

MODEL CODE FOR COLORADO MUNICIPALITIES

MODEL GUIDELINES AND REGULATIONS FOR THE USE OF GEOTHERMAL RESOURCES FOR COMMERCIAL PRODUCTION OF ELECTRICITY

INTRODUCTION TO REGULATIONS.

The *Model Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity* ("Model Code") is intended for use as a template to guide preparation of land use regulations for development of geothermal resources in Colorado municipalities pursuant to authority under C.R.S. §§ 24-65.1-101, *et seq.* The Model Code meets statutory requirements and has been drafted to be consistent with current land use law at the time of its writing. **Each municipality, however, should consult with the town/city attorney for legal advice before adopting any provisions of this Code.**

TABLE OF CONTENTS

1.0 GENERAL PROVISIONS

1.1	Title and Citation	1
1.2	Authority	1
1.3	Applicability	1
1.4	Permit or Finding of No Significant Impact Required.....	1
1.5	Exemptions from These Regulations	1
1.6	Relationship to Other Regulations.....	2
1.7	Severability.....	3
1.8	Definitions of Words and Terms	3

2.0 DESIGNATION HEARING AND DESIGNATION OF USE OF GEOTHERMAL RESOURCES FOR COMMERCIAL PRODUCTION OF ELECTRICITY TO BE AN ACTIVITY OF STATE INTEREST

2.1	Findings.....	5
2.2	Designation of Activity of State Interest.....	6

3.0 APPLICATION REVIEW AND ACTION

3.1	Pre-Application Conference	6
3.2	Finding of No Significant Impact (FONSI)	8
3.3	Application Submittal and Determination of Completeness.....	9
3.4	Application Submittal Requirements	9
3.5	Administrative Permit and Standard Permit Review and Action	19
3.6	Approval Standards.....	24

4.0 EXPLORATION ACTIVITY NOTICE

4.1	Activity Notice Required	34
4.2	Activity Notice Submittal Requirements	35
4.3	Filing Fees.....	36
4.4	Confidential Information	37
4.5	Approval Standards for Activity Notice	37
4.6	Activity Notice Review and Action	39

5.0 TECHNICAL REVISIONS AND PERMIT AMENDMENTS

5.1	Technical Revisions	39
5.2	Permit Amendments.....	39
5.3	Staff Review of Proposed Changes	39

MODEL CODE FOR COLORADO MUNICIPALITIES

GUIDELINES AND REGULATIONS FOR THE USE OF GEOTHERMAL RESOURCES FOR
COMMERCIAL PRODUCTION OF ELECTRICITY

5.4 Notice of [*Staff's*] Determination Regarding Technical Revision or Permit Amendment 40

5.5 Reconsideration of [*Staff's*] Determination of Whether Change is a Permit Amendment or a Technical Revision..... 40

6.0 FINANCIAL GUARANTEE

6.1 Financial Guarantee Required. 40

6.2 Amount of Financial Guarantee..... 41

6.3 Estimate 41

6.4 Form of Financial Guarantee..... 41

6.5 Release of Financial Guarantee..... 41

6.6 Annual Review and Adjustment of Financial Guarantee 42

6.7 Cancellation of Financial Guarantee 43

6.8 Forfeiture of Financial Guarantee..... 43

6.9 Substitute of Financial Guarantee 44

7.0 PERMIT ADMINISTRATION AND ENFORCEMENT

7.1 Person May Be Enjoined from Conducting Activity or Engaging in Development Without Obtaining Permit 44

7.2 Permit May Be Revoked or Suspended 44

7.3 Permit Suspension or Revocation 44

7.4 Transfer of Permits..... 45

Appendix A
Flow Chart, Application Review and Action 46

Appendix B
Sample Form - FONSI 47

Appendix C
Sample Form - EXPLORATION ACTIVITY NOTICE 49

1.0 GENERAL PROVISIONS**1.1 Title and Citation.**

These regulations are entitled “Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity,” or “Regulations.”

1.2 Authority.

These Regulations are authorized by, *inter alia*, C.R.S. §§ 24-65.1-101, *et seq.* and 29-20-101, *et seq.*

1.3 Applicability.

These Regulations shall apply to the use of geothermal resources for the commercial production of electricity (“Commercial Use of Geothermal Resources”) on public or private lands, located wholly or partially within the Town/City. The Commercial Use of Geothermal Resources may only be located in a zoning district where such use is allowed.

1.4 Permit or Finding of No Significant Impact Required.

- A. No person may engage in Commercial Use of Geothermal Resources covered by these Regulations without first obtaining either a Permit or a Finding of No Significant Impact (FONSI) issued under these Regulations.
- B. The Town/City shall not issue any building permit or grant other approvals for Commercial Use of Geothermal Resources subject to these Regulations without the applicant having first obtained a Permit or a FONSI issued under these Regulations.

1.5 Exemptions from These Regulations.

- A. **Statutory Exemptions.**¹ These Regulations shall not apply to any development in an area of state interest or any activity of state interest which met any one of the following conditions as of May 17, 1974:
 - 1. The development or activity is covered by a current building permit issued by the appropriate local government; or
 - 2. The development or activity has been approved by the electorate;
or

¹ § 24-65.1-107, C.R.S.

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3. The development or activity is to be on land:
 - a. Which has been conditionally or finally approved by the appropriate local government for planned unit development or for a use substantially the same as planned unit development; or
 - b. Which has been zoned by the appropriate local government for the use contemplated by such development or activity; or
 - c. With respect to which a development plan has been conditionally or finally approved by the appropriate governmental authority.
 - B. **Other Exemptions.** These Regulations shall not apply to Commercial Use of Geothermal Resources approved by the Town/City as of the effective date of these Regulations.

1.6 Relationship to Other Regulations.

- A. **More Stringent Requirements Control.** If any provision of these Regulations is found to be inconsistent or in conflict with other Town/City standards or requirements or the statutory criteria for administration of matters of state interest, the more stringent standards or requirements shall control.
- B. **Coordination of Town/City Permit Process with Permit Processes of Other Agencies.**
 1. **Coordinated Review.** The applicant may request that the Town/City application and review process be coordinated with that of other agencies. The Town/City will coordinate its review of the application with other agencies, as appropriate.
 2. **Coordinated Permit Conditions.** The Town/City will coordinate its approval of the application, including the terms and conditions of such approval, with that of other agencies so that the applicant is not subjected to duplicative terms and conditions.
- C. **No Intent to Conflict.** These Regulations shall not be applied to create a conflict with any state or federal laws or regulations.

1.7 Severability.

If any section, subsection, sentence, clause or phrase of these Regulations is held to be invalid or unconstitutional by a court of law, such decision shall not affect the validity of these Regulations as a whole or any part other than the part declared invalid.

1.8 Definitions of Words and Terms.

Adverse means unfavorable, harmful.

Completed well means a well that has been drilled to its total depth, has been cased, grouted, and pressure or flow tested as required, has been equipped with production equipment if needed, and is ready to be placed into service.²

Designation means that legal procedure specified by C.R.S. § 24-65.1-401 for designating Matters of State Interest

Development means any construction or activity which changes the basic character or the use of the land on which the construction or activity occurs.³

Development area means those geographic areas within the Town/City that will be developed or altered directly by construction or operation of the Project.

Exploration means any activity relating to the search for evidence of geothermal resources. This activity requires physical presence on the land and may result in damage to surface lands or resources. Exploration includes, but is not limited to geophysical operations such as drilling shallow temperature gradient wells or holes used for explosive charges for seismic exploration. It also includes related construction of roads and trails, and cross-country transit by vehicles over surface land. Exploration operations do not include the production or beneficial use of geothermal resources.⁴

Geothermal well means a well that is constructed for the use of a geothermal resource for the commercial production of electricity, or reinjection of a geothermal fluid from such well.⁵

Impact area means those geographic areas, including the development area, in which any impacts are likely to be caused by the Project.

² 2 C.C.R. 402-10, Rule 4.2.6

³ § 24-65.1-102(1), C.R.S.

⁴ 43 C.F.R. § 3200.1

⁵ 2 C.C.R. 402-10, Rule 4.2.15

Material injury means diminution or alteration of quantity, temperature, or quality of a geothermal or water right.

Mitigation means an action that will have one or more of the following effects:

1. Avoiding an impact by not taking a certain action or parts of an action.
2. Minimizing impacts by limiting the degree or magnitude of the action or its implementation.
3. Rectifying the impact by repairing, rehabilitating or restoring the impact area, facility or service.
4. Reducing or eliminating the impact over time by preservation and maintenance operations.
5. Compensating for the impact by replacing or providing suitable biological and physical conditions and by replacing or providing suitable services and facilities.

Net effect (relating to mitigation) means the impact of an action after mitigation.

Permit means a permit for Use of Geothermal Resources for Commercial Production of Electricity issued by the Board/Council pursuant to these Regulations.

Production equipment means any pump, fluid circulating system, or other device used or intended for extracting geothermal resources from a well. Production equipment includes well seals, well heads, control devices, and couplings appurtenant thereto.⁶

Production facilities include, but are not limited to, power plants, extraction plants, and separators.

Project means the construction and operation of an activity proposed under these Regulations throughout its life cycle including all ancillary structures, facilities, improvements and activities, and all integrated components thereof, and any proposed land use directly related to such project if such project is to be located wholly or partially within the Town/City.

