twenty-four (24) months of drilling experience. Twelve (12) of the twenty-four (24) months drilling experience must have occurred within the five (5) year period immediately preceding the filing of the application. An applicant will be credited with one (1) month of drilling experience for each one hundred sixty (160) hours of employment as a driller or operator, or the equivalent, as determined by the director. Experience drilling monitoring wells, geothermal wells or other cased wells will be credited as experience by the Director if the equipment and drilling methods are applicable to water well construction.

**02. Application Requirements.** An individual desiring a license shall file with the department a completed application on a form provided by the department accompanied by the following:

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a. The application fee required by Section 42-238, Idaho Code.
 ( )

**b.** Written documentation of drilling experience and compliance history. ( )

**c.** Successful completion of classroom study in geology, well drilling, map reading, and other related subjects may be substituted for up to, but not exceeding, twelve (12) months of drilling experience. The director will determine the number of months of classroom study, up to twelve (12), to be credited as experience. ( )

d. The names and addresses of up to three (3) references to confirm the applicant's drilling experience

may be requested at the department's discretion.

**03. Examination**. An applicant determined by the director to have adequate experience and an acceptable compliance history, as confirmed by references acceptable to the director, is eligible to take a written examination. ( )

## 031. OBTAINING A COMPANY LICENSE (RULE 31).

**01. Application Requirements**. A company shall file with the department a complete application for a company license upon a form provided by the department to be accompanied by the following: ( )

**a.** The names and addresses of up to three (3) persons not affiliated with the company, whom the department can contact for information regarding the company's past well drilling operations, may be requested at the department's discretion.

**b.** Designation of a principal driller who shall be a full-time employee of the company and shall drill wells only for the company. A licensed driller who renders only occasional, part-time or consulting drilling services to or for a company may not be designated as the principal driller. ( )

c. The names and addresses of drillers and operators presently employed.( )

## 032. OBTAINING AN OPERATOR'S PERMIT (RULE 32).

**01.** Experience Requirements.

**a.** An applicant for an operator's permit shall submit evidence to establish a minimum of 600 hours of well drilling experience acquired while in the presence of a licensed driller or operator. Evidence may include but is not limited to: payroll information, daily log signed by a licensed driller or operator or other documentation approved by the Director.

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**02. Application Requirements**. An individual desiring an operator's permit shall file with the department a completed application on a form provided by the department accompanied by the following: ( )

a. The fee required by Section 42-238, Idaho Code.
( )

**b.** Attendance records, completion certificates, or other documents that verify attendance and completion of two (2) continuing education credit hours, approved by the CEC, earned while in training to become an operator.

**03.** Written Examination. Applicants for an operator's permit shall pass an examination pursuant to these rules

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**04. Operator Drills Only for Licensed Driller or Company**. An operator shall drill only for the licensed driller or company approved by the director. If an operator changes employment to another licensed driller or company, a new operator's permit application or transfer form shall be filed as provided in this rule. ( )

# 033. PROCESSING APPLICATION FOR A DRILLER'S LICENSE OR OPERATOR'S PERMIT (RULE 33).

01. Incomplete Application. If an application is incomplete, not properly signed, or does not include

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the information required by these rules, the department will advise the applicant in writing of the deficiency. If the deficiencies are not satisfied within ninety (90) days of sending the notice of the deficiency, the application will be void. The application fee is not refundable.

**02. Issuance of License**. If the director, upon review of the application, determines that an applicant for license is qualified and the driller has subsequently taken and passed an examination, a notice will be sent to the applicant requesting a bond in an amount determined in accordance with Rule 60 be filed with the department. Upon receipt of a satisfactory bond, the director will issue a license to the applicant. ( )

**03. Issuance of Operator's Permits**. The department will mail a notice and operator's permit card to the principal driller on behalf of the applicant if the application is complete and the applicant meets the qualifications described in these rules.

