

June 23, 2009

**EPA Has Ample Authority under the Safe Drinking Water Act  
To Limit the Duration of UIC Permits, To Impose  
Reasonable and Appropriate Conditions on Such Permits, and  
To Require the County to Obtain an NPDES Permit for  
The Lahaina Injection Wells**

*A. EPA Has the Authority to Grant a Permit For a Lesser Term Than 10 Years and  
Should Use That Authority To Grant The Permit for No Longer Than 3 Years*

In EPA's response to the comments at the November 2008 public hearing on the Lahaina Underground Injection Control (UIC) Permit proposal, the Agency did not address the contention that the injection wells should be phased out in favor of beneficial re-use of the wastewaters on land. There was no explicit response in the statement of basis for the revised permit and there was no explanation for the Agency's apparent decision to grant a new permit for 10 year duration.

The Safe Drinking Water Act does not specify any length of time or standard duration for UIC permits. Thus, it is within the Administrator's discretion as to the duration of UIC permits. The Administrator has adopted rules on this point. 40 CFR section 144.36 (a), entitled "Duration of Permits," states, "Permits for Class I and Class V wells shall be effective for a fixed term *not to exceed* 10 years." <http://cfr.vlex.com/vid/144-36-duration-permits-19813041>. Thus, it is clearly within the Administrator's authority to grant a permit for a fixed term less than 10 years.

*B. EPA Has Offered No Explanation Why It Is Proposing to Grant a New 10 Year Permit*

Thus far, the Agency has failed to explain why it has determined that it is wise to allow the permit to go for 10 years and wise to grant this 10 year permit without any requirement to explore the feasibility of safer alternatives for the management of these wastes. This is not in keeping with a real commitment to public engagement, particularly when the public has so vociferously urged the phase out of injection wells in favor of beneficial re-use on land. See the November 2008 public hearing record. <http://www.epa.gov/region/water/groundwater/uic-pdfs/lahaina/1345E.pdf>

*C. The Mayor of Maui County Has Announced a Goal of Zero Injection*

If it were only the lay public's will, that would be one thing – a very important thing, but only one consideration. However, on virtually the same day that EPA proposed to grant the 10 year permit injection at Lahaina, the Mayor of Maui County, Hon. Charmaine Tavares gave a speech in which she announced the following goal:

“Our goal is to use all of the water that's produced by our treatment plants and not put it down any injection wells. That's our goal.”

So now the County's Mayor has declared that best policy is to get rid of the injection wells in favor of re-use of the wastewaters.

*D. EPA Region IX's Own Position Favors Recycling and Reuse in Preference to Environmental Disposal*

What's more EPA Region IX itself has been actively promoting re-use of wastewaters in preference to alternative methods that discard them in ways that pollute the environment. This is what Region IX says on its web site:

**“Water Recycling Can Reduce and Prevent Pollution –**

“When pollutant discharges to oceans, rivers, and other water bodies are curtailed, the pollutant loadings to these bodies are decreased. Moreover, in some cases, substances that can be pollutants when discharged to a body of water can be beneficially reused for irrigation. For example, recycled water may contain higher levels of nutrients, such as nitrogen, than potable water. Application of recycled water for agricultural and landscape irrigation can provide an additional source of nutrients and lessen the need to apply synthetic fertilizers.” – EPA Region 9, [“Water Recycling and Reuse: The Environmental Benefit.”](#)

*E. The Federal Pollution Prevention Act of 1990 Establishes National Policy Inconsistent with Continued Injection of Wastes in Preference to Recycling and Re-use*

Moreover, more than 15 years after enactment of the Safe Drinking Water Act, Congress passed the Pollution Prevention Act, which made it national policy to prefer “recycling” of wastes over discarding them. Section 6602(b) of that Act establishes the following national “Policy”:

“(b) POLICY.—The Congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.” <http://epw.senate.gov/PPA90.pdf>

Clearly, it seems that Congress wanted this Policy to be considered by the Agency in administering its authorities under other laws, such as the Safe Drinking Water Act.

