## Will Hamakua be the next Flint, MI?

## It will, if Hu Honua Bioenergy has its way!

(aka "Honua Ola")

The Hu Honua Bioenergy Facility, now under construction on Hawaii Island's famed Hamakua Coast, proposes to:

- Clearcut 5 acres of trees per day in Ka'ū, Hilo, and Hāmākua
- Shuttle 5-6 logging trucks PER HOUR (on "light" days) to the power plant (the County does not have enough money for infrastructure maintenance of roads and bridges)
- Burn the trees so that 300,000 TONS PER YEAR of greenhouse gas emissions are released
- Draw 21.6 MILLION GALLONS OF WATER PER DAY from the Hakalau aquifer to cool the turbines (the entire district of North Kona consumes only half that)
- Add over 2 dozen hazardous chemicals to the heated water
- Inject the hot contaminated water back into the aquifer via 3 injection wells that are 400 feet and less than 100 feet from the edge of geologically unstable cliffs
- Allow the hot, contaminated water to rise up in the ocean seabed to directly impact coral reefs and critically endangered Hawksbill turtles



• And then overcharge us for electricity! Solar in Hawaii costs only 9-11 cents per kWh. Hu Honua wants to charge us double that!

This dumping into our atmosphere is just one part of Hu Honua's destructive practices. It is also applying for a permit to operate injection wells, less than 100 feet from the cliff shoreline. Tainted waste-water will be injected directly above the aquifer, which will percolate into the water supply as well as through the porous cliffs, and into coastal waters.

Hu Honua also proposes to clear-cut five acres of eucalyptus trees per day, which would lead to catastrophic mudslides during heavy rains.

## Burning wood is not "renewable energy."

Hu Honua is taking part in a global scheme in which governments are qualifying wood-burning as a "renewable" form of energy. They base this on the logic that replanted trees will supposedly sequester an amount of carbon from the atmosphere equal to that which was released due to burning. There is no science that has measured how much carbon sequestered by growing eucalyptus will equal that which is released through burning it.

The only studies that have been conducted did not study eucalyptus trees. Rather, a study by the Natural Resources Defense Council, and another by the Journal of Sustainable Forestry showed that if you replant certain deciduous trees after burning them, it would take 40-100 years for replanted trees to sequester enough carbon to reach "carbon neutral." Waiting a halfcentury to become carbon neutral is not "renewable." In fact, the studies showed that the emissions from burning wood actually exceed those from burning coal! The term "renewable" to describe wood-burning is an industry lobbyists' fabrication.

Below is a partial list of chemicals that will be in the waste stream that will pass through Hu Honua's proposed injection wells, and most likely, percolate back into the aquifer, and also through the porous cliffs and into coastal waters:

- \* Sulfamic Acid (product name: "Acid Reagent") OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard, "Harmful to aquatic life with long lasting effects"
- \* NALCO NexGuard 2230 "Prevent material from entering sewers or waterways."
- \* NALCO Permatreat "Do not contaminate surface water."
- \* Bromcresol Green-Methyl Red Indicator Powder OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard
- \* Phenolphthalein Indicator Powder OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard, Contains material which may cause cancer based on animal data
- \* Sulfuric Acid Standard Solution OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard
- \* DPD Free Chlorine Reagent (Salt of N,N-Diethyl-p-Phenylenediamine, Carboxylate Salt, Sodium Phosphate, Dibasic) OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
- \* HydraVer 2 Hydrazine Reagent (Sulfuric Acid, p-Dimethylaminobenzaldehyde) causes severe burns, targets lungs, OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
- \* FerroVer Iron Reagent (Sodium Thiosulfate, 1,10-Phenanthroline-p-toluenesulfonic Acid Salt, Sodium Hydrosulfite, Sodium Citrate, Sodium Metabisulfite) OSHA Hazardous substance. EPA Immediate (Acute) Health Hazard. Delayed (Chronic) Health Hazard
- Sodium Metabisulfite) OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

  \* PhosVer 3 Phosphate Reagent (Potassium Pyrosulfate, Ascorbic Acid, Sodium Molybdate) Target organs: blood, liver OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
- \* Amino Acid F, Sodium Metbisulfate OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard
- \* Morpholine "Prevent material from entering sewers and waterways" OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard
- Molpholine Prevent inaterial mole intering sewers and waterways Osha hazardous substance, EPA initiating for the sewer of the contaminate surface water. In clinical tests, showed acute oral toxicity in rats, acute dermal toxicity in rabbits, and primary eye irritation in rabbits OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard
- \* NALCO 3D Cooling water treatment "Do not contaminate surface water, Prevent material from entering sewers or waterways. If drains, streams, soil or sewers become contaminated, notify local authority." Acute oral toxicity in rats 5,000 mg/kg; acute dermal toxicity in rabbits over 2,000 mg/kg OSHA Hazardous substance, EPA Immediate (Acute) Health Hazard
- \* Sodium Nitrite "Prevent material from entering sewers or waterways. Spilled product may pose a risk to the aquatic ecosystem if released.

  If drains, streams, soil or sewers become contaminated, notify local authority." OSHA Hazardous substance, EPA Immediate (Acute) Health
  Hazard, Delayed (Chronic) Health Hazard
- \* Potassium Hydroxide "Prevent material from entering sewers and waterways"
- \* NALCO 3DT120 (Sodium Bisulfite, sulfuric acid) "Do not contaminate surface water. Prevent material from entering sewers or waterways, If drains, streams, soil or sewers become contaminated, notify local authority." Acute oral toxicity in rats 5,000 mg/kg; acute dermal toxicity in rabbits greater than 2,000 mg/kg