( )

04. Driller's License or Operator's Permit Issued With Conditions or Denial of License or Operator's Permit. The Director may issue a license or operator's permit with specific conditions or limitations based on the applicant's experience and compliance history. The Director may refuse to issue or renew a driller's license permanently or for a designated period if the driller has previously constructed wells improperly or constructed a well without a valid driller's license. If the Director determines that the applicant is not qualified, the Director will deny the application. Notice of a denied application or a conditioned license or operator's permit will be given to the applicant in accordance with IDAPA 37.01.01, "Rules of Procedure of the Idaho Department of Water Resources." ()

# 034. EXAMINATION PROCEDURES (RULE 34).

**01.** Written Examination. Written examinations will be offered at department offices on the first Monday of each quarter. If the first Monday is a legal holiday, written examination will be offered on the first Tuesday. Re-examination may be taken at a regularly scheduled examination date during a following quarter and shall be scheduled with the department office originally testing the applicant. ( )

**02. Verbal or Oral Examination**. Successful passage of a verbal examination may satisfy all or a part of the written testing requirements under the following circumstances: ( )

**a.** The applicant requests a verbal examination and shows cause acceptable to the director why the examination should be verbal rather than written. Applicants desiring to take the examination verbally shall request that a verbal examination be scheduled allowing at least fifteen (15) days to set an examination date. ( )

**b.** The director determines that because of the applicant's compliance history, additional testing is needed to determine the applicant's qualifications. ( )

**03.** Examination Scoring. A score of seventy percent (70%) or higher is a passing score. ( )

**04. Assistance Must Be Authorized**. The use of written materials, equipment, or other individuals to assist an applicant during an examination is prohibited unless specifically authorized by the department. An applicant receiving unauthorized assistance during an examination may be disqualified and the application may be rejected. An application filed by a disqualified applicant will not be processed for a period of up to one (1) year from the time of disqualification. ( )

# 035. EXPIRATION AND RENEWAL OF DRILLER LICENSES AND OPERATOR PERMITS (RULE 35).

**01. Expiration of Licenses and Permits**. All driller licenses and operator permits expire at the end of the licensing period for which they are issued. The licensing period begins April 1 and ends March 31 of the second year following issuance.

02. Renewal Application. A license or operator permit may be renewed by submitting a renewal

application including the following:

A completed application on a form provided by the department. An application for renewal shall be a. signed by the principal driller.

b. The renewal fee required by Section 42-238, Idaho Code. ) (

A new bond or continuation certificate for an existing bond covering all drillers and operators c. employed by the company. )

Continuing Education Requirements. Credit hours not to exceed twenty (20) are required for 03. renewal of a driller license or operator's permit for any licensing period. )

#### 036. PROCESSING APPLICATION TO RENEW LICENSE OR OPERATOR'S PERMIT (RULE 36).

01. **Processing Applications for Renewal.** The department shall receive a complete application for renewal no later than March 15 to assure that the license or operator's permit will remain in force without interruption. If the director determines that the application is complete and the applicant is qualified, the license or operator's permit will be renewed for the period ending on March 31 of the second year after approval of the renewal. )

02. Regulatory Compliance Required for Renewals. A license or operator's permit will not be renewed if the applicant has not submitted all required driller's reports, applications for drilling permits, fees, agreed civil penalties, has not complied with all orders requiring repair or decommissioning of improperly constructed wells or is not otherwise in compliance with Sections 42-235 and 42-238, Idaho Code, and the applicable rules. ( )

03. **Compliance History**. If the Director determines that the applicant has exhibited an unacceptable compliance history, the Director may deny renewal, refuse renewal for a specified time, or renew with conditions, including but not limited to an increased bond amount. )

Renewal of Expired Licenses or Operator's Permits. A license or an operator's permit which has 04. expired or otherwise not been in effect for a period not exceeding three (3) years shall be renewed in accordance with the requirements of Rule 35. An applicant for renewal shall provide verification of earned credit hours required for the entire period since the license or operator's permit was last issued. If a license or operator's permit has been expired or otherwise not effective for a period of more than three (3) years, a new application shall be submitted in accordance with these Rules. The director may waive the examination requirement if the applicant has been previously licensed or permitted in the state of Idaho. )

05. Reuse of Identification Numbers. The identification number assigned to a license by the department will not be reused if the license has been expired or otherwise not in effect for three (3) years or more except, at the director's discretion, the number may be reissued to the original owner. ( )

Condition or Denial of an Application for Renewal. If the Director determines that the applicant 06. has not or cannot fully comply with these rules, a license or operator's permit may be issued with conditions. If the Director determines that the applicant is not qualified or has documented violations of well drilling laws and/or rules, the Director will deny the application. When there are documented violations of well drilling laws and/or rules, including well construction standards, the Director may issue a conditional license or operator's permit or deny an application based on the applicant's compliance history. Notice of a denied application or a conditioned license will be given as provided in IDAPA 37.01.01, "Rules of Procedure of the Idaho Department of Water Resources." )