Reinjection means reintroducing geothermal fluids through a well into the same

⁶ 2 C.C.R. 402-10, Rule 4.2.23

2.0 - DESIGNATION HEARING AND
DESIGNATION OF USE OF GEOTHERMAL RESOURCES FOR COMMERCIAL PRODUCTION OF
ELECTRICITY TO BE AN ACTIVITY OF STATE INTEREST

reservoir from which they were produced, whether by pressure at the surface or by gravity flow.⁷

Significant means deserving to be considered important; notable and not trifling.⁸

Significantly degrade means to lower in grade or desirability to a significant, as opposed to trifling, degree.⁹

Significantly deteriorate means to make inferior in quality or value to a significant, as opposed to trivial, degree.¹⁰

Significant adverse impact means an impact of an action which is considerable or substantial, and unfavorable or harmful.

Use of Geothermal Resources for the Commercial Production of Electricity or Commercial Use of Geothermal Resources means the drilling, deepening, reworking, closure or abandonment of a geothermal well; power production facilities and operations; and all construction, site preparation, reclamation and related activities associated with the development of geothermal resources for the commercial production of electricity.

**2.0 DESIGNATION OF USE OF GEOTHERMAL RESOURCES FOR
COMMERCIAL PRODUCTION OF ELECTRICITY TO BE AN
ACTIVITY OF STATE INTEREST¹¹**

2.1 Findings.¹²

The Board/Council hereby finds that:

1. All applicable notice and public hearing requirements have been followed;
2. Designation of development of geothermal resources for the commercial production of electricity as an activity of state interest is necessary because of the current and foreseeable development pressures on and within the Town/City;

⁷ 2 C.C.R. 402-10, Rule 4.2.24

⁸ 895 P.2d 1105, 1114 (Colo.App. 1994)

⁹ Id.

¹⁰ Id.

¹¹ § 24-65.1-404, C.R.S.

¹² § 24-65.1-401(2)(b), C.R.S.

3. Developing geothermal resources for commercial production of electricity in an uncontrolled manner could result in detrimental effects to water resources and water supplies and detrimental effects on people, property, and the environment; and
4. The advantages of developing geothermal resources for commercial production of electricity in a controlled manner include:
 - a. To encourage the responsible production of electricity from the abundant geothermal resources in the Town/City.
 - b. To ensure that development of geothermal resources for the commercial production of electricity does not have an unacceptable impact on private property rights.
 - c. To ensure that development of geothermal resources for commercial production of electricity does not prevent development of geothermal resources for other purposes.
 - d. To ensure that development of geothermal resources for commercial production of electricity is undertaken in such a manner as to safeguard life, health, property, public welfare, and the environment.

2.2 **Designation of Activity of State Interest.** Based upon the findings in Section 2.1, the Board/Council hereby designates the Use of Geothermal Resources for Commercial Production of Electricity to be an activity of state interest subject to the provisions of these Regulations.

3.0 APPLICATION REVIEW AND ACTION

3.1 Pre-Application Conference.

Any person proposing to engage in Commercial Use of Geothermal Resources shall first request a pre-application conference with the Staff. The conference will be held within ten (10) working days of the request.

- A. **Purpose.** The purposes of the pre-application conference include, without limitation:
 1. To discuss the location and nature of the proposed Project and site specific considerations that bear on the proposed Project;
 2. To discuss whether the proposed Project is eligible for a FONSI or

MODEL CODE FOR COLORADO MUNICIPALITIES

GUIDELINES AND REGULATIONS FOR THE USE OF GEOTHERMAL RESOURCES FOR
COMMERCIAL PRODUCTION OF ELECTRICITY

whether a Permit is required;

3. To explain Permit application submittal requirements and the nature of materials that will be responsive to those requirements;
 4. To identify materials that may have been submitted to other state or federal agencies that the project proponent may propose to use in the Town/City application process;
 5. To discuss federal and state terms and conditions that may have been imposed on the proposed Project;
 6. To discuss projected impacts and potential mitigation;
 7. To discuss the standards that must be satisfied for permit approval; and
 8. To identify potential waivers of standards based on technical infeasibility or environmental protection that the proponent intends to raise.
- B. **Materials.** At or before the pre-application conference, the project proponent shall submit the following materials:
1. Proponent's name, address and phone number. If the proponent is not the owner of the property where the proposed Project will occur, proponent shall also provide the name, address and phone number of the property owner and documentation that the property owner consents to the proposed Project.
 2. Map prepared at an easily readable scale showing:
 - a. Boundary of the proposed Project;
 - b. Relationship of the proposed Project to surrounding topographic and cultural features such as roads, streams and existing structures;
 - c. Proposed building(s), improvements and infrastructure; and
 - d. Topographic information in intervals not less than forty (40) feet.
 3. Written summary of the proposed Project.

4. Why the proposed Project is eligible for a FONSI under Section 3.2 if the proponent is seeking a FONSI.
- C. **Participation by Town/City Staff and Consultants.** The [Staff] may include staff from other departments and agencies and outside consultants in the pre-application conference.
 - D. **Comments are Preliminary.** Any comments made by Town/City staff and consultants during the pre-application conference are preliminary in nature and not binding.

3.2 Finding of No Significant Impact (FONSI).

- A. **FONSI.** If the [Staff] determines that the proposed Project, without mitigation, in its proposed location is unlikely to have any significant impact to the Town/City, it may issue a FONSI within fourteen (14) calendar days of the pre-application conference. If a FONSI is issued, no Permit will be required under these Regulations.
- B. **Notice of FONSI.** Within five (5) calendar days of the FONSI, the [Staff] shall notify the applicant, the Board/Council, and adjacent property owners in writing. The notice shall include a description of the proposed Project and the procedure for requesting reconsideration of the [Staff's] FONSI by the Board/Council.
- C. **Reconsideration of FONSI by Board/Council.**
 1. **Call-up by the Board/Council.** Following the notice of FONSI, at the next regularly scheduled meeting for which proper notice can be accomplished pursuant to the [land use code] the Board/Council may, at its discretion, decide to reconsider the FONSI.
 2. **Request for Reconsideration.** The applicant or adjacent property owners may request that the Board/Council reconsider the FONSI. The request shall be in writing, within seven (7) calendar days following the date of written notice of decision.
 3. **Reconsideration of FONSI by Board/Council.** After call-up by the Board/Council or upon receiving the request for reconsideration of FONSI, the Board/Council may reconsider the FONSI at the next regularly scheduled meeting for which proper notice can be accomplished pursuant to the [land use code]. A public hearing is not required. The Board/Council shall either uphold or reverse the

FONSI, based upon the proposed Project's compliance with the approval standards, without mitigation, in its proposed location.

3.3 Application Submittal and Determination of Completeness.

- A. **Application Submittal.** Following a pre-application conference with the [Staff], an applicant shall submit an application to the [Staff] unless a FONSI was issued. See Section 3.4 of these Regulations for the content of the application.
- B. **Determination of Completeness.** Not more than ten (10) working days after receipt of the application materials, or twenty (20) working days if outside consultants or staff other than [Department] assist the Town/City with completeness determination, the [Staff] shall determine whether the application is complete.
1. **Application Is Not Complete.** If the [Staff] determines that the application is not complete, the [Staff] shall inform the applicant in writing of the deficiencies and shall take no further action on the application until the deficiencies are remedied. If the applicant fails to correct the deficiencies within thirty (30) calendar days after the notice that the application is incomplete, the application shall be considered withdrawn unless the applicant requests more time to ensure that the materials are as complete as possible.
 2. **Application Is Complete.** If the [Staff] determines that the application is complete, the [Staff] shall date the application and notify the applicant in writing.
 3. **Completeness Is Not a Determination of Compliance.** A determination that an application is complete shall not constitute a determination that it complies with the approval standards of these Regulations.

3.4 Application Submittal Requirements.

Following a pre-application conference, the application submittal materials shall be submitted to the [Staff] by the owner, or any agent acting through written authorization of the owner. The [Staff] may waive any part of the submittal requirements when the information would not be relevant to determining whether the proposed Project complies with the approval standards in Section 3.6.

- A. **Authorized Applicant.** Completed application forms and accompanying materials shall be submitted to the [Staff] by the owner, or any agent acting through written authorization of the owner.

1. **Authorized Agent.** If the applicant is not the owner of the land, or is a contract purchaser of the land, the applicant shall submit a letter signed by the owner consenting to the submission of the application.
 2. **Applicant is Not the Sole Owner.** If the applicant is not the sole owner of the land, the applicant shall submit a letter signed by all other owners or an association representing all the owners, by which all owners consent to or join in the application.
- B. **Application Fees and Deposit.** The application shall be accompanied by the appropriate fees and deposit based on a schedule of fees adopted by the Board/Council. A schedule of fees adopted by the Board/Council is available through the [Department].
1. **Applicant Responsible for Cost of Reviewing and Processing the Application.** The applicant is responsible for the Town's/City's costs of reviewing and processing the application including costs of copying, mailings, publications, labor and overhead, and all hearings and meetings on the application.
 2. **Applicant Responsible for Referral Agency and Consultant Fees.** The applicant is responsible for the costs of referral agency, counsel and consultant review of the application including reviews associated with the pre-application conference, completeness determination, and all hearings and meetings on the application.
 - a. **Deposit.** The deposit shall be applied toward the costs of the pre-application meeting, referral agency review, and consultant fees. The Town/City shall pay the costs of referral agency review and outside consultants retained by the Town/City to review the application from this fund.
 - b. **Minimum Balance.** Throughout the application process, the applicant shall maintain a minimum fee deposit balance established by the Board. The amount of the deposit and the minimum balance required may be reduced upon a finding by the Town/City that the application processing and review costs are likely to be less than the minimum amount set herein.
 - c. **Suspend Processing.** The Town/City may suspend processing the application pending receipt of additional

installments required to bring the fee deposit balance to at least the minimum balance. The Town/City will take no action on the application until all fees and expenses related to the application review process have been paid. Suspension shall toll all deadlines imposed on the Town/City by these Regulations.