*F. The Safe Drinking Water Act Itself Is to Be Administered with the Precautionary Principle in Mind*

The Safe Drinking Water Act itself was intended to be administered in accordance with the precautionary principle: “The statute’s precautionary purpose is clear. . .” Miami-

*G. Still We Have No Answer Why EPA Proposes to Grant a 10 Year Permit*

Yet despite all this and without explanation, EPA proposes to allow a new 10 year permit for the injection wells at Lahaina. Why? Why is EPA proposing to grant a 10 Year Permit for the Lahaina injection wells when to do so flies in the face of (a) strong and united public opposition, (b) the Mayor's policy goal to reuse the wastewaters and end injection, (c) EPA Region IX's stated policy in favor of wastewater reuse in preference to disposal, (d) the clear "national Policy" of the Pollution Prevention Act of 1990, and (e) the precautionary purpose of the Safe Drinking Water Act itself? We deserve an explanation, if the public engagement process is to be real, and the explanation cannot be that the Agency has no legal authority to grant a permit less than 10 years.

*H. EPA Has the Authority to Require the County, as a Condition of the Permit, to Conduct Appropriate Feasibility and Design Studies for Alternative Means of Disposing of the Wastewaters When the Injection Wells Are Closed*

In a number of other instances, EPA has imposed permit conditions under the various laws it administers and the courts generally have upheld the exercise of this discretion except where found to be arbitrary, capricious, or an abuse of authority. In this particular situation, the Agency is proposing nitrogen phase down limits (which we generally support, but would favor accelerating), without any showing that these limits are necessary to prevent endangerment to drinking water sources. <http://www.epa.gov/region/water/groundwater/uic-pdfs/lahaina/Lahaina-revised-draft-permit.pdf>, p. 8. And in many other circumstances, the Agency has cited its rulemaking authority under section 1450 (a)(1) of the Safe Drinking Water Act as part of the basis for reaching results it deems necessary or appropriate in the administration of the Act. See: [http://bulk.resource.org/gpo.gov/register/2007/2007\\_17903.pdf](http://bulk.resource.org/gpo.gov/register/2007/2007_17903.pdf), in which EPA cites this authority as part of its general rulemaking authority; and <http://www.fluoridealert.org/health/epa/reports/fedreg.may1985.pdf>.

*I. EPA Has the Authority and Should Use That Authority to Require the County to Obtain an NPDES Permit Under the Clean Water Act and To Impose Restrictions Under that Permit to Ensure Protection of Public Health, the Environment (Including the Reefs) and All Pertinent Beneficial Uses of the Ocean*

1. There is strong proof that the Lahaina wastewater injection wells do not effectively contain the waste waters and prevent their movement into the ocean. Instead, these injection wells are connected to the ocean through various underground seeps, submarine groundwater discharge, and pathways that result in the nutrient laden waste waters reaching the ocean.
  - a. Mr. Dave Taylor, Division Chief, Wastewater Reclamation Division, County of Maui, has acknowledged on the record in an EPA public hearing on the Lahaina treatment plant's request for a ten year underground injection

operating permit under the Safe Drinking Water Act that the injected waste waters do reach the ocean: ““The other water, about four million gallons, maybe a little less, goes down the injection wells. The injection well water is - does not go through the ultraviolet treatment. It goes down these deep pipes into the ground, they go down a couple hundred feet. And that water moves outward through the ground, eventually **it comes out into the ocean.**” – Testimony of November 6, 2008, “EPA Public Hearing on Lahaina Waste Water Injection Permit,” p. 8, lines 15-21.

<http://www.epa.gov/region09/water/groundwater/uic-pdfs/Lahaina/1345E.pdf>

- b. This was not an isolated comment. Later in that same hearing, Mr. Taylor confirmed that the injection well wastewaters make their way into the ocean:

“MR. JOHN SEEBART: Hi. My name is John Seebart. I just have two quick questions for Mr. Taylor. One is, how long at the Honokowai injection plant does it take for the water to get from the plant into the water?