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#### 037. -- 049. (RESERVED)

#### DUTIES AND RESPONSIBILITIES OF DRILLERS, COMPANIES AND OPERATORS (RULE 50). 050.

01. Licensed Drillers and Principal Drillers. All licensed drillers and principal drillers shall:

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**a.** Allow drilling only by those authorized by and under the supervision required by these rules and according to any conditions of the license or permit. ( )

**b.** Complete each well in compliance with IDAPA 37.03.09, "Well Construction Standards Rules," and drilling permit conditions.

c. Maintain a valid cash or surety bond, as defined in Rule 60.

**d.** Display the driller or company license number in a conspicuous place on the drill rig using a metal identification plate issued by the department or other permanent marking approved by the director. If requested by the applicant, one plate will be issued upon initial licensure. Replacement plates or additional plates are available for a fee.

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e. Keep current the department's list of operators and drillers employed by the licensed driller or company, including current addresses for the company, drillers, and operators. The licensed driller or principal driller shall be held responsible for all drilling activity of a driller or operator under their supervision until such notification has been submitted in writing to the department that the driller or operator is no longer employed by the licensed driller or ( )

**f.** Have at the drilling site the driller's license and drilling permit or other written authorization from the director to drill the well.

**g.** Obtain specific written authorization from the director to drill:

- in contaminated areas identified by the department;
- in areas of drilling concern designated by the department;
- a public drinking water supply well, as defined in IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems";
- low temperature geothermal resource wells; and
- geothermal resource wells.

Verbal authorizations to drill and pre-approved drilling permits (start cards) do not authorize drilling in these areas.

**h.** Monitor and record bottom-hole temperature in areas where low temperature geothermal resources are known or suspected or when the well is being constructed pursuant to IDAPA 37.03.09, Rule 30, as a low temperature geothermal resource well. Bottom-hole temperature of every well being constructed pursuant to IDAPA 37.03.09, Rule 30, must be measured, recorded, and reported on the well drillers report. ( )

i. Maintain a daily well log at the drilling site acceptable to the department and as required by Section 42-238(11), Idaho Code. Pertinent data required to be recorded on the daily log must include information sufficient to complete a well drillers report acceptable to the Director. The driller shall retain the well log for at least one (1) year after the driller's report is submitted to the department. ( )

**j.** Submit driller's reports, acceptable to the Director, on forms approved by the department within thirty (30) days following removal of the drill rig from the drilling site at completion of the well. Driller's reports shall be prepared from information recorded on the daily well log. Driller's reports returned to the driller due to deficiencies must be corrected and returned to the department within thirty (30) days of mailing by the department.

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**k.** Attach a well tag supplied by the department to every well drilled for which a drilling permit is required. The tag shall be affixed permanently to the casing, or other permanent object attached to the well, by a method approved by the Director prior to removing the well rig from the drilling site. ( )

**I.** Cause all drilling activity under the supervision of the driller to cease when the driller's license expires, becomes invalid, or is suspended or revoked.

**02. Companies**. Companies shall:

**a.** Have a principal driller always designated with the department and keep current the Department's contact information to include a valid phone number for the principal driller.

( )

**b.** Notify the department within ten (10) days of the principal driller leaving employment with the company. The company's license shall immediately become void and of no effect when the principal driller leaves employment with the company and shall remain so until the department has been notified in writing that a new principal driller has been employed and designated by the company. Failure to designate a principal driller within ninety (90) days of the departure of the designated principal driller is cause for the director to take action to cancel the company's license.

c.	Always maintain a bond as required in Rule 60.	(	)
03.	<b>Operators</b> . Operators shall:	(	)

Have in their possession a valid operator's permit while operating drill rigs or drilling equipment.

b.	Only drill wells as authorized by the operator's permit.	(	)
c.	Maintain a complete and accurate well log at the drilling site.	(	)
d.	Co-sign a driller's report with the licensed driller upon completion of the well.	(	)

# 051. -- 059. (RESERVED)

# **060. BONDING (RULE 60).**

**01. Bonding Requirements**. Each licensed company shall submit a surety bond or cash bond in an amount determined by the director, within the limits of 42-238, Idaho Code, covering all drillers and operators employed by the company, payable to the director for the licensing period. If the licensed driller drills wells as an individual and not for a company, a separate bond must be filed with the director.