- d. **Refund.** Within thirty (30) calendar days after the decision on the Permit is made, the Town/City shall refund any balance of the deposit not expended.

C. Information Describing the Applicant.

1. Name, address, email address, phone number, organization form, and business of the applicant and, if different, the owner of the proposed Project.
2. Authorization of the application by the owner of the proposed Project, if different than the applicant.
3. Documentation of the applicant's financial and technical capability to develop and operate the proposed Project, including a description of the applicant's experience developing and operating similar projects.
4. Names, addresses and qualifications, including areas of expertise and experience with projects directly related or similar to that proposed in the application, of individuals who are or will be responsible for constructing and operating the proposed Project.
5. Written qualifications of those preparing reports and providing certifications required by these Regulations.

D. Information Describing the Project.

1. Detailed plans and specifications of the proposed Project.
2. Amount and type of energy (KW, MW, or BTU) and/or products to be produced by the proposed Project.
3. Detailed map(s) showing the location of all existing and proposed structures and appurtenant facilities.
4. Description of the surface water and groundwater to be used by the

proposed Project including: the source, amount and quality of such water; the applicant's right to use the water, including adjudicated decrees, and application for decrees; proposed points of diversion and changes in the points of diversion; and the existing uses of the water. If an augmentation plan for the proposed Project has been decreed or an application for such plan has been filed in court, the applicant shall submit a copy of that plan.

5. Discussion of the alternatives to the proposed Project that were considered and rejected by the applicant, including the general degree of feasibility of each alternative and reasons why alternatives were rejected.
6. Schedules for drilling, construction and operation of the proposed Project, including the estimated life of the proposed Project.

E. Property Rights, Permits and Other Approvals.

1. Description of property rights that are necessary for or that will be affected by the proposed Project, and documentation establishing property rights and easement and right-of-way agreements connected with the property.
2. List and copies of all other federal, state, and local permits and approvals that have been or will be required for the proposed Project, together with any proposal for coordinating these approvals with the Town's/City's permitting process.
3. Description of all mitigation required by federal, state and local authorities.

F. Technical and Financial Feasibility of the Project.

1. Estimated construction costs and period of construction for each development component, and the total mitigation costs for the proposed Project.
2. Revenues and operating expenses for the proposed Project.
3. Amount of any proposed debt and the method and estimated cost of debt service.
4. Details of any contract or agreement for revenues or services in connection with the proposed Project.

5. Description of the persons or entity(ies) who will pay for or use the proposed Project and those who will benefit from any and all revenues generated by it.
- G. **Socioeconomic Impact Analysis.** Analysis of the socioeconomic impact of the proposed Project. The analysis shall include a description of how the applicant will comply with the approval standards applicable to socioeconomic impacts in Section 3.6 of these Regulations.
1. **Land Use.**
 - a. Description of existing land uses within and adjacent to the proposed Project.
 - b. Description of provisions from the Town/City's comprehensive plan/master plan and intergovernmental agreements that are applicable to the proposed Project, and an assessment of whether the proposed Project will be consistent with or further the objectives of those provisions.
 - c. Description of the impacts and net effect of the proposed Project on existing and future land use patterns.
 2. **Local Government Services.**
 - a. Description of existing capacity of and demand for local government services including roads, schools, water and wastewater treatment, water supply, emergency services, transportation, infrastructure or other Town/City services necessary to accommodate the proposed Project.
 - b. Map that identifies the access route to and roadway(s) within the subject property, and an analysis of the impacts of the proposed Project on the public roadway system.
 - c. Description of the impacts and net effect of the proposed Project on the capability of the Town/City to provide services, and proposed mitigation.
 3. **Local Economy.**
 - a. Description of the local economy, including revenues generated by the different economic sectors.

- b. Description of the impacts and net effect of the proposed Project on the local economy.

4. **Recreational Opportunities.**

- a. Description of present and potential recreational uses in the area where the proposed Project will be located.
- b. Description of the impacts and net effect of the proposed Project on present and potential recreational opportunities and revenues to the local economy derived from those uses, and proposed mitigation.

H. **Areas of Paleontological, Historic or Archaeological Importance.**

- 1. Map and description of all sites of paleontological, historic or archaeological interest.
- 2. Description of the impacts and net effect of the proposed Project on sites of paleontological, historic or archaeological interest, and proposed mitigation.

I. **Environmental Impact Analysis.** Analysis of the environmental impacts of the proposed Project. The analysis shall include a description of how the applicant will comply with the approval standards applicable to environmental impacts in Section 3.6 of these Regulations.

1. **Air Quality.**

- a. Description of the airsheds that will be affected by the proposed Project, including the seasonal pattern of air circulation and microclimates.
- b. Map and description of the ambient air quality and state air quality standards of the airsheds that will be affected by the proposed Project, including particulate matter and aerosols, oxides, hydrocarbons, oxidants and other chemicals, temperature effects and atmospheric interactions.
- c. Description of the impacts and net effect of the proposed Project on air quality during both construction and operation, and proposed mitigation.

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2. **Visual Quality.**
 - a. Map and description of ground cover and vegetation, forest canopies, streams, viewsheds, scenic vistas, unique landscapes and land formations or other natural features of visual importance.
 - b. Description of the impacts and net effect of the proposed Project on visual quality, and proposed mitigation.
 3. **Surface Water Quality and Quantity.**
 - a. Map and description of all surface waters that will be affected by the proposed Project, including description of applicable state water quality standards for water bodies that will be affected by the proposed Project.
 - b. Map and description of existing points of diversion for municipal, industrial, and recreational uses of water within the Town/City.
 - c. Description of the immediate and long-term impacts and net effect of the proposed Project on the quantity and quality of surface water, and proposed mitigation.
 4. **Groundwater Quality and Quantity.**
 - a. Map and description of all groundwater, including any aquifers that will be affected by the proposed Project, including:
 - (1) Seasonal water levels in each subdivision of the aquifer affected by the proposed Project.
 - (2) Artesian pressure in aquifers and a description of how the proposed Project may affect adjacent users on wells.
 - (3) Groundwater flow directions and levels.
 - (4) Existing aquifer recharge rates and methodology used to calculate recharge to the aquifer from any recharge sources.

- (5) Existing groundwater quality and classification.
 - (6) Location of all water wells and their uses.
 - b. Description of the impacts and net effect of the proposed Project on groundwater, and proposed mitigation.
5. **Drinking Water Supplies.**
- a. Inventory and location of all water bodies and domestic water wells within one mile of the proposed Project.
 - b. Identification of all intakes for the municipal water supply downstream from the proposed Project.
 - c. Description of impacts associated with the proposed Project to drinking water supply(ies), and proposed mitigation.
6. **Floodplains, Wetlands and Riparian Areas.** *[NOTE: Floodplains may be excluded from regulation under these Regulations if the municipality intends to regulate floodplains through a separate permit review under its land use code or as a separate designated matter of state interest.]*
- a. Map and description of all floodplains, wetlands, and riparian areas that will be affected by the proposed Project, including a description of each type of wetlands, species composition, and biomass.
 - b. Description of the source of water interacting with the surface systems to create each wetland (i.e., side-slope runoff, over-bank flooding, groundwater seepage, etc.).
 - c. Description of the impacts and net effect of the proposed Project on the floodplains, wetlands and riparian areas, and proposed mitigation.
7. **Wildlife and Wildlife Habitat.**
- a. Analysis of existing wildlife and wildlife habitat.
 - b. Detailed map indicating the location of wildlife habitat in relationship to the proposed structures and appurtenant facilities.

- c. Description of the impacts and net effect of the proposed Project on wildlife and wildlife habitat, and proposed mitigation.
- 8. **Identification of Other Geothermal Resources Affected by the Proposed Project.** Description of the impacts and net effect of the proposed Project on geothermal resources used by others, and proposed mitigation.
- J. **Soils, Geologic Conditions, and Natural Hazards.**
 - 1. Map and description of soils, geologic conditions, and natural hazards, including soil types, drainage areas, slopes, avalanche areas, debris fans, mud flows, rock slide areas, faults and fissures, seismic history, and wildfire hazard areas.
 - 2. Descriptions of the risks to the proposed Project from natural hazards, and proposed mitigation.
 - 3. Descriptions of the impacts and net effect of the proposed Project on soil and geologic conditions in the area, and proposed mitigation.
- K. **Nuisance.** Descriptions of noise, glare, dust, fumes, vibration, and odor levels caused by the proposed Project, and proposed mitigation.
- L. **Balance Between Benefits and Losses.**
 - 1. Description of foreseeable benefits to the Town/City created by the proposed Project.
 - 2. Description of foreseeable losses of natural, recreational, or industrial resources within the Town/City and loss of opportunities to develop those resources in the future.
- M. **Drainage and Erosion Control Plan.** Detailed plan that identifies existing and proposed drainage patterns and the methods for controlling erosion during construction and operation phases of the proposed Project.
- N. **Weed Management Plan.** Plan for the management and prevention of noxious weeds on the site.
- O. **Emergency Response Plan.** Plan that addresses events including, but

- not limited to blow-outs, major fluid spills, earthquakes, fires, floods and other emergencies, including: proof of adequate personnel, equipment, supplies, and funding to implement the emergency response plan immediately at all times during construction and operations. The plan shall include a notification list of response agencies. The plan shall include a provision for the owner or operator to reimburse the appropriate emergency response service providers for costs incurred in connection with the emergency.
- P. **Reclamation Plan.** Detailed plan showing proposed reclamation including: schedules; finish contours, grading and sloping; types, placement, and amount of vegetation; subsequent land use plans; and any other proposed elements.
- Q. **Spill Prevention, Storage, and Control Plan.** Detailed plan that describes spill prevention, containment, control, storage, countermeasure and clean-up procedures and protocols.
- R. **Monitoring and Mitigation Plan.**
1. Description of all mitigation for the proposed Project.
 - a. Description of how and when mitigation will be implemented and financed.
 - b. Description of impacts that are unavoidable and cannot be mitigated.
 - c. Description of methodology used to measure impacts of the proposed Project and effectiveness of proposed mitigation measures.
 2. Description, location, and intervals of proposed monitoring to ensure that mitigation will be effective.
 3. The Board/Council may at its discretion require the applicant to prepare a revised monitoring and mitigation plan for review and approval by the Town/City as a condition of permit approval.
- S. **Additional Information May Be Necessary.** The [Staff] may request that the applicant supply additional information related to the proposed Project as may be necessary for the Board/Council to make a determination on whether the proposed Project satisfies approval standards.