“MR. TAYLOR: No one is exactly sure. There -- there has been a recent study in Kihei that the USGS did that showed that it took about two to five years for the water from the injection wells to reach the ocean. And our guess is because the -- the geometry is kind of about the same. They're about the same depth. The water has about the same specific gravity. It floats upward. We would guess it would be similar. . . .”

EPA Hearing, Nov. 6, 2008, page 13, lines 10-25 --

<http://www.epa.gov/region09/water/groundwater/uic-pdfs/Lahaina/1345E.pdf>

2. The amount of nitrogen compounds injected into the Lahaina injection wells is quite substantial.

Current levels of nitrogen injection can be as high as 12,000 lbs per month of total nitrogen (or on calendar quarter basis up to 126,000 lbs/year).

<http://www.epa.gov/region09/water/groundwater/uic-pdfs/lahaina/Lahaina-revised-draft-permit.pdf>, p. 8. Even assuming that no higher levels were

discharged into the environment over the last 14 years of operation, this could still mean as much as 1.7 million lbs of nitrogen discharged over this period.

3. It is not accidental that the nutrient-laden waste waters placed in the injection wells at the Lahaina wastewater treatment plant end up in the ocean; it is clearly by design that the injected wastes will not be contained in the wells, but will instead be released into the environment.

- a. That is the intent -- how the injection well system is supposed to work. This is evident from Mr. Taylor's testimony. He acknowledged discharges of “about 4 million gallons” of wastewater per day (EPA Hearing, Nov. 6, 2008, p. 8. Line 7). The record also shows “total well depth” of only “185 to 255 feet below ground surface” (Id, p. 23, lines 23-24). Diameters of the well are less than 2 feet across. See Maui County permit application (2004), Attachment M

--. <http://www.epa.gov/region09/water/groundwater/uic-pdfs/LahainaPermitApp.pdf>. The permit application also makes clear that solid casing of these wells does not extend more than 108 feet down. Id. Given these facts alone, it is clear that these injection wells do not have anywhere near the capacity to contain the injected effluent the almost 1.5 billion gallons of wastewater effluent injected annually.

- b. Moreover, the drawings of the injection wells submitted by the County with its permit application do not show any closure, seal or other barrier at the bottom of the wells. Instead, at the bottom, there is either an “open hole” or “perforated pipe”. Id, Attachment Q, p. 131.
  - c. If further proof is needed that the wells are designed to release effluent to underground waters, geological “fractures”, and seeps, see the July 2004 report (#18) on the Lahaina injection wells, where the County acknowledges that the capacity of one of the wells is “about six times greater than the daily plant flows” ” (p. 16) and “over ten times the daily average flow” for another well (p. 30). <http://www.epa.gov/region09/water/groundwater/uic-pdfs/LahainaPermitApp.pdf>, pp. 102, 116.
  - d. If the first of these wells were meant to contain (not discharge) the effluent, it would only be able to do so for six days; if the second of these wells were meant to prevent (instead of facilitate) environmental discharge, it could not do so for more than 11 or 12 days. It is clear, therefore, that the design of the injection wells is to discharge the effluent, to be released underground into the environment.
4. The hydro-geology of the area has been well-documented and shows the “flow of the watershed from the mountain to the ocean” in this area.
- a. See the USGS information for this area, which states, “The general movement of fresh ground water in the Lahaina District is from the dike-impounded water body into the freshwater-lens system and then to the ocean.” [http://hi.water.usgs.gov/lahaina/lahaina\\_tab.htm](http://hi.water.usgs.gov/lahaina/lahaina_tab.htm).
  - b. See also, for example, the 1991 consultant’s report on closure of the Olawalu Landfill, which includes the statement: “Regional hydro-geological characteristics show groundwater flow to be from the mountain foothills toward the ocean.” [http://oeqc.doh.hawaii.gov/Shared%20Documents/EA\\_and\\_EIS\\_Online\\_Library/Maui/1990s/1991-08-08-MA-FEA-LOWALU-LANDFILL-CLOSURE.pdf](http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Maui/1990s/1991-08-08-MA-FEA-LOWALU-LANDFILL-CLOSURE.pdf); and
  - c. The 1983 “Revised EIS for the Honakahua Well B” also makes clear that the groundwater in this area tends to move unimpeded by geological barriers toward the sea:

