



AN ORDINANCE AMENDING CHAPTER 14 OF THE HAWAI'I COUNTY CODE 1983 (2005 EDITION, AS AMENDED), BY ADDING A NEW ARTICLE RELATING TO A HYDRAULIC FRACTURING POLICY.

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF HAWAI'I:

SECTION 1. Findings and purpose: The County Council finds that the following conditions necessitate the implementation of a hydraulic fracturing policy:

- (1) The negative consequences of hydraulic fracturing pose serious threats to Hawai'i Island's air, water, watersheds, aquifers, rivers, littoral zone, ocean, land, climate, forests, wildlife, domestic animals, and the public health, safety, and general welfare; and
- (2) The public natural resource trust doctrine as described in the State of Hawai'i Constitution, Article XI which states:

“For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii’s natural beauty and all natural resources, including land water, air, minerals and energy resources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.”

and the Hawai'i County Charter, Section 13-29 which states:

“For the benefit of present and future generations, the county shall conserve and protect Hawai'i’s natural beauty and all natural and cultural resources, including but not limited to land, water, air, minerals, energy sources, wahi pana, surf spots, historic sites, and historic structures, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the county. All public natural and cultural resources are held in trust by the county for the benefit of the people.”

- (3) Although potential impacts from hydraulic fracturing may be currently under investigation by federal agencies, other states, academia, and research institutions, no independent scientific investigations are being undertaken or have been completed for the Island of Hawai'i to examine the risks of hydraulic fracturing to the island's unique geologic, geographic, and aquatic features; and

- (4) The very nature of hydraulic fracturing increases permeability and porosity of the island's underground geologic formation which may lead to infiltration of chemicals and toxins into our aquifers, wells, rivers, shoreline, and ocean. Such increased permeability and porosity may allow lateral, vertical, or descending movement of human- introduced toxic chemicals or even additional naturally-occurring volcanic toxins; and
- (5) The County of Hawai'i has an immediate need to protect against and prepare for the emergencies and incidents related to any drilling operation and its related activities; and
- (6) The cost of repairing road infrastructure from the damage caused in part by the drilling rig, support equipment, and massive number and weight of water tankers required for such a hydraulic fracturing project is beyond the limited maintenance budget of the County; and
- (7) Hydraulic fracturing causes earthquakes. It breaks and displaces rock at depth. The magnitude is typically one to two on the Richter scale. Injecting fluids into fault systems has been known to lubricate the fault and earthquakes subsequently can occur. There is now recognized a class of earthquakes called silent earthquakes where the fault moves without rupture; and
- (8) Emergencies and negative incidents caused by hydraulic fracturing have been reported and range from small localized events to far-reaching disasters with complex consequences that may require the involvement and coordination among many agencies of the county, state, and federal government. It is unknown how the County of Hawai'i, the State of Hawai'i, and the U.S. Government would be able to quickly respond to such emergencies or negative events that cause harm to our people, animals, plants, land, air, water, or ocean; and
- (9) Industry cannot be relied upon to provide adequate monitoring for the safety of human, animal, or plant health, water, ocean, and environmental issues nor is the county or state equipped to monitor these projects, as revealed in the report issued by the Geothermal Public Health Assessment Study Group; and
- (10) There is inadequate public or private funding to mitigate large-scale disasters caused by hydraulic fracturing; and
- (11) There are no monitoring data available to indicate the risks of hydraulic fracturing on the Island of Hawai'i and to determine its impact on the health and safety of the public and the protection of current environmental resources. Even small-scale disasters might negatively impact the County of Hawai'i if state or federal assistance was denied or such levels of government were slow to respond to such a disaster; and
- (12) Mechanisms to ensure funding, coordination, equipment, and County manpower for response to these impacts have not been identified and adopted; and

