

Recommendation Memo

State of Idaho

Department of Water Resources

322 E Front Street, P.O. Box 83720, Boise, Idaho 83720-0098

Phone: (208) 287-4800 Fax: (208) 287-6700

Date: January 18, 2022

To: Idaho Water Resource Board

Thru: Gary Spackman, Director, and Mat Weaver, Deputy Director

From: Tim Luke, Water Compliance Bureau Chief *TL*

Subject: Memorandum re: IDWR's Drilling for Geothermal Resources Rules, IDAPA 37.03.04 with Retrospective Analysis and Recommendation.

Executive Order 2020-01

Executive Order No. 2020-01 (the "EO") requires the Idaho Department of Water Resources ("IDWR") and the Idaho Water Resource Board ("IWRB") (collectively "Agencies") to review all rule chapters under the Agencies' purview by 2026. The review must be a critical and comprehensive review. EO at 2.

Pursuant to the schedule already determined by the Division of Financial Management ("DFM") and the Agencies, IDWR's Drilling for Geothermal Resources Rules ("Geothermal Rules"; IDAPA 37.03.04) must be analyzed in the second year of the review process.

Therefore, the EO requires the Agencies to review the Geothermal Rules to determine whether they should be repealed altogether or re-promulgated. If the Agencies desire to re-promulgate the Geothermal Rules, the Agencies must retrospectively analyze the rules and determine whether the rules need to be re-promulgated, and, if so, to recommend an approach. *Id* at 3.

This Recommendation Memorandum ("Memo") provides analysis and recommendations for the Director and Board.

Retrospective Analysis

1. What are the benefits of the current rule?

The Geothermal Rules provide minimum standards and best management practices that protect against overdevelopment of a limited but renewable energy resource. The rules help IDWR manage a unique resource for the maximum benefit to the state while minimizing risk and cost to the citizens of Idaho. Additional benefits of the current rule include:

- Clarification of permit requirements and processing procedures.
- Establishes minimum construction methods for exploration, production, and injection wells to protect both geothermal and groundwater resources, public health, neighboring property owners, and the public. For example, several sub-rules on well casing requirements are designed to protect usable groundwater from contamination.

- Provides minimum standards for abandonment of geothermal wells to prevent contamination of usable groundwater, prevent damage to geothermal reservoirs, and protect life, health, environment, and property.
- Establishes minimum record requirements that benefit public understanding and occurrence of geothermal resources in Idaho, but also provide confidentiality of certain records within one year of receipt.

2. Do the benefits of the rule justify the costs of the rule?

The current Geothermal Rules do not impose more costs than what is normally encountered with drilling geothermal resource wells in other states or areas of the country. The Geothermal Rules specify some minimal construction practices that are normally implemented or engineered to industry standards to minimize risk or liability to the geothermal resource, groundwater resources, environment, life, and public health and safety. Geothermal resource developers typically implement drilling and well construction plans that are more stringent than required by rule.

Due to the nature and depth of the geothermal resource in Idaho, much of the cost to develop the resource is a result of the specialized equipment necessary to drill and construct wells, land acquisition costs, lease payments, royalties, and other factors not within the purview of the rule. Only four to five geothermal wells have been drilled and developed in Idaho over the past ten to 12 years, at costs of over \$4 million per well. High costs, risks and limited benefits tend to limit private business interest and investment in geothermal resource exploration, development, and production. Protecting the geothermal and ground water resources to benefit the citizens of Idaho justifies the relatively minor cost attributed to minimum standards imposed by rule.

3. Are there less restrictive alternatives to accomplish the benefits of the rule?

The current Geothermal Rules add clarification to the Geothermal Act Chapter 40, Title 42, Idaho Code), authorize flexibility in the application of statutes, and imposes certain minimum well construction standards that are normally designed and implemented to existing industry standards to protect resources, the environment, and public health.

IDWR will propose removing certain sub-rules that are unnecessary or obsolete, including sub-rules that reiterate current statutes.

4. Recommendation

IDWR staff recommends the Geothermal Rules be repealed and replaced through the negotiated rulemaking process. Pursuant to the negotiated rule process, IDWR staff will seek comment on whether any non-regulatory measures can be implemented in lieu of the Geothermal Rules. IDWR will propose some minor rule changes or updates for purposes of clarification and consistency with current statutes.