“Unfortunate, Sectors A and B are not bound by a continuous wedge of caprock sediments along the coast that would act to retard groundwater discharge to the sea . . . A substantial flow of groundwater continues to leak to the sea in both sectors.” (pp. II-12, II-14, and II-19 computing the flow balances outward from groundwater to the sea in both sectors ).  
[http://oegc.doh.hawaii.gov/Shared%20Documents/EA\\_and\\_EIS\\_Online\\_Library/Maui/1980s/1983-04-MA-REIS-LAHAINA-HONOKAHUA-WELL-B.pdf](http://oegc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Maui/1980s/1983-04-MA-REIS-LAHAINA-HONOKAHUA-WELL-B.pdf)

- d. Page 1 of the County’s July 2004 Status Report (#18) on the Lahaina injection wells admits that the layers of Wailuku Basalt lava into which the effluent is injected are “fractured.” --  
<http://www.epa.gov/region09/water/groundwater/uic-pdfs/LahainaPermitApp.pdf>, p. 87.

5. The Lahaina waste water injection wells are very close to the ocean – “1500-1900 feet from the shoreline of West Maui” in Lahaina according to EPA’s Statement of Basis for the proposed permit.

“The water that comes from that plant in Lahaina exits very, very closely nearby, within half a mile of Kahekili.” (EPA Hearing, p. 59, lines 4-6). Alan Arakawa, the former Mayor of Maui and former Manager of the Lahaina Waste Water treatment plant testified, “When you look at the Lahaina Treatment Plant and the Kahului Treatment Plant, the effluent is very close, the wells are very close to the ocean. They are not miles above the ocean; they're hundreds of yards above the ocean. [“1500-1900 feet from the shoreline of West Maui” in Lahaina according to EPA’s Statement of Basis for the proposed permit at p. 2 --  
<http://www.epa.gov/region09/water/groundwater/uic-pdfs/Lahaina-renewal-SOB-final.pdf>]. And I think that you will find that **the water that's going from the treatment plant, going into the ocean,** is probably getting there a lot sooner than most people think. . . . I know that, in Kahului, the water goes into the injection well, it comes out almost immediately at the ocean side. We can even see traces of it bubbling up almost as a stream. In Lahaina, we're not much further.” (p. 81, lines 5-9, lines 15-19) .  
<http://www.epa.gov/region09/water/groundwater/uic-pdfs/Lahaina/1345E.pdf>

6. Nitrogen-laden contaminants of these injection wells clearly percolate into the near shore ocean waters. (See points 1 and 2 above).
  - a. *Independent Study Confirmation – Acknowledgement by Maui County and the DLNR:* Maui County’s web site acknowledges the existence of “independent studies [which] detected injection well discharge in some areas of algae blooms . . .” -- <http://www.co.maui.hi.us/FAQ.asp?QID=473>, answer to question 10.
  - b. Other confirmation that the injection wells empty their contents into the ocean, albeit indirectly through underground discharge, comes from DLNR: “But in areas like Hawaii, **where the injection wells clearly percolate into the nearshore waters,** the Clean Water Act should also be an indicator of whether

or not permits should be issued. (Testimony of Russell Sparks, Hawaii DNL, EPA Hearing, Nov. 6, 2008, p. 37, lines 8-11). See also Sparks quote at [redacted] below.