- (13) Hydraulic fracturing has contributed to releases of toxic gases to the atmosphere, contamination of potable water, and health problems in plants, animals, and humans in mainland locations; and
- (14) The risks of hydraulic fracturing are both great and unknown so that it is banned in some countries and many states or municipalities in the U.S. Countries that have stopped hydraulic fracturing include: Argentina, Austria, Australia, Bulgaria, Canada, Czech Republic, France, Germany, Italy, Ireland, Netherlands, New South Wales, New Zealand, Romania, South Africa, Spain, Switzerland, and the United Kingdom; and
- (15) Hydraulic fracturing requires between four and 10 million gallons of fresh water to achieve permeability and porosity in an underground geologic formation. The Island of Hawai'i and its people, businesses, animals, plants, rivers, shoreline marine life, and ocean cannot afford to lose these millions of gallons of fresh water. Even using partially treated waste water for hydraulic fracturing may pollute our aquifers, rivers, and ocean. Salt water may not be a viable solution for hydraulic fracturing due to corrosion which might require additional anti-corrosives to be placed in the well to protect the drilling equipment, the well itself, or its various parts. Such anti-corrosives may contribute even more chemicals and toxins into the environment that could infiltrate the aquifers; and
- (16) Remediation of water used for hydraulic fracturing is not currently possible in the County of Hawai'i because there is no waste water treatment plant on the island able to handle the chemicals and toxins introduced or produced by hydraulic fracturing. Evaporation is not a viable option as it degrades air quality. Therefore, the water must be removed to another location within the United States for safety and is irreversibly lost to the island's hydrologic cycle; and
- (17) Large areas of the Island of Hawai'i need potable water for the people and fresh water for plants and animals. The ocean and shoreline areas need the fresh water to move from mauka to makai to sustain a healthy environment. Wasting millions of gallons of water to achieve hydraulic fracturing is not conducive to supporting the people, the environment, or natural resources of which the County has an affirmative duty to protect; and
- (18) Many chemicals required by hydraulic fracturing are toxic or can create toxic gases and fluids in the air or water that may damage people, animals, plants, the land, and the ocean, however full disclosure of those chemicals is prevented through claims of proprietary rights; and
- (19) A company's net worth may be insufficient to cover the costs associated with managing a hydraulic fracturing disaster. In that case, those costs may be forced on those who have suffered property damage or injuries, and the County might be liable for the cost of repairing public infrastructure and the relocation of families. Loss of property taxes may also create unnecessary financial distress to the County; and

- (20) It is a common industry practice to use site-specific LLC/LLP corporations that are dissolved after drilling operations are completed. With no solvent company left to pay the costs of catastrophic loss, the neighboring landowners and the County may be left with the cost of remediation and recovery; and
- (21) Sufficient extreme catastrophic loss event insurance requirements would need to be in place and be sufficiently comprehensive to cover claims received between a disaster's occurrence and the time when the discovery of such a disaster might occur. The County is incapable of determining the sufficient amount of insurance required or what best practices for such insurance are applicable. However, it is unlikely to find insurance or a bond for current and future liability adequate to cover the loss of an entire water resource in the case that a hydraulic fracturing source contaminates that water resource which may then contaminate a second or additional water resources or a release of toxic gases that occurs years after the hydraulic fracturing is completed forcing people to move to survive; and
- (22) It is difficult to establish fault for some types of leaks and seepage events, and these types of fault-finding legal cases may take years to resolve leaving the people and the County bearing the brunt of the remediation and recovery.

The purpose of this ordinance is to protect the public health, safety, and general welfare; the public trust; natural resources such as air, water, watersheds, rivers both above and below ground and its life, the ocean and its marine life, land, animals, both wild and domestic, plants both indigenous and imported; and the economic value of private and public property. This ordinance seeks to minimize public and private losses in the County of Hawai'i due to the negative effects of hydraulic fracturing used in drilling operations for exploration and production of water, gas, oil, or minerals, or the exploration or production of geothermal energy or related research including geologic research.

The objectives of this hydraulic fracturing policy are:

- (1) To permanently halt or to prohibit the initiation of hydraulic fracturing for any purpose;
- (2) To protect human life and health;
- (3) To protect the public natural resources trust doctrine as required by the Hawai'i State Constitution (Article XI) and the Hawai'i County Charter, Section 13-29;
- (4) To protect the air, land, ocean, aquifers, rivers, animals, plants, watersheds, forests, and all natural resources;
- (5) To protect potable ground water resources;
- (6) To protect the economic value of private and public property, minimize public and private financial losses, prevent the loss of purpose for which the land may be used, or the reduction of property value;

- (7) To minimize expenditure of public funds for costly emergency repairs of public infrastructure;
- (8) To minimize damage to public facilities and utilities such as water, sewers lines, gas mains, electric utilities, telephone and cable utilities, streets, roads, and bridges located in areas around or impacted by hydraulic fracturing;
- (9) To minimize the need for rescue and relief efforts associated with evacuation from an unhealthy situation or location undertaken at the expense of the general public due to the negative effects of hydraulic fracturing;
- (10) To protect our emergency response personnel from the danger of toxic chemicals, toxic air, or unsafe conditions while attempting to ascertain the severity of an apparent disaster or rescue people;
- (11) To minimize prolonged business interruptions;
- (12) To help maintain a stable tax base by providing for the sound use and development of land areas and to minimize future blight areas;
- (13) To advise potential property buyers that no property on the island is in an area of hydraulic fracturing;
- (14) To prevent the loss of millions of gallons of water used to initiate or enhance hydraulic fracturing;
- (15) To prevent future earthquakes caused by hydraulic fracturing on the island; and
- (16) To advise future companies who might engage in hydraulic fracturing that it is not allowed on this island.