3.5 Administrative Permit and Standard Permit Review and Action.

- A. **Administrative Permit Review and Action.** The [*Staff*] may determine that the proposed Project is of such limited impact that only certain provisions of these Regulations are relevant. Under those circumstances the application will be eligible for an Administrative Permit .
1. **Identification of Relevant Approval Standards.** The [*Staff*] shall identify those approval standards in Section 3.6 of these Regulations that are relevant to the scope and impacts of the proposed Project.
 2. **Review by [*Staff*].** The [*Staff*] shall review the application to determine if the proposed Project satisfies the relevant approval standards.
 3. **Review by Referral Agencies.** The [*Staff*] may send copies of the application to any referral agencies and consultants deemed necessary by the Town/City.
 4. **Notice to Adjacent Property Owners.** Notice to adjacent property owners shall not be required for an Administrative Permit unless the [*Staff*] determines that the proposed Project is likely to affect adjacent property owners. If notification is required, applicant shall mail written notice to the owners of record of all adjacent property by certified mail, return receipt requested.
 - a. **List of Property Owners.** The list of property owners to be notified shall be compiled by the applicant using the most current list of property owners on file with the County Assessor.
 - b. **Validity of Notice.** The applicant is responsible for the accuracy of lists of property owners to whom written notice is provided. If the applicant makes reasonable good faith efforts to accomplish the notice responsibilities identified above, then the failure of any property owner to receive notice shall not affect the validity of the decision.
 5. **Permit Decision by [*Staff*].** Within fourteen (14) working days of the date that the application was determined to be complete, the [*Staff*] may approve, approve with conditions or deny the application based upon the proposed Project's compliance with the

relevant standards in Section 3.6. The [Staff's] decision shall include the following:

- a. **Description of Project.** Brief discussion of the proposed Project;
 - b. **Issues.** Description of issues raised by [Staff], referral agencies and consultants;
 - c. **Conditions Imposed by State and Federal Agencies.** Description of terms, conditions and requirements imposed on the proposed Project by state and federal agencies;
 - d. **Impacts and Mitigation.** Description of impacts of the proposed Project, proposed mitigation, and whether each applicable approval standard has been satisfied; and
 - e. **Conditions of Approval.** Conditions of approval, if any, necessary to ensure compliance with the applicable approval standards.
6. **Notice of Decision by [Staff].** The [Staff] shall inform the applicant, adjacent property owners, and the Board/Council of the approval, conditions of approval or basis for denial in writing within five (5) working days of the decision.
7. **Reconsideration of [Staff's] Decision by the Board/Council.**
- a. **Call-up by the Board/Council.** Within fourteen (14) calendar days after receipt of the Notice of Decision, at the next regularly scheduled meeting for which proper notice can be accomplished pursuant to the [land use code] the Board/Council may, at its discretion, decide to reconsider the [Staff's] decision.
 - b. **Request for Reconsideration.** The applicant or adjacent property owners may request that the Board/Council reconsider the [Staff's] decision. The request shall be in writing, within five (5) calendar days following the date of the Notice of Decision.
 - c. **Reconsideration of [Staff's] Decision.** After call-up by the Board/Council or upon receiving the request for reconsideration of the [Staff's] decision, the Board/Council

may reconsider the decision at the next regularly scheduled meeting for which proper notice can be accomplished pursuant to the [land use code]. A public hearing is not required. The Board/Council shall either uphold the [Staff's] decision, modify the decision, or reverse the decision based on the proposed Project's compliance with the relevant standards in Section 3.6.

B. Standard Permit Review and Action. For any Project that is not issued a FONSI or that is not eligible for Administrative Permit Review, the following process shall apply.

1. Public Notice.

- a. **Notice by Publication.**¹³ Not later than thirty (30) calendar days after determination that the application is complete under Section 3.3B, the [Staff] shall publish a notice of public hearing on the application. The notice shall be published in a newspaper of general circulation in the Town/City not less than thirty (30) calendar days nor more than sixty (60) calendar days prior to the date of the public hearing. The applicant shall be responsible for the cost of publication.
- b. **Written Notice to Adjacent Property Owners.** Not less than thirty (30) calendar days nor more than sixty (60) calendar days prior to the date of the public hearing, the applicant shall mail written notice of the public hearing to the owners of record of all adjacent property by certified mail, return receipt requested.
 - (1) **List of Property Owners.** The list of property owners to be notified shall be compiled by the applicant using the most current list of property owners on file with the County Assessor.
 - (2) **Validity of Notice.** The applicant is responsible for the accuracy of lists of property owners to whom written notice is provided. If the applicant makes reasonable good faith efforts to accomplish the notice responsibilities identified above, then the failure of any property owner to receive notice shall not affect the validity of the decision.

¹³ § 24-65.1-501(2)(a), C.R.S.

2. **Planning Commission Review.** The [Staff] shall submit a copy of the complete application to and seek review comments from the Planning Commission. The Planning Commission shall consider the application at a properly noticed regular meeting or Commission work session. No public hearing by the Commission is required. The Planning Commission shall submit review comments to the Board/Council no later than twenty (20) working days from the date that the application is determined to be complete.
3. **Consultant Review.** The [Staff] may submit the complete application for review and recommendation by consultants retained by the Town/City with the necessary expertise to review the application. The costs of consultant review are the responsibility of the applicant as set forth in Section 3.4.B of these Regulations.
4. **Referral Agency Review.** The [Staff] may submit the complete application for review and recommendation to other Town/City departments, and state or federal agencies having an interest in or authority over all or part of the proposed Project. The referral review and comment period shall be twenty (20) working days from the date that the application is determined to be complete. Comments not received from referral agencies within the comment period may, but need not be considered by the [Staff]. The costs of referral agency review are the responsibility of the applicant as set forth in Section 3.4.B of these Regulations.
5. **Application Review and Staff Report.** The [Staff] shall review the application to determine if the proposed Project satisfies the approval standards in Section 3.6 of these Regulations. The [Staff] shall prepare a report taking into account the application, Planning Commission review comments, issues raised by referral agencies and consultants, terms and conditions imposed by state and federal agencies, and any other available information on the record.
 - a. **Contents of Staff Report.** The report shall:
 - (1) Briefly describe the proposed Project and highlight issues raised by the Planning Commission, consultants, and referral agencies.
 - (2) Discuss state or federal requirements that may have been imposed on the proposed Project and the extent to which any of the terms, conditions, and

requirements satisfy Town/City standards applicable to the proposed Project.

- (3) Discuss the impacts of the proposed Project, the proposed mitigation, and whether it appears that each approval standard has been satisfied.
 - (4) Recommend conditions of approval for any approval standard that appears not to have been fully satisfied, or recommend denial.
 - (5) Include additional information that would be relevant to the decision of the Board/Council.
- b. **Distribution of Staff Report.** No less than seven (7) calendar days prior to the date of the public hearing, the [Staff] shall submit the staff report to the applicant and to the Board/Council. A copy of the staff report shall also be available for public review prior to the hearing.
6. **Action on Permit Application by Board/Council.**
- a. **Public Hearing.** The Board/Council shall consider the application at a public hearing following proper public notice.
 - b. **Application of Approval Standards.**
 - (1) The Board/Council shall apply the approval standards in Section 3.6 to determine whether a permit should be issued.
 - (2) In determining whether the proposed Project satisfies the approval standards, the Board/Council shall take into consideration the construction, operation and cumulative impacts of the proposed Project. A project cannot be segmented to avoid the requirements of these Regulations. If a project is to be phased over time or is composed of distinguishable elements, the impacts of all phases or elements of the development must be considered together when determining whether the proposed Project satisfies the approval standards.
 - c. **Permit Decision by Board/Council.** The Board/Council

shall approve, approve with conditions, or deny the application based upon compliance with the approval standards in Section 3.6 of these Regulations. The Board's/Council's decision shall include the following:

- (1) **Description of Project.** Brief discussion of the proposed Project;
- (2) **Issues.** Description of issues raised by the Planning Commission, referral agencies and consultants;
- (3) **Conditions Imposed by State and Federal Agencies.** Description of terms, conditions and requirements imposed on the proposed Project by state and federal agencies;
- (4) **Impacts and Mitigation.** Description of impacts of the proposed Project, proposed mitigation, and whether each approval standard has been satisfied; and
- (5) **Conditions of Approval.** Conditions of approval, if any, necessary to ensure compliance with approval standards.