- c. *U of H Research*: University of Hawaii research also substantiates that the discharge of wastewater from injection wells travels through seeps, submarine groundwater discharge, or other similar pathways into the ocean: “A University of Hawaii researcher believes that tracking an isotope of nitrogen in seawater can demonstrate that nutrients from injection wells are getting into the water. . . . Dailer updated a presentation that Russell Sparks of the Department of Land and Natural Resources gave the council in July 2007, which pointed to injection wells at county sewage treatment plants as the cause of algae overgrowth. . . . A high ratio of N15 is thought to indicate a source from a well, a low ratio a source from runoff, perhaps from excess fertilizer. When the treated sewage, which still contains some biological material, is injected into a well, she said, bacteria act on it while it's there. Their action selectively favors N15. Thus the presence of N15 suggests the presence of upwelling from sources that receive injection well water. . . . She showed maps based on the 2007 samples that give higher N15 ratios close to the three county sewage treatment plants. . . . She concluded that around Maui, the highest N15 ratios are close to sewage injection wells.” Edgar, “Algae Blooms Gone Missing – Why?” Maui News, December 2, 2008 -- <http://www.mauinews.com/page/content.detail/id/511895.html>
  - d. *Other Data Showing that the Concern is Not Speculative*: Evidence that wastewater treatment plant effluent in injection wells can and does enter the ocean nearby has also been demonstrated in Florida in a number of cases: “According to the National Archives and Records Administration, as early as 2001, migration of injected effluent has been documented or was suspected to be occurring in 42 of the 81 operational deep-injection sites, which are located primarily along south Florida’s coast.” <http://www.nt2099.com/J-ENT/news/surfing-related-news/treasure-coast-groups-organize-to-fight-new-injection-well-threat-to-coastal-health>. See also, Paul, Rose, et al, “Wastewater from Injection Wells in Florida Keys Found in Surface Marine Waters,” *Water Research* 31 (6): 1448-1454, University of South Florida (1977) -- <http://www.reefrelief.org/coralreef/study/wastewater.html>
7. When this discharge of nutrient-laden wastewaters from the injection wells reaches the ocean, it can cause and/or contribute significantly to severe harm to ocean ecosystems, fish, and coral.
- a. EPA has acknowledged this: ““Deep well injection could also pose a risk to marine ecology if contaminants can readily migrate and discharge to offshore waters. . . . Two potential ecological effects of particular concern, should surface or ocean waters be sufficiently contaminated, include harmful algal blooms and bio-concentration of toxic contaminants in the food web. Algal blooms can cause a variety of toxic symptoms in aquatic organisms (including death) as well as nontoxic adverse effects such as clogging of gills and

smothering of coral reefs and seagrass beds. Food web bio-concentration of metals and other contaminants can also cause of variety of toxic effects.” EPA, “Underground Injection Control Program—Relative Risk Assessment of Management Options for Treated Wastewater in South Florida; Notice of Availability,” May 5, 2003, p. 23673, 23677 -- [http://bulk.resource.org/gpo.gov/register/2003/2003\\_23677.pdf](http://bulk.resource.org/gpo.gov/register/2003/2003_23677.pdf),

- b. Hawaii DLNR has agreed under the specific conditions of the Hawaiian Islands and Maui in particular: “...when we stitched together the long-term data set, it was really clear that a lot of reefs are declining quite substantially. The reefs right offshore from the wastewater treatment plant have in fact lost about 50 percent of their coral cover over the last 14 years.

“Recent work by the University of Hawaii Botany Department is starting to show more evidence that the nutrients that are fueling some of these declines are in fact likely the result of injection plumes.

“Overall evidence that we see on the reef is that the coral reef cover is declining, erosion is increasing, and there's periodic blooms on the base of algae that tends to smother out and kill and stress the coral further.

“We recognize, certainly, that there [are] numerous causes for coral reef decline. But what we would like to see is that certain things that we can deal with and can address be addressed.” (p. 36, lines 6-24) -- <http://www.epa.gov/region09/water/groundwater/uic-pdfs/Lahaina/1345E.pdf>