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**a.** The amount of the bond will be determined by the director based on the applicant's compliance history, the size and depth of wells the applicant proposes to construct and is authorized to drill, the complexity of the wells, the resource to be recovered, the area of operation of the applicant, the number of drillers and operators employed by a company, and other relevant factors. (()

**b.** The amount of the bond required prior to drilling in an area of drilling concern, and/or drilling monitoring wells, public water supply wells, or wells with a bottom hole temperature meeting the definition of a low temperature geothermal resource as defined by Section 42-233, Idaho Code, shall be the maximum amount allowed by Section 42-238, Idaho Code. (())

c.

All bonds and continuation certificates shall commence on April 1 or date of licensure for a new company and be valid until March 31 of the year the driller or company license expires. Bonds and continuation certificates must be on a form approved or provided by the department.

## 02. Cash Bonds.

**a.** Cash bonds shall be in a separate account readily accessible to the director for use as provided in these rules. The director will review cash bond proposals made by an applicant. Cash bonds shall be retained in financial institutions within the state of Idaho unless waived by the director.

**b.** The director will retain cash bonds for two (2) years from the date the driller requests that the bond be released unless replaced by another bond or the director determines that all wells drilled by the driller satisfy well construction standards. The release of a cash bond must be requested in writing.

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**03.** License Void Without Bond. If the surety cancels a bond, the bond expires or otherwise becomes non-effective during the term of a license, the license shall immediately become void and of no further effect until an adequate replacement bond is received by the department.

## 061. -- 069. (RESERVED)

## 070. CONTINUING EDUCATION (RULE 70).

**01. Requirements**. Every licensed driller or operator must earn the applicable number of credit hours consistent with these rules. The credit hours must be obtained during the licensing period preceding the renewal application.

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**02. Earning Credit Hours**. Credit hours may be earned for time spent in attendance at workshops, seminars, short courses, and other educational opportunities devoted to well drilling or related subjects acceptable to the Director or approved by the continuing education committee (CEC) in compliance with the CEC guidelines. These may include completion of college courses, correspondence courses, or online courses. ()

**03. Documentation**. Documentation in support of credit hours is the responsibility of each licensed driller and operator. Records required include but are not limited to: (())

**a.** A log showing the type of course or activity, sponsoring organization, duration, instructor's name, and credit hours. ( )

**b.** Attendance verification records in the form of completion certificates or other official documents providing evidence of attendance and completion. ( )

**04. Submittal and Maintenance of Records**. Copies of continuing education records for the preceding license period shall be submitted with applications to renew licenses or permits. These records shall be maintained by the applicant for a period of three (3) years and shall be available for review by the department at the request of the director. ( )

**05. Insufficient Credit Hours**. If at the time of renewal, the applicant is unable to provide verification of the required credit hours, the director will deny renewal of the driller's license or operator's permit, except as otherwise provided in the following: ( )

**a.** The director may withhold action on an application for renewal for a period not to exceed ninety (90) days to allow the applicant to provide verification of the required credit hours. The applicant is not authorized to drill until the verification is provided and the renewal is issued. ( )

**b.** The director may exempt an applicant from all or part of the continuing education requirements if the applicant served on active duty in the armed forces of the United States for one hundred twenty (120) consecutive days or more during the licensing period prior to filing the application for renewal; or the applicant suffered physical disability, serious illness, or other extenuating circumstances that prevented the applicant from earning the required units. ( )

**06. Out-of-State Residents**. The continuing education requirements for a driller's license or operator's permit are the same for both resident and non-resident applicants.

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**07. Responsibility for Education Development and Implementation**. The department's responsibility to develop and implement a program for continuing education may, at the Director's discretion, be delegated through a memorandum of understanding (MOU) and/or contract to external providers such as the Idaho Ground Water Association (IGWA) (0)

## 071. -- 089. (RESERVED)

## 090. ENFORCEMENT (RULE 90).

**01. Violations**. Violations of these rules or Sections 42-235 or 42-238, Idaho Code, will be enforced as provided in Sections 42-238 and 42-1701B, Idaho Code. ()

**02. Enforcement Procedures**. Department procedures and guidance for administrative enforcement are published on the department's website and available upon request. ( )

## **091. -- 999.** (**RESERVED**)