3.6 Approval Standards.

A. Performance Standards.

1. **All Property Rights, Permits and Approvals Have Been Obtained.** Prior to site disturbance associated with the proposed Project, the applicant can and will obtain all property rights, permits, and approvals necessary for the proposed Project. If the applicant has not obtained all necessary property rights, permits and approvals, the Town/City may, at its discretion, defer making a final decision on the application until outstanding property rights, permits and approvals are obtained.
2. **Applicant Has Expertise to Accomplish Proposed Project.** The applicant has the necessary expertise to develop and operate the proposed Project consistent with all requirements and conditions.
3. **Applicant Has Financial Capability to Accomplish Proposed Project.** The applicant has the necessary financial capability to

develop and operate the proposed Project consistent with all requirements and conditions.

4. **Project is Financially and Technically Feasible.** The proposed Project is financially and technically feasible. Examples of factors the Town/City may consider in determining financial feasibility include without limitation:
 - a. Amount of debt associated with the proposed Project.
 - b. Debt retirement schedule and sources of funding to retire the debt.
 - c. Estimated construction costs and construction schedule.
 - d. Estimated costs of annual operation, maintenance and monitoring costs.
 - e. Market conditions related to the type of direct and indirect service(s) and/or product(s) to be generated by the proposed Project.
 - f. Plan and sources of funding for construction and operations.
 - g. Plan and sources of funding for mitigation, cessation of operations, and environmental and permit violations.
5. **No Significant Impact to Geothermal Resources.** The proposed Project shall not significantly impact geothermal resources used by others. Examples of factors the Town/City may consider in determining impacts include the following:
 - a. Temperature.
 - b. Chemistry.
 - c. Volume.
6. **No Significant Degradation of Property Rights.** The proposed Project shall not significantly degrade or cause material injury to property rights held by others.
7. **No Unreasonable Risk of Releases of Hazardous Materials.** The proposed Project shall not result in significant risk of releases

of hazardous materials. Examples of factors the Town/City may consider in determining risk include without limitation:

- a. Adequacy of spill prevention and response plans.
- b. Likelihood of hazardous materials or wastes being moved off the site by natural causes or forces.

8. **No Significant Risk from Soils, Geologic, or Natural Hazards.**

The proposed Project is not subject to significant risk from soils, geologic, or natural hazards. Examples of factors the Town/City may consider in determining risk include without limitation:

- a. Faults and fissures.
- b. Unstable slopes including landslides, rock slides and avalanche areas.
- c. Expansive or evaporative soils and risk of subsidence.
- d. Changes to the topography, natural drainage patterns, soil morphology and productivity, soil erosion potential, and floodplains.
- e. Exacerbation of seismic concerns and subsidence.
- f. Flood hazard.
- g. Wildfire hazard.

9. **No Significant Adverse Effect on the Capability of Local Government to Provide Services or the Capacity of Service Delivery Systems.**

The proposed Project shall not significantly degrade the capability of the Town/City to provide services, or exceed the capacity of service delivery systems within the Town/City. Examples of factors the Town/City may consider in determining impacts to local government services include without limitation:

- a. **Public Roadways.** Current and projected capacity of roads and the impact of the proposed Project upon the current and projected capacity.

- (1) All public access roads under the jurisdiction of the

Town/City shall be constructed and maintained in compliance with the [*refer to applicable road standards*] as necessary to accommodate the traffic and equipment related to Project operations and emergency vehicles.

- (2) Ingress and egress points to Town/City roads shall be located, maintained and improved to assure adequate capacity for efficient movement of existing and projected traffic volumes and to minimize traffic hazards.
 - (3) If the projected use of Town/City roads resulting from the proposed Project will result in a need for an increase in roadway maintenance or snow removal, the Town/City shall require the applicant to: (i) enter into an agreement with the Town/City whereby the applicant provides for private maintenance and snow removal, or reimburses the Town/City for such increased costs; and/or (ii) provide a bond or other financial assurance; and/or (iii) pay impact fees in an amount acceptable to the Town/City to cover the costs of impacts to Town/City roads.
- b. **Water Supply.** Change in the amount of water available to the Town/City for future water supply.
 - c. **Water Treatment.** Change in current and future capacity of water treatment services.
 - d. **Wastewater Treatment.** Change in current and future capacity of wastewater treatment services.
 - e. **Emergency Services.** Change in current and future capacity for provision of emergency services.
10. **No Significant Degradation of the Economy.** The proposed Project shall not significantly degrade any current or foreseeable future sector of the local economy. Examples of factors the Town/City may consider in determining impacts to the economy include without limitation:
- a. Changes to projected revenues generated from each economic sector.

- b. Changes in the value or productivity of any lands.
 - c. Changes in opportunities for economic diversification.
 - d. Potential for boom/bust cycles.
11. **No Significant Degradation of Recreation Opportunities and Experiences.** The proposed Project shall not cause a significant degradation in the quality or quantity of recreational activities in the Town/City. Examples of factors the Town/City may consider in determining impacts to recreation opportunities include without limitation:
- a. Changes to existing and projected visitor days.
 - b. Changes in access to recreational resources.
 - c. Changes to quality and quantity of hiking and biking trails.
12. **No Significant Degradation of Areas of Paleontological, Historic, or Archaeological Importance.** The proposed Project shall be conducted in a manner that will be compatible with the preservation of the paleontological, historic or archaeological resource and minimize damage to that resource.
13. **No Significant Degradation of the Natural Environment.**
- a. **No Significant Degradation of Air Quality.** The proposed Project shall not significantly degrade air quality. Examples of factors the Town/City may consider in determining impacts to air quality include without limitation:
 - (1) Changes to seasonal ambient air quality.
 - (2) Changes in visibility.
 - (3) Changes to microclimates.
 - (4) Applicable air quality standards.
 - b. **No Significant Degradation of Visual Quality.** The proposed Project shall not significantly degrade visual quality. Examples of factors the Town/City may consider in

determining impacts to visual quality include without limitation:

- (1) Visual changes to ground cover and vegetation, streams or any other natural feature, or interference with view sheds and scenic vistas and ridgelines.
- (2) Visual changes resulting from construction activities and from the existence and operation of the proposed Project.
- (3) Changes to unique or fragile areas, including geological formations, forested areas, critical view sheds or water bodies.
- (4) Compatibility of proposed facility and appurtenant structures with surrounding land uses.

c. **No Significant Degradation of Surface Water Quality.**

The proposed Project shall not significantly degrade surface water quality. Examples of factors the Town/City may consider in determining impacts to surface water quality include without limitation:

- (1) Applicable narrative and numeric water quality standards.
- (2) Changes in point and nonpoint source pollution loads.
- (3) Increase in erosion and sediment loads. The proposed project shall be conducted in accordance with the drainage and erosion control plan.
- (4) Changes in stream channel or shoreline stability.
- (5) Changes in stormwater runoff flows.

d. **No Significant Degradation of Groundwater Quality.** The proposed Project shall not significantly degrade groundwater quality. Examples of factors the Town/City may consider in determining impacts to groundwater quality include without limitation:

- (1) Changes in aquifer recharge rates, groundwater

levels and aquifer capacity including seepage losses through aquifer boundaries and at aquifer-stream interfaces.

- (2) Changes in capacity and function of wells within the impact area.
- (3) Changes in quality of well water within the impact area.

e. **No Significant Degradation of Wetlands and Riparian Areas.** The proposed Project shall not significantly degrade wetlands and riparian areas. Examples of factors the Town/City may consider in determining impacts to wetlands and riparian areas include without limitation:

- (1) Changes in the structure and function of wetlands and riparian areas.
- (2) Changes to the filtering and pollutant uptake and storage capacities of wetlands and riparian areas.
- (3) Changes to areal extent of wetlands and riparian areas.
- (4) Changes in species characteristics and diversity.
- (5) Transition from wetland to upland species.
- (6) Introduction of exotic, nuisance, or invasive species into wetland and riparian areas.

f. **No Significant Adverse Effect on Designated Floodplains.** The proposed Project will not have a significant adverse effect on designated floodplains. Examples of factors the Town/City may consider in determining impacts to floodplains include without limitation:

- (1) Changes in function and areal extent of floodplains.
- (2) Creation of obstructions from the proposed Project during times of flooding and vulnerability of the proposed Project to flooding.

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- (3) Use of flood-protection devices or floodproofing methods.
 - (4) Increases in impervious surface area caused by the proposed Project.
 - (5) Increases in surface runoff flow rate and amount caused by the proposed Project.
 - (6) Increases in floodwater flow rate and amount caused by the proposed Project.
 - (7) Proximity and nature of adjacent or nearby land use.
 - (8) Impacts to downstream properties.
 - (9) Impacts on shallow wells, waste disposal sites, water supply systems and wastewater disposal or septic systems.
- g. **No Significant Degradation of Wildlife and Wildlife Habitat.** The proposed Project shall not significantly degrade wildlife or wildlife habitat. In determining impacts to wildlife and wildlife habitat the *Town/City* shall consider changes to habitat features necessary for the protection and propagation of any wildlife.
14. **Benefits Outweigh the Loss of Resources.** The benefits accruing to the *Town/City* and its citizens from the proposed Project outweigh the losses of any natural, recreational, or commercial resources within the *Town/City*, or the losses of opportunities to develop such resources.
15. **Best Alternative.** The proposed Project represents the alternative that best complies with these Regulations.

B. Siting and Operational Standards.

1. **Project Located to Minimize Disturbance to Surface Areas.**
- a. Project production facilities shall, to the extent practicable, be located in centralized areas to serve the maximum number of wells and maximize separation from residential land uses.

- b. All off-site collection and injection pipelines shall, to the extent practicable, share existing dedicated rights-of-way. All pipelines shall be painted and/or landscaped to blend with the environment. For pipelines to be installed adjacent to public roads, applicant shall consult with the [refer to applicable department] in order to minimize impacts on existing and future road needs.
- c. All Project electric transmission lines shall, whenever possible, be constructed underground and in existing rights-of-way or easements. For transmission lines to be located adjacent to public roads, applicant shall consult with the [refer to applicable department] in order to minimize impacts on existing and future road needs.
- d. Project drill sites shall be accessed by existing roads to the extent practicable.