- c. “The [U of H] researcher, Meghan Dailer, told the [Maui] County Council Water Resources Committee on Monday that laboratory experiments show that both native and alien algae species are nitrogen-deficient around Maui, so that nitrogen-enriched effluent [from waste water treatment injection wells] could contribute to algae blooms. The blooms of "turf algae," in turn, are blamed for smothering coral and coralline algae, contributing to the deterioration of reefs.” Id at <http://www.mauinews.com/page/content.detail/id/511895.html>
- d. See also: Pandolfi et. al., “Are U.S. Coral Reefs on the Slippery Slope to Slime?” *Science*, March 18, 2005, pp. 1725-6 -- [http://www.reefresilience.org/pdf/1725-Are\\_US\\_Reefs\\_on\\_Slippery\\_Slope\\_to\\_Slime.pdf](http://www.reefresilience.org/pdf/1725-Are_US_Reefs_on_Slippery_Slope_to_Slime.pdf) and its conclusions that
  - i. “. . . scientists should stop arguing about the relative importance of different causes of coral reef decline: overfishing, pollution, disease, and climate change. Instead, we must simultaneously reduce all threats to have any hope of reversing the decline [in the reefs].
  - ii. “For too long, single actions such as making a plan, reducing fishing or pollution, or conserving a part of the system were viewed as goals. But only combined actions addressing all these threats will achieve the ultimate goal of reversing the trajectory of

- decline [of the reefs].
- iii. “We need to act now to curtail processes adversely affecting reefs.”
8. Maui County has in the past opposed groundwater monitoring wells that would have enabled the documentation of the movement of the nutrient-laden wastewaters in the direction of the ocean.

It is clear that Maui County has opposed required groundwater monitoring in the vicinity of the wastewater injection wells. The County went so far as to appeal the 1995 permit by EPA when it included such a requirement: “The County’s main focus in the appeal was that the requirement for groundwater monitoring wells be removed from the permit.” Eventually, EPA and the County reached a settlement in which “(a) EPA would remove the requirement to construct ground water monitoring wells.” EPA “Statement of Basis” for the Proposed 2009 Lahaina injection well permit, -- <http://www.epa.gov/region09/water/groundwater/uic-pdfs/Lahaina-renewal-SOB-final.pdf>, p. 2.

9. Under these circumstances, the County should be deemed to be stopped from arguing that there is insufficient nexus between the environmental releases from the injection wells and the consequent contribution of these wastewaters to algal blooms that suffocate the coral reefs and harm ocean ecosystems.
10. There is no question that the Lahaina waste water treatment plant has not obtained, is operating without, and has not requested a federal or State Clean Water Act NPDES Permit.
11. The federal Clean Water Act “prohibits ‘the discharge of any pollutant by any person’ unless done in compliance with some provision of the Act. §1311(a).

“. . . Generally speaking, the NPDES requires dischargers to obtain permits that place limits on the type and quantity of pollutants that can be released into the Nation's waters. *South Florida Water Management District v. Miccosukee Tribe of Indians et al.*, 541 U.S. 95 (2004) -- <http://supreme.justia.com/us/541/02-626/case.html>

12. The federal CWA defines the term “navigable waters” to mean “waters of the United States, including the territorial seas.”

See: “DOH, EPA Take Action Against Pflueger on Kauai,” June 2002 -- <http://healthuser.hawaii.gov/health/about/pr/2002/02-33epa.html>, and “Cabrillo Point Liquefied Natural Gas Facility: EPA Permit for Water Discharges (2006),” in which EPA states, “The Clean Water Act (“CWA”) requires that sources of water pollution obtain a [NPDES] permit prior to discharging pollutants into the Pacific Ocean.” (p. 1) -- <http://www.coastaladvocates.com/pdf/CCPN%20EDC%20Water%20Quality%20Permit%20&%20Info.pdf>. See also Craig and Miller, “OCEAN DISCHARGE

CRITERIA AND MARINE PROTECTED AREAS: OCEAN WATER QUALITY PROTECTION UNDER THE CLEAN WATER ACT,” which includes the following: “EPA’s NPDES permitting authority extends to all waters that the Act covers, whether internal, coastal, or oceanic.” (at nt. 112 -- [http://www.bc.edu/bc\\_org/avp/law/lwsch/journals/bcealr/29\\_1/01\\_TXT.htm](http://www.bc.edu/bc_org/avp/law/lwsch/journals/bcealr/29_1/01_TXT.htm))

13. Moreover, it is clear that “one of the [Clean Water] Act's primary goals was to impose NPDES permitting requirements on municipal wastewater treatment plants.”