SECTION 2. Chapter 14 of the Hawai‘i County Code 1983 (2005 Edition, as amended), is amended by adding a new article to be appropriately designated and to read as follows:

“Article __. Hydraulic Fracturing Policy.

Section 14- __. Definitions.

As used in this article, unless the context requires otherwise:

“Department” means the planning department.

“Director” means the director of the planning department, or the director’s authorized representative(s).

“Drilling operation” means the boring, piercing, or penetration into an underground geologic formation.

“Hydraulic fracturing” means a drilling operation into an underground geologic formation and the injection of fluids, gases, chemicals, sand or any other substance with the intention to cause or enhance fractures in the geologic formation for the purpose of instigating or increasing the porosity or permeability of the geologic formation to initiate or increase the production of a desired commodity from a well. Hydraulic fracturing is also known as “fracking,” “hydro-fracking,” “hydro-fracturing,” “hydro-shearing,” “hydraulic shearing,” “hydro-stimulation,” or “enhanced geothermal drilling.”

Section 14-___. Hydraulic Fracturing prohibited.

Hydraulic fracturing or the practice by any other name shall be prohibited for any purpose. No permit or exemption to this policy shall be provided by the County. Any permit issued by the County that allows for a drilling operation shall include a written condition prohibiting hydraulic fracturing.

Section 14-___. Right of entry.

Upon presentation of proper credentials, the director may enter at reasonable times any property in the County which utilizes drilling operations to inspect the property for potential violations of this article, provided that such entry shall be made in such a manner as to cause the least possible inconvenience to the person in possession. An order of a court authorizing such entry shall be obtained in the event such entry is denied or resisted.

Section 14-___. Violation.

Any hydraulic fracturing for any purpose at any time using any method constitutes a violation of this article. Single or multiple violations shall be listed on the notice of violation and penalties shall be applied for each violation.

Section 14-___. Notice of violation.

- (a) Whenever the director determines that there exists a violation of any provision of this article, the director shall serve a notice of violation upon the parties responsible for the violation, which may include, but shall not be limited to the owner and any lessee of the property where the violation is located, to make the location where the violation is occurring compliant with this article. Such notice of violation shall include:
 - (1) The date of the notice;
 - (2) The name and address of the person noticed, and the location of the violation;
 - (3) The section number of the ordinance, code, or rule which has been violated;
 - (4) The nature of the violation; and
 - (5) The deadline for compliance with the notice.
- (b) Proper service of such notice shall be by personal service, registered mail, or certified mail upon the owner of record, provided, that if such notice is by registered mail or certified mail, the designated period within which the owner or person in charge is required to comply with the order of the director shall begin as of the date the owner or person in charge receives such notice.

Section 14-___ . Administrative enforcement.

- (a) If the director of planning determines that any entity is not complying with a notice of violation, the director may have the party responsible for the violation served, by mail or delivery, with an order pursuant to this section.
- (b) Contents of the Order.
 - (1) The order may require the parties responsible for the violation, including but not limited to the owner/lessee of the property where the violation is located, to do any or all of the following:
 - (A) Correct the violation(s) within the time specified in the order;
 - (B) Pay a civil fine in the amount, at the place, and before the date specified in the order.
 - (2) The order shall advise the party responsible for the violation that the order shall become final thirty calendar days after the date of its delivery. The order shall also advise that the County's action may be appealed to the board of appeals.
- (c) Civil fines.
 - (1) Any person who violates this article shall pay a civil fine not to exceed \$25,000 for each separate offense. Each day a violation persists shall constitute a separate offense. Any action taken in court to impose or collect the fine provided for in this section shall be considered a civil action.
 - (2) Any person who denies, obstructs, or hampers the director from the entrance to or inspection of any building, place, or vehicle pursuant to this article shall pay a civil fine not to exceed \$10,000 for each day of denial, obstruction, or hampering. Any action taken in court to impose or collect the penalty provided for in this section shall be considered a civil action.
 - (3) Factors to be considered by the director in imposing a civil fine shall include but not be limited to the following:
 - (A) The nature, circumstances, extent, gravity, and history of the violation and of any prior violations;
 - (B) The economic benefit to the violator, or anticipated by the violator, resulting from the violation;
 - (C) The opportunity, difficulty, and history of corrective action;
 - (D) Good faith efforts to comply;
 - (E) Degree of culpability; and/or
 - (F) Such other matters as justice may require.
- (d) Effect of Order; Right to Appeal. The provisions of the order issued by the County under this section shall become final thirty calendar days after the date of the delivery of the order. The party responsible for the violation may appeal the order to the board of appeals as provided in chapter 91 of the Hawai'i Revised Statutes. The appeal must be received in writing on or before the date the order becomes final. However, an appeal to the board of appeals shall not stay any provision of the order.
- (e) Judicial Enforcement of Order. The County may institute a civil action in any court of competent jurisdiction for the enforcement of any final order issued pursuant to this section. Where the civil action has been instituted to enforce the civil fine imposed by such final order, the County need only show that the notice of violation