2. **Setback Requirements.**

Unless other mitigation techniques justify a lesser setback, the following setbacks shall apply to structures and wells appurtenant to the proposed Project. Where state, federal, and Town/City setback requirements differ, the most stringent setback requirements shall control.

Property Boundary	100'
Public Roads	100'
Residence	1320'
School	1320'
Hospital	1320'
Any Other Permanent Structure/Development	300'

- 3. **Removal and Disposal of Drilling Wastes upon Completion of Drilling.** Within sixty (60) calendar days after completion of the drilling of a well, all drilling wastes shall be removed from the drilling site and disposed of in accordance with applicable federal and state regulations.
- 4. **Zero Discharge System Utilized.** The geothermal facility shall utilize a zero discharge water system.
- 5. **Project Will Not Cause a Nuisance.** The proposed Project shall

not cause excessive noise and vibration levels, dust, fumes, glare, exterior artificial light, and odor. The following prescriptive standards also shall apply:

- a. All vehicles and construction equipment shall be properly maintained to minimize exhaust emissions and shall be properly muffled to minimize noise.
 - b. All work in preparation of the site for drilling shall be done between the hours of 7 a.m. and 7 p.m.
 - c. Drill pipes shall be racked and/or made up between the hours of 7 a.m. to 7 p.m. unless soundproofing is provided.
 - d. Well venting and testing shall be accompanied by the use of an effective muffling device or “silencer.”
 - e. Impulse noises such as sudden steam venting shall be controlled by discharge through a muffler or other sound attenuating system, as appropriate.
 - f. Lights shall be directed or shielded to confine direct rays to the Project site.
 - g. If the geothermal system remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The abandoned system shall be removed by the owner, at the owner’s expense, and the impact area restored to be compatible with surrounding uses and as agreed to by the Town/City.
6. **Leak Detection and Spill Protection.** All production equipment shall be maintained in a manner that prevents leaking and spilling.
 7. **Impact Area Shall Be Reclaimed Upon Cessation of Project Operation.** When the operation of the permitted Project has ceased, all facilities and appurtenances shall be dismantled and removed, and the impact area shall be restored as requested by the landowner and agreed to by the Town/City in the approved reclamation plan.
 8. **Signage.** All Project well sites shall have a durable sign bearing the current name and number of the well; emergency telephone

number; and name and/or insignia of the operator and the owner. The sign shall be displayed at all times from the commencement of drilling operations until the well has been abandoned.

- C. **Waiver of Standards for Technical Infeasibility or Enhanced Protection.** The Board/Council may waive one or more of the approval standards in this Section 3.6 for technical infeasibility or enhanced environmental protection in accordance with the following procedures:
1. **Definition of Technical Infeasibility.** There is no economical technology commercially available to carry out the proposal in compliance with the standard(s).
 2. **Definition of Enhanced Protection.** The waiver of the standard(s) allows implementation of an alternate approach that enhances protection of public health, safety, welfare and the environment.
 3. **Request for Waiver of Standard(s) for Technical Infeasibility or Environmental Protection.** The applicant may make a written request to the Town/City for waiver of standard(s) for technical infeasibility or enhanced protection at any time prior to the final permit decision by the Board/Council.
 4. **Determination on Request for Waiver.** The Board/Council may consider a request for Technical Infeasibility or Environmental Protection waiver during its review and final permit decision. If the Board/Council determines that the application of the standard(s) is technically infeasible or that protection of public health, safety, welfare and the environment will be enhanced by a proposed alternate approach, the Board/Council may waive the standard(s). The Board/Council may impose conditions on the waiver that are necessary to minimize any negative impacts.

4.0 EXPLORATION ACTIVITY NOTICE

[NOTE: This is an optional process. The statute does not require an exemption from permit requirements for exploration.]

4.1 Activity Notice Required.

Exploration activities are not subject to the permit application and review requirements of these Regulations provided the operator files and receives approval of an Activity Notice for exploration and reclamation activities with the Staff.

4.2 Activity Notice Submittal Requirements.

An operator filing an Activity Notice shall submit the following materials to the [Staff]. The [Staff] may waive one or more of the submittal requirements when the submittal information would not be relevant to a determination as to whether the proposed exploration complies with the Activity Notice approval standards in Section 4.5. Application materials submitted to other agencies may be submitted to satisfy one or more submittal requirements if the materials contain the information required under this section.

- A. Name, address and telephone number of the person proposing exploration activities.
- B. Name, address and telephone number of the person who will be present at and responsible for conducting the proposed exploration activities.
- C. If the surface land comprising the proposed exploration area is owned by a person other than the person who intends to conduct exploration activities, name and address of the owner of record of the surface land and a description of the basis upon which the person proposing exploration activities claims the right to enter the proposed exploration area.
- D. Map, at a scale acceptable to the Town/City, showing the proposed exploration area. The map shall specifically show:
 - 1. Location of all exploratory wells proposed to be drilled or altered;
 - 2. Location of existing and proposed roads and the existing and proposed access routes;
 - 3. Earth or debris storage and disposal areas;
 - 4. Topographic and drainage features;
 - 5. Historic and cultural features;
 - 6. Existing bodies of surface water;
 - 7. Wildlife habitats;
 - 8. Areas of developed geothermal resources;
 - 9. Recreation areas; and

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10. Location of occupied dwellings.
- E. Exploration and reclamation plan including:
1. **Description of Exploration Area.** Narrative description of the proposed exploration area, cross-referenced to the map required in Section 4.2.D, that identifies surface topography, geology, drainage, surface water, and other physical features; vegetative cover; wildlife habitats; and recreational, historical and archaeological resources located within the proposed exploration area.
 2. **Description of Proposed Exploration.** Narrative description of the proposed exploration, including maximum number and location of drill holes intended for the proposed exploration, cross referenced to the map required in Section 4.2.D, and their size and depth; a narrative description of the methods to be used to conduct exploration, including but not limited to the type(s) of drilling, construction of access routes, and an estimated timetable for conducting and completing each phase of exploration and reclamation.
 3. **Description of Reclamation.** Narrative description of the methods to be used for reclamation of the exploration area upon completion of each phase of exploration activities.
 4. **Protection of Public Health and the Environment.** Narrative description of the practices proposed to be followed to ensure public health and safety and to protect the environment and wildlife habitat from adverse impacts as a result of the proposed exploration and reclamation activities.
 5. **Permit(s) Issued by State Engineer.** Copy of the drilling permit(s) issued by the State Engineer for the proposed exploration.

4.3 Filing Fees.

The Activity Notice shall be accompanied by appropriate fees. A schedule of fees adopted by the Town/City is available through the [Department].

- A. **Applicant Responsible for Cost of Reviewing and Processing the Activity Notice.** The applicant is responsible for the costs of reviewing and processing the Activity Notice including costs of copying, labor and overhead.

- B. Applicant Responsible for Referral Agency and Consultant Fees.**
The applicant is responsible for the costs of referral agency and consultant review of the Activity Notice.

4.4 Confidential Information.

Upon request of the applicant, information submitted to the Town/City pursuant to Section 4.2 concerning trade secrets, or privileged commercial or financial information that relates to the competitive rights of the person or entity intending to explore the described area shall be kept confidential and not be available for public examination. Such information shall be clearly marked confidential and submitted in a separate packet.

4.5 Approval Standards for Activity Notice.

The following standards shall apply to evaluate all requests for approval of an Activity Notice for exploration activities associated with Commercial Use of Geothermal Resources.

- A. All Property Rights, Access Agreements, Permits and Approvals Have Been Obtained.** Prior to site disturbance associated with the proposed exploration activities the operator can and will obtain all property rights, access agreements, permits and approvals necessary for the proposed exploration. If the applicant has not obtained all necessary property rights, access agreements, permits and approvals, the Town/City may, at its discretion, defer making a final decision on the Activity Notice until outstanding property rights, access agreements, permits and approvals are obtained.
- B. No Significant Risk from Soils, Geologic, or Natural Hazards.** The proposed exploration activities are not subject to significant risk from soils, geologic, or natural hazards. Examples of factors the Town/City may consider in determining risk include without limitation:
1. Faults and fissures.
 2. Unstable slopes including landslides, rock slides and avalanche areas.
 3. Expansive or evaporative soils and risk of subsidence.
 4. Changes to the topography, natural drainage patterns, soil morphology and productivity, soil erosion potential, and floodplains.
 5. Exacerbation of seismic concerns and subsidence.

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6. Flood hazard.
 7. Wildfire hazard.
- C. **No Unreasonable Risk of Releases of Hazardous Materials and Drilling Byproducts or Waste.** The proposed exploration activities shall not result in significant risk of releases of hazardous materials and drilling byproducts or waste. Each drilling site shall be reclaimed upon completion of drilling activities.
- D. **Disturbance to Surface Areas Minimized.** The proposed exploration activities shall be conducted in a manner that will minimize disturbance to surface areas.
- E. **No Significant Degradation of Recreation Opportunities and Experiences.** The proposed exploration activities shall not cause a significant degradation in the quality or quantity of recreational activities in the Town/City.
- F. **No Significant Degradation of Areas of Paleontological, Historic, or Archaeological Importance.** The proposed exploration activities shall be conducted in a manner that will be compatible with the preservation of the resource and minimize damage to the resource.
- G. **No Significant Degradation of the Natural Environment.**
1. **No Significant Degradation of Air Quality.** The proposed exploration activities shall not significantly degrade air quality.
 2. **No Significant Degradation of Surface Water Quality.** The proposed exploration activities shall not significantly degrade surface water quality.
 3. **No Significant Degradation of Groundwater Quality.** The proposed exploration activities shall not significantly degrade groundwater quality.
 4. **No Significant Degradation of Wetlands and Riparian Areas.** The proposed exploration activities shall not significantly degrade wetlands and riparian areas.
 5. **No Significant Degradation of Wildlife and Wildlife Habitat.** The proposed exploration activities shall not significantly degrade wildlife or wildlife habitat.