See, e.g., §1311(b)(1)(B) (establishing a compliance schedule for publicly owned treatment works).” *South Florida Water Management District v. Miccosukee Tribe of Indians et al.*, 541 U.S. 95 (2004) -- <http://supreme.justia.com/us/541/02-626/case.html>

14. Nor does it matter that the treatment plant does not originate, generate or introduce the pollutants that it discharges.

a. “We therefore reject the District's proposed reading of the definition of 'discharge of a pollutant' " contained in §1362(12). That definition includes within its reach point sources that do not themselves generate pollutants.” *South Florida Water Management District v. Miccosukee Tribe of Indians et al.* cited above.

b. Likewise, The National Park Service has recognized that a Class V waste water injection well, such as the one at Lahaina, could also be subject to an NPDES requirement if “the well directly discharges wastewater to ‘waters of the United States’” – See <http://www.concessions.nps.gov/document/EnviroCheckSheet-WastewaterManagement.pdf>.

15. Because the Lahaina municipal wastewater treatment plant discharges pollutants (nitrogen containing compounds) into its injection wells and the injection wells release these pollutants into the ground or ground waters where they make their way in accordance with the hydrogeology of the area into the Pacific Ocean only 1500-1900 feet away, the question arises whether the discharge of a pollutant indirectly into the ocean (rather than directly) exempts the plant from meeting NPDES requirements that clearly would be applicable if it dumped the wastewaters directly into the ocean.

a. A number of courts have held that the NPDES permit requirements of the Clean Water Act clearly would or do apply even to the indirect discharge of a pollutant into navigable waters where there is “a connection or link between discharged pollutants and their addition to navigable waters.”

See, for example: *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133 (10th Cir. 2005) at paragraph 52 -- <http://cases.justia.com/us-court-of-appeals/F3/421/1133/609105>; and

Quivera Mining Co. v. USEPA, 765 F.2d 126 (10<sup>th</sup> Cir. 1985), which held, among other things, that the discharge of mine wastes to non-navigable in fact waters and arroyos would be subject to NPDES permit requirements where “the waters of the Arroyo del Puerto and the San Mateo Creek soak into the earth's surface, become part of the underground aquifers, and after a lengthy period, perhaps centuries, the underground water moves toward eventual discharge at Horace Springs or the Rio San Jose.” – paragraph 10 -- <http://cases.justia.com/us-court-of-appeals/F2/765/126/414750>. This case is noteworthy in the context of the Lahaina waste water injection well, in which the estimated time for the wastewaters placed in the injection well to reach the ocean is much shorter, not “centuries”.

16. In the recent US Supreme Court decision in *Rapanos v. US*, 126 S.Ct. 2208 (2007), the US Supreme Court split 4-1-4 on the question of whether and under what circumstances unpermitted dredging or filling of an area not directly connected to navigable waters of the United States is prohibited by the Clean Water Act. Justice Kennedy’s concurring opinion held that “mere hydrological connection should not suffice in all cases” to establish Clean Water Act jurisdiction and that the required “nexus” between the discharge and receiving waters must be “significant” in order for the Clean Water Act to apply.
17. Since the *Rapanos* decision, the US Circuit Court of Appeals for the 9<sup>th</sup> Circuit has considered the applicability of the “significant nexus” to circumstances quite similar to those presented by the Lahaina wastewater injection well discharges.

