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November 6, 2008

Nancy Rumrill
U.S. Environmental Protection Agency
Ground Water Office (WTR-9)

Submitted via email: rumrill.nancy@epa.gov

Subject: DRAFT UNDERGROUND INJECTION CONTROL (UIC) PERMIT
FOR THE LAHAINA WASTEWATER RECLAMATION FACILITY, MAUI, HAWAII

Dear Ms. Rumrill:

1. Coral reef ecosystems on Maui are threatened by land-based pollution, overfishing, invasive algae, climate change, and other factors.
2. The decline of coral reefs on Maui is reflective of a broader crisis unfolding in Hawaii, in other subtropical waters of the U.S., and indeed world wide, as coastal areas become more developed, and as global warming results in a host of adverse impacts on these ecosystems.
3. The National Oceanic and Atmospheric Administration (NOAA 2008*) recently warned: *Despite the investments made to date in managing and monitoring U.S. coral reef ecosystems and increasing management capacity at all levels, coral reef ecosystem resources have continued to decline over the short- and long-term....Significant actions and bold protective measures are required if reef conditions are expected to improve in the future* (my emphasis).
4. Coral reefs of Maui and elsewhere in Hawaii's have exceptionally high biodiversity value. A large proportion of their species are found nowhere else on Earth. Over 60 species of coral, 400 reef fishes, and the imperiled Hawaiian Monk Seal, Green Sea Turtle, and Hawksbill Sea Turtle are part of Maui's coral reef ecosystem.

5. Hawaii's coral reefs, valued at billions of dollars annually, are a key aspect of the State's economy and an important part of Hawaiian culture. Island reefs provide commercial, recreational and subsistence fishing opportunities, create world famous surfing and diving locations, and are essential to Hawaii's marine tourism industry (NOAA 2008).

6. The plight of Hawaii's coral ecosystems underscores one of the greatest challenges facing resource conservation today: reversing the current inability or reluctance of government to protect treasured natural ecosystems.

7. Nearly 25% of all living coral has been lost during the past 8-14 years, adding further to damage recorded in previous decades (Hawaii Division of Aquatic Resources 2007). One of the best coral reefs on the Maui, Maalaea, has seen astounding degradation with up to 67% coral lost since 1993.

8. Coral reefs near areas of development have suffered the greatest. Research indicates that elevated nutrients from sewage wastewater are fueling profuse growth of marine algae thereby smothering living corals. Other factors contributing to the problem include fertilizer runoff from agricultural fields, lawns, and golf courses, and runoff of soil and debris from construction sites and urbanized areas.

9. In a recent report, scientists with the Hawaii Division of Aquatic Resources warned that *"The goal of those charged with the protection and restoration of Hawaii's natural resources must be to prevent such severe degradation from further affecting Maui's reefs...If steps are not taken to return conditions to those in which corals can thrive, it is nearly certain that additional reefs will reach the state of Maalaea."*

10. The report links the decline of coral reefs on Maui with locations of waste water injection wells, including those at the Lahaina Wastewater Reclamation Facility.

11. The EPA's draft permit would continue to authorize the underground injection of secondary treated municipal wastewater into four existing Class V injection wells at the facility.

12. In your reply to this letter, please address the following questions:

a) Does EPA believe that the wastewater injection wells on Maui, including those at the Lahaina Faculty, are a factor in coral reef degradation? Please provide a technical analysis in support of your response

b) What is EPA's responsibility and role in protecting Maui's coral reefs, in terms of controlling both point and non-point sources of land-based pollution?

c) Are the injection fluid standards in the Lahaina Draft Permit designed to safeguard coral reefs against harmful pollutants emanating from the injection wells? If so, please explain the technical basis for these standards.

13. Prudence demands that pollution of coral reef ecosystems is quickly curtailed. The status quo is not acceptable. The U.S. Coral Reef Task Force (2008) notes cause for hope but urges swift action: *Science has demonstrated that reef communities can recover when they are protected and stressors are removed. Urgent action is needed to reduce greenhouse gas emissions. In the meantime, precious time for coral reef ecosystems can be secured through increased protection from land and marine pollution, unsustainable fishing, development, and other stressors, all of which we know can damage coral health. The time to act is now* (My emphasis).

14. Please indicate how your agency's handling of permitting issues at the Lahaina Wastewater Reclamation Facility will ensure timely action to protect West Maui's coral reefs.

15. We ask that the EPA fulfill its obligation to safeguard the biological integrity of the Nation's waters, in this case the coastal waters of Maui, Hawaii. Your agency must ensure that pollution of coral reef ecosystems from wastewater facilities such as those at Lahaina is curtailed, and that alternative treatments for wastewater receive EPA's full support.

Thank you for this opportunity to comment.

Sincerely,

Tony Povilitis, Ph.D.

*Text references available upon request