H. **Activities Will Not Cause a Nuisance.** The proposed exploration activities shall not cause excessive noise and vibration levels, dust, fumes, glare, exterior artificial light, and odor.

4.6 Activity Notice Review and Action.

- A. **Consultant and Referral Agency Review.** The [Staff] may refer the Activity Notice to consultants and other state or federal agencies to assist with review of the Activity Notice.
- B. **[Staff] Decision.** Not more than thirty (30) working days after receipt of a complete Activity Notice, the [Staff] shall approve, deny, or conditionally approve the exploration activity, based upon whether the proposed exploration satisfies the approval standards in Section 4.5.
- C. **Call-up by the Board/Council.** The *Board/Council* may, at its discretion, review and amend the [staff's] Activity Notice decision at the next regularly scheduled meeting of the *Board/Council* for which proper notice can be accomplished in accordance with the [land use code] following the date of written notice of determination.

5.0 TECHNICAL REVISIONS AND PERMIT AMENDMENTS

The [Staff] shall determine whether a change in the construction or operation of the Project from that approved by the *Board/Council* requires a technical revision or Permit amendment.

5.1 Technical Revisions.

A proposed change is a technical revision if the [Staff] determines that there will be no increase in the size of the area affected or the intensity of impacts as a result of the proposed change(s).

5.2 Permit Amendments.

Changes other than technical revisions shall be considered Permit amendments subject to review as a new Permit application.

5.3 Staff Review of Proposed Changes.

The permittee shall submit the following information and materials describing the proposed changes for the [Staff's] review.

- A. Documentation of the current Permit approval.
- B. As-built drawings of the Project, if available.

- C. Drawings and plans of proposed changes to the Project.
- D. Statement of need for proposed changes.
- E. Description of additional or changed mitigation plans.

5.4 Notice of [Staff's] Determination Regarding Technical Revision or Permit Amendment.

- A. **Written Notice.** Within five (5) working days of the date of determination, the [Staff] shall notify the applicant, the Board/Council, and adjacent property owners in writing, regarding the determination of whether the change is a technical revision or Permit amendment.
- B. **Publication of Notice of [Staff's] Determination.** Within fourteen (14) calendar days after the date of determination, a notice of the [Staff's] determination of whether the change is a technical revision or Permit amendment shall be published once in a newspaper of general circulation in the Town/City.

5.5 Reconsideration of [Staff's] Determination of Whether Change is a Permit Amendment or a Technical Revision.

- A. **Call-Up by the Board of Trustees/City Council.** The Board/Council may, at its discretion, review and amend the [Staff's] determination of whether the change is a Permit amendment or a technical revision at the next regularly scheduled meeting for which proper notice can be accomplished pursuant to the [land use code] following the date of written notice of the determination.
- B. **Request for Reconsideration.** The applicant or adjacent property owners may request that the Board/Council reconsider the [Staff's] determination at the next regularly scheduled meeting for which proper notice can be accomplished pursuant to the [land use code]. The request shall be in writing, within seven (7) calendar days of the date of written notice of determination.

6.0 FINANCIAL GUARANTEE

6.1 Financial Guarantee Required.

The Board/Council may at its discretion require the applicant to file a guarantee of financial security deemed adequate by the Board/Council and payable to the Town/City. The purpose of the financial guarantee is to assure the following:

MODEL CODE FOR COLORADO MUNICIPALITIES

GUIDELINES AND REGULATIONS FOR THE USE OF GEOTHERMAL RESOURCES FOR
COMMERCIAL PRODUCTION OF ELECTRICITY

- A. That the permitted activity is completed and, if applicable, that disturbed areas are properly reclaimed.
- B. That the permittee performs all mitigation requirements and Permit conditions in connection with the approved permit.

6.2 Amount of Financial Guarantee.

In determining the amount of the financial guarantee, the Board/Council shall consider the following factors:

- A. The estimated cost of completing the Project and, if applicable, of returning disturbed areas to a condition acceptable to the Town/City.
- B. The estimated cost of performing all mitigation requirements and permit conditions in connection with the Project.

6.3 Estimate.

Estimated cost shall be based on the applicant's submitted cost estimate plus the Board's/Council's estimate of the additional cost to the Town/City of bringing in personnel and equipment to accomplish any unperformed purpose of the financial guarantee. The Board/Council shall consider the duration of the permitted activity and compute a reasonable projection of increases due to inflation. The Board/Council may require, as a condition of the Permit, that the financial security be adjusted upon receipt of bids to perform the requirements of the Permit and these Regulations.

6.4 Form of Financial Guarantee.

The financial guarantee may be in the form of cash, federally-insured certificates of deposit, irrevocable letters of credit issued by a bank, surety bonds issued by a company authorized to do business in Colorado, written guarantees backed by collateral, or any other form or combination of forms acceptable to the Board/Council.

6.5 Release of Financial Guarantee.

The financial guarantee may be released only when:

- A. The Permit has been surrendered to the Board/Council before commencement of any physical activity on the Project site; or
- B. The Project has been abandoned and the site has been returned to a condition acceptable to the Town/City; or
- C. The applicable Permit conditions have been satisfied; or

MODEL CODE FOR COLORADO MUNICIPALITIES

GUIDELINES AND REGULATIONS FOR THE USE OF GEOTHERMAL RESOURCES FOR
COMMERCIAL PRODUCTION OF ELECTRICITY

- D. A phase or phases of the Project have been satisfactorily completed allowing for partial release of the financial guarantee consistent with Project phasing and as determined appropriate by the Board/Council.

6.6 Annual Review and Adjustment of Financial Guarantee.

- A. **Annual Review of Guarantee and Project Status.** The Board/Council shall review the guarantee at least annually to ensure that it remains adequate in both amount and form.
- B. **Modification of Form of Guarantee If Board/Council Finds It Inadequate.** The permittee shall be required to modify the form of the guarantee if, at any time, the Board/Council determines in writing that the current form does not provide adequate security to the Town/City. The permittee must modify the form of the guarantee as required no later than thirty (30) calendar days after it receives written notice of the Board's/Council's determination or, if the permittee requests a hearing, thirty (30) calendar days after it receives written notice of the Board's/Council's decision following the hearing. If the permittee fails to modify the guarantee within this period, the Board/Council may suspend the Permit until the guarantee is modified, and may initiate forfeiture proceedings against the guarantee.
- C. **Form of Guarantee May Be Modified.** Upon request of the permittee, the Board/Council may allow the form of the guarantee to be modified if the Board/Council determines in writing that, after the proposed modification, the guarantee will still provide adequate and acceptable financial guarantee to the Town/City.
- D. **Amount of Guarantee May Be Increased If Board/Council Finds It Inadequate.** The Board/Council may require the permittee to increase the amount of the guarantee if, at any time, the Board/Council determines in writing that the current amount does not provide adequate security to the Town/City. The permittee must increase the amount of the guarantee as required no later than thirty (30) days after it receives written notice of the Board's/Council's determination or, if the permittee requests a hearing, within thirty (30) calendar days after it receives written notice of the Board's/Council's decision following the hearing. If the permittee fails to increase the guarantee within this period, the Board/Council may suspend the Permit until the guarantee is increased, and may initiate forfeiture proceedings against the guarantee.
- E. **Amount of Guarantee May Be Decreased If Board/Council Finds It**

MODEL CODE FOR COLORADO MUNICIPALITIES

GUIDELINES AND REGULATIONS FOR THE USE OF GEOTHERMAL RESOURCES FOR
COMMERCIAL PRODUCTION OF ELECTRICITY

Excessive. Upon request of the permittee, the Board/Council may decrease the amount of the guarantee if the Board/Council determines in writing that the current amount is excessive because of events that have occurred since the Board/Council established such amount or because of circumstances unknown to the Board when it established that amount.

F. Process for Modifying Form of Guarantee or Increasing Guarantee.

In the event that the Board/Council determines that the form of the guarantee must be modified, or that the amount of the guarantee must be increased, the following procedures shall apply:

1. The Board/Council shall provide written notice of its determination to the surety and the permittee.
2. After receiving the written notice, the permittee shall have ten (10) calendar days to submit a written request for hearing by the Board/Council.
3. If a hearing is requested, it shall be held within thirty (30) calendar days after the Board/Council receives the request. At minimum, notice of the hearing shall be published once in a newspaper of general circulation in the Town/City, no less than fourteen (14) calendar days prior to the hearing. The Town/City shall provide written notice of the hearing to the surety and the permittee.
4. Following the public hearing, the Board/Council shall reaffirm, modify, or withdraw its determination. Written notice of the Board's/Council's decision shall be provided to the permittee.

6.7 Cancellation of Financial Guarantee.

Any financial guarantee may be canceled only upon written consent by the Board/Council when such cancellation will not detract from the purposes of the financial guarantee.

6.8 Forfeiture of Financial Guarantee.

- A. If the Board/Council determines that a guarantee should be forfeited because of any violation of the Permit or any applicable Regulations adopted by the County, it shall provide written notice to the surety and the permittee that the guarantee will be forfeited unless the permittee makes written request for hearing by the Board/Council within thirty (30) calendar days after permittee's receipt of notice. If no request is made by the permittee within said period, then the Board/Council shall order the guarantee forfeited.