That case -- *Northern California River Watch v. City of Healdsburg*, 457 F.3d 1023, 496 F.3d 993 (9<sup>th</sup> Cir. 2007) -- involved a situation in which the City of Healdsburg, CA owned and operated a municipal waste treatment plant, discharged treated waters to a nearby pond, which then percolated into an aquifer, which in turn released the wastewater effluent into the Russian River. Plaintiffs alleged that this violated the Clean Water Act, because the city had not obtained an NPDES permit for these discharges. The Court held that these circumstances met Justice Kennedy’s “significant nexus” test under the US Supreme Court’s *Rapanos* decision. The 9<sup>th</sup> Circuit Court explained, “In light of *Rapanos*, we conclude that Basalt Pond possesses such a “significant nexus” to waters that are navigable in fact, not only because the Pond waters seep into the navigable Russian River, but also because they significantly affect the physical, biological, and chemical integrity of the River. We affirm the district court’s holding that Basalt Pond is subject to the CWA. We also affirm the district court’s ruling that neither the waste treatment system nor the excavation operation exceptions in the Act apply to Healdsburg’s discharges.”

18. For reasons explained in the *Northern California River Waters* case, the “sewage treatment” exemption would not apply to injected wastewaters that then are released to the environment. It is intended only for elements of closed systems, according to the 9<sup>th</sup> Circuit Court of Appeals.

19. Accordingly, given this case law, the proof of the Lahaina treatment plant’s injected effluent reaching the ocean and the resultant significant contribution to the harm to the coral and near shore ecosystems by the release of these nutrient-laden wastewaters from the Lahaina wastewater treatment injection wells, it is clear that the Lahaina wastewater injection well’s indirect discharges to the nearby ocean waters should be deemed to have a “significant nexus” with the Pacific Ocean under Justice Kennedy’s *Rapanos* test and the 9<sup>th</sup> Circuit Court of Appeals decision in the *Northern California River Watch v. City of Healdsburg* decision, and that the County should be required to obtain and comply with an NPDES permit for its discharges that intentionally are not contained in the injection wells and that are known by the County to enter the ocean.
20. This conclusion is further supported by the provisions of the Hawaii Health Departments’ Administrative Rules, Chapter 11-55. In addition, they provide an independent basis for concluding that the Lahaina wastewater treatment plant is subject to NPDES requirements.

These provisions are also relevant to Justice Kennedy’s “substantial nexus” test, because they define with considerable specificity the state policy and purpose underlying the applicable laws, regulations, and permit conditions for the Lahaina injection wells.

In addition to limiting the duration of the permit, we are requesting that EPA impose conditions on the permit. Here are the conditions we are requesting:

- That the County within one year initiate a feasibility and design study for alternative management of the wastewaters following closure of the injection wells;
- That the County apply for and obtain an NPDES permit under the Clean Water Act for any discharges from the wells that enter the ocean and that the NPDES permit include such measures as are necessary to protect public health and the environment and all beneficial uses of the ocean as provided in Hawai’i Administrative Rules, Title 11, regulating various aspects of water quality and [water] pollution, and Chapter 342, HRS” including “Chapter 11-55, Water pollution Control.” These rules provide in pertinent part:
  - (i) “11-55-02. General policy of Water pollution control. (a) It is the public policy of this State: (2) To protect, maintain, *and improve* the quality of state waters: . . . (B) For the growth, support, propagation of shellfish, fish, and other desirable species of marine and aquatic life. . . [and] (D) for the *coral reefs*. . . . (3) To provide that no waste be discharged into any state waters without first being given the degree of treatment necessary to protect the legitimate beneficial uses of the waters; (4) *To provide for the prevention, abatement, and control of new and existing water pollution*” [emphasis added]. <http://gen.doh.hawaii.gov/sites/har/AdmRules1/11-55.pdf>, pp. 55-14 – 55-15.

EPA's authority to require the first recommended condition above is clear. In the proposed permit, EPA proposes a range of conditions. See:

For example, EPA has already indicated that its UIC permitting authorities are broad enough to impose "special permitting requirements" where "where EPA issues permits and an injection activity poses a special health risk to minority or low-income populations," even though the Safe Drinking Water Act never expressly mentions "minority or low-income populations." [http://www.epa.gov/R5water/uic/uic\\_ej.htm](http://www.epa.gov/R5water/uic/uic_ej.htm)

Similarly,