and order were served, that a civil fine was imposed, the amount of the civil fine imposed, and that the fine imposed has not been paid.

- (f) From the date the order takes effect, the date on which an appeal has been rendered against the appellant, or the date on which the judicial enforcement of order has been rendered, whichever shall have standing, the violator shall make immediate remediation. If remediation is not initiated within five calendar days or completed within fifteen calendar days, the County may initiate or complete such remediation, including but not limited to: brownfield cleanup; bioremediation; soil remediation; ground or surface water restoration and remediation; environmental restoration; biohazard remediation; hazardous waste remediation; cleaning, removal, and safe disposal of chemicals and toxins at an appropriate disposal facility; monitoring costs; replanting the negatively impacted area with appropriate native or other plants at the discretion of the County, and safe disposal of poisoned flora and fauna by composting or other means to prevent further negative impacts. Best management practices shall be used to compost poisoned flora and fauna. The County shall charge the violator or its bonding agent for the cost of remediation accrued by the County.

Section 14-____. Penal enforcement.

- (a) General Provisions. The provisions of this section are in addition to any other applicable remedy or penalty provided by law.
- (b) In case the parties responsible for violating any provisions of this article fail, neglect, or refuse to comply or correct a violation, the County may submit the matter to the proper authority for penal enforcement.
- (c) Any person, firm, or corporation violating any provisions of this article shall, upon conviction, be deemed guilty of a petty misdemeanor and each person so convicted shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any provision of this article is committed, continued or permitted; and upon conviction of any such violation, such person shall be punishable by a fine of not more than \$1,000, or by imprisonment for not more than thirty days, or by both fine and imprisonment.
- (d) Any officer or inspector designated by the County, who has been deputized by the chief of police as a special officer for the purpose of enforcing the provisions of this article, pursuant to section 803-6, Hawai'i Revised Statutes, may arrest without warrant alleged violators by issuing a summons or citation in accordance with the procedure specified in this section. Nothing in this section shall be construed as barring such authorized personnel from initiating prosecution by warrant or such other judicial process as is permitted by statute or rule of court.
- (e) Any authorized personnel designated by the County, upon making an arrest for a violation of this article, may take the name and address of the alleged violator and shall issue to the violator in writing a summons or citation hereinafter described, notifying the violator to answer the complaint to be entered against the violator at a place and at a time provided in the summons or citation.
- (f) There shall be provided for use by authorized personnel a form of summons or citation for use in citing violators of this article which does not mandate the physical arrest of such violators. The form and content of such summons or citation

shall be as adopted or prescribed by the administrative judge of the district court and shall be printed on a form commensurate with the form of other summonses or citations used in modern methods of arrest, so designed to include all necessary information to make the same valid within the laws and regulations of the State of Hawai'i and County of Hawai'i.

- (g) In every case when a citation is issued, the original of the same shall be given to the violator; provided, that the administrative judge of the district court may prescribe by giving to the violator a copy of the citation and provide for the disposition of the original and any other copies.
- (h) Every citation shall be consecutively numbered and each copy shall bear the number of its respective original.

Section 14-___ . Injunctive relief.

Proceedings for injunctive relief in a court of competent jurisdiction may be heard for potential violations of this article.”

SECTION 3. Severability. If any provision of this ordinance or the application thereof to any person or circumstance, is held invalid, such invalidity does not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this ordinance are to be severable.

SECTION 4. This ordinance shall take effect upon approval.

INTRODUCED BY:



COUNCIL MEMBER, COUNTY OF HAWAI'I

_____, Hawai'i

Date of Introduction:
Date of 1st Reading:
Date of 2nd Reading:
Effective Date:

REFERENCE **Comm.** 421.77