- B. The Board/Council shall hold a hearing within thirty (30) calendar days after the receipt of the written request by the permittee.
- C. If the forfeiture results in inadequate revenue to cover the costs of accomplishing the purposes of the financial guarantee, the Town/City shall take such steps as deemed proper to recover such costs where recovery is deemed possible.

6.9 Substitute of Financial Guarantee.

If the license to do business in Colorado of surety upon a security filed pursuant to these Regulations is suspended or revoked by any state authority, then the permittee shall within sixty (60) calendar days after receiving notice thereof, substitute a good and sufficient surety licensed to do business in Colorado. Upon failure of the permittee to make substitution within the time allowed, the Board/Council shall suspend the Permit until proper substitution has been made.

7.0 PERMIT ADMINISTRATION AND ENFORCEMENT

7.1 Person May Be Enjoined from Conducting Activity or Engaging in Development Without Obtaining Permit.

Any person engaging in Commercial Use of Geothermal Resources subject to these Regulations who does not obtain either a FONSI or a Permit pursuant to these Regulations may be enjoined by the Board/Council from engaging in such activity.

7.2 Permit May Be Revoked or Suspended.

In addition to any other legal remedy that may be available, the Town/City may suspend or revoke a Permit if the Town/City determines at any time that there are material changes in the construction or operation of the Project from that approved by the Town/City or there is a violation of the conditions of the Permit or these Regulations.

7.3 Permit Suspension or Revocation.

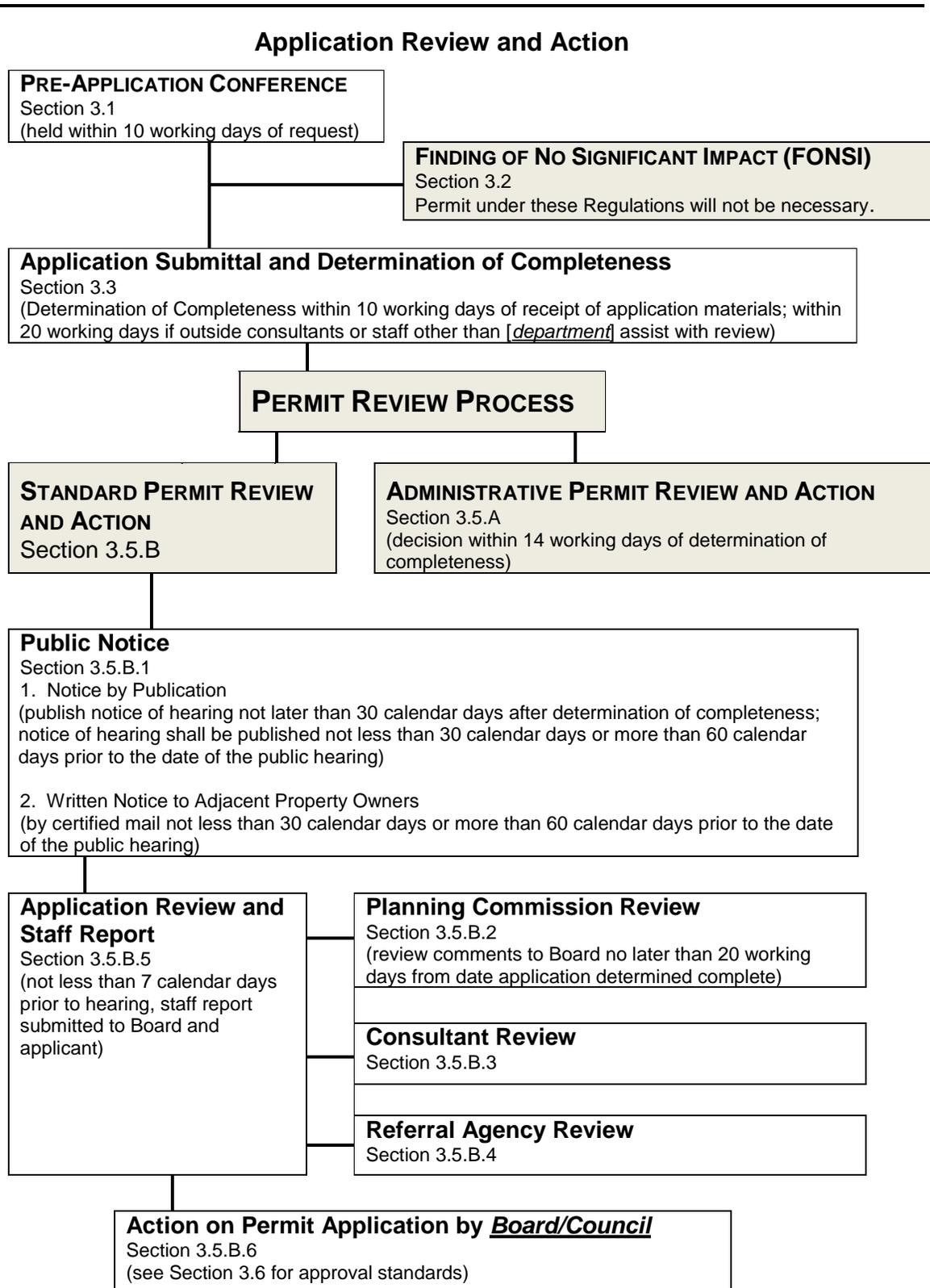
- A. **Suspension of Permit.** The Town/City may temporarily suspend a Permit, upon written notice to the permittee, if the Town/City determines that there is a violation of the conditions of the Permit or these Regulations or that there are material changes in the Project. The permittee shall cease construction or operations immediately upon such notice.
1. The permittee shall have fifteen (15) calendar days to correct the violation or to request an immediate hearing before the Board/Council. The Board/Council shall hold a public hearing at

the next regularly scheduled meeting for which proper notice of public hearing can be accomplished following the permittee's written request for hearing.

2. If the violation is not timely corrected, the Permit may be further suspended pending a revocation hearing by the Board/Council.
- B. **Revocation of Permit.** The Town/City may revoke a Permit following a revocation hearing by the Board/Council.
1. **Notice to Permittee.** Not less than thirty (30) calendar days prior to the revocation hearing, the Town/City shall provide written notice to the permittee stating the Permit violation(s) or material change(s) to the Project and the date, time, and location of the hearing.
 2. **Public Notice.** Not less than thirty (30) calendar days prior to the revocation hearing, the Town/City shall publish notice of the hearing in a newspaper of general circulation in the Town/City.
 3. **Action by Board of Trustees/City Council.** The Board/Council may revoke the Permit upon determination of a violation of the conditions of the Permit or these Regulations or that there are material changes in the Project. The Board/Council may specify a date by which the permittee shall correct the violations to avoid revocation.

7.4 Transfer of Permits.

- A. A Permit may be transferred only with the written consent of the Board/Council.
- B. The Board/Council shall not approve any transfer unless the proposed transferee can and will comply with all the requirements, terms, and conditions contained in the Permit and applicable Town/City regulations; that such requirements, terms, and conditions remain sufficient to protect the health, welfare and safety of the public; and that an adequate guarantee of financial security can be made.



[Town/City]
 FINDING OF NO SIGNIFICANT IMPACT (FONSI)
 for
 Proposed Commercial Use of Geothermal Resources

Name, address, email address, and phone number of the applicant and, if different, the owner of the proposed Project:

Location of proposed Project:

and more fully described in the application materials attached hereto.

Description of proposed Project:

and more fully described in the application materials attached hereto.

Accompanying Information. The application materials required in Section 3.4 of the **Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity** shall be attached hereto and incorporated by reference.

Finding of No Significant Impact (FONSI) by [Staff]. Pursuant to the provisions of Section 3.2 of the **Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity**, the [Staff] has determined that the construction and operation of the proposed Project, without mitigation, in its proposed location is unlikely to have any significant impact to the Town/City and a Permit for Commercial Use of Geothermal Resources is not required. If the Town/City

determines at any time that there are material changes in the construction or operation of the Project so that it no longer qualifies for a FONSI under the provisions of Section 3.2, a Permit for Commercial Use of Geothermal Resources will be required.

Date

[*Staff*]

[County]

EXPLORATION ACTIVITY NOTICE

Name, address and phone number of person proposing exploration activities¹.

Four horizontal lines for text entry.

Name, address and phone number of person present at and responsible for conducting the proposed exploration activities.²

Four horizontal lines for text entry.

If the surface land comprising the proposed exploration area is owned by a person other than the person who intends to conduct exploration activities, name and address of the owner of record of the surface land. Attach description of the basis upon which the person proposing exploration activities claims the right to enter the proposed exploration area.³

Four horizontal lines for text entry.

¹ Section 4.2.A Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity
² Section 4.2.B Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity
³ Section 4.2.C Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity

Description of Exploration Area.

and more fully described in the Activity Notice submittal materials attached hereto.

Accompanying Information. The Activity Notice submittal materials required in Section 4.2 of the *Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity* shall be attached hereto and incorporated by reference.

Pursuant to the provisions of Section 4.0 of the *Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity*, the [Staff] has determined that:

- the exploration of geothermal resources as described herein satisfies the approval standards for Activity Notice set forth in Section 4.5 of the *Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity*.

APPROVED

[Staff]

Date

- with conditions, the exploration of geothermal resources as described herein will satisfy the approval standards for Activity Notice set forth in Section 4.5 of the *Guidelines and Regulations for the Use of Geothermal Resources for Commercial Production of Electricity*:

APPROVED with the following conditions:

[Staff]

Date

Denied based upon the following findings:

DENIED

[Staff]

Date