

BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

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ENVIRONMENTAL APPEALS BOARD

In re: _____)
)
City & County of Honolulu)
Sand Island Wastewater Treatment Plant)
Honouliuli Wastewater Treatment Plant)
)
NPDES Permit Nos. HI0020117 & HI0020877)

NPDES Appeal No. 09-01

REPLY BRIEF IN SUPPORT OF CONSOLIDATED
PETITION FOR REVIEW

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Dated: July 15, 2009

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**REPLY BRIEF IN SUPPORT OF CONSOLIDATED
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INTRODUCTION

Region 9 fundamentally erred in concluding that the City and County of Honolulu (“CCH”) violated state water quality standards and therefore failed to meet Section 301(h)(9)’s requirement that applicants meet EPA water quality criteria Region 9 measured and calculated compliance with those standards in a place where, as a matter of state law, they do not apply. That single error permeates three of Region 9’s four findings that CCH violated water quality standards (toxicity, pesticides and ammonia nitrogen). *See* Region 9 Br. at 25. The fourth finding (non-compliance with bacteria water quality standards) is unlawful because Region 9 rendered it while refusing to consider relevant and diligently presented new information.

These errors also invalidate Region 9's finding that CCH failed to meet Section 301(h)(2)'s requirement that waiver applicants show protection of aquatic life and recreation. Region 9 based that finding solely on its findings of water quality standards violations, despite biological data showing that the effluent had no harmful impact.

In essence, Region 9 has converted the 301(h) waiver proceeding into a device for enforcing a self-created federalized version of state water quality standards that is stricter than the version Hawaii adopted *and EPA itself approved*. That is arbitrary and capricious because Congress intended Section 301(h) as a means of easing restrictions otherwise applicable to treatment plants with ocean outfalls. Instead, Region 9 is using the 301(h) proceeding to impose water quality standards with mixing zones *stricter* than would otherwise apply.

Moreover, if EPA believed the state-defined mixing zones were inadequate, it could have disapproved the Hawaii standards. Instead, it approved them. Region 9 cannot claim now that the state mixing zones EPA previously approved are unacceptably lax.

CCH also argues that Region 9 failed adequately to respond to various technical issues CCH raised in the comment period. Should CCH prevail on these contentions, then Region 9's adverse finding with respect to Section 301(h)(9) (and also Section 301(h)(2)) fails, irrespective of the Court's conclusion as to whether

Region 9 erred by assessing water quality standard violations at a location other than the location specified by the state-established mixing zone.

ARGUMENT

I. REGION 9 ERRED IN RELYING ON A FEDERALLY-DEFINED MIXING ZONE FOR STANDARDS OTHER THAN THOSE FOR WHICH THE VARIANCE WAS REQUESTED.

In its opening brief, CCH showed why Region 9's denial of 301(h) waivers should be reversed. The principal basis Region 9 gave for its decision was its conclusion that, according to water quality measurements taken at the edge of a federally-defined mixing zone ("ZID"), and according to calculations approximating water quality at the ZID, CCH's plants had violated four of the many state water quality standards. Yet under Hawaii regulations approved by EPA, CCH applied for and received state-defined mixing zones ("ZOM"), which EPA specifically approved and which Region 9 had respected in all of CCH's prior waiver applications. Hawaii's water quality standards apply outside, not within the ZOM. Since the edge of the ZID where Region 9 measured and estimated violations is entirely contained within the ZOM, Region 9 could not have rationally concluded that CCH violated *state* water quality standards -- standards cannot be violated where they do not apply.

Yet that is precisely the position that Region 9 has tried to justify in its Responses To Comments and its Brief filed in this Court. Region 9 contends that

CCH forfeited its opportunity to dispute Region 9's use of the ZID; that CCH's argument does not weaken the decision to deny the waivers; and that EPA's regulations actually and validly authorize its novel approach to applying a state's standards where the state has decided they do not apply. As discussed more fully below, all of these contentions miss the mark, and Region 9's denial of CCH's waivers was unlawful, arbitrary and capricious.

A. CCH's Position Was Properly Presented.

Region 9 urges that CCH's arguments in favor of the ZOM are not properly presented because, in Region 9's estimation, they go "far beyond any comments" submitted during the comment periods. Region 9 Br. at 34-35. In Region 9's view, CCH's comments only objected to "the Region's criticism of the absence of ZID stations in the monitoring program." *Id.* at 34.

CCH's comments belie Region 9's narrow understanding of them and demonstrate that CCH's arguments are properly presented. CCH commented on the fact that Region 9's tentative decisions measured and calculated compliance at the ZID for *all* Hawaii water quality standards, whereas Region 9's prior decisions on CCH's earlier permits had used the ZID only for the biochemical oxygen demand ("BOD") and total suspended solids ("TSS") standards, and CCH specifically complained that the tentative decisions gave no "explanation or justification" for the sudden, dispositive change. Honouliuli Response and

Comments at I-9 – I-10, Doc. H.2.1, pp. H-02-24 - H-02-25; *see id.* at I-13, p. H-02-28 (“The inconsistencies between EPA’s 1988 TD and EPA’s 2007 TD demonstrate an abrupt and unjustified change in approach, [and] an arbitrary and inconsistent interpretation of environmental information”); *see also* Sand Island Response and Comments at I-11 – I-12, Doc. S.2.1, pp. S-02-34 - S-02-35 (showing how the ZID / ZOM discrepancy was manifested in Region 9’s concern about the absence of testing stations at the edge of the ZID, even though Region 9 had previously said that the ZOM stations were sufficient).

In its Responses to Comments, issued along with its final decisions, Region 9 finally offered the missing explanation -- its (mistaken) position that EPA regulations, though substantively unchanged in the last 15 years, during which Region 9 had read the regulations to require compliance at the ZOM, actually require it to test all state standards at the edge of the ZID. *See* Honouliuli Response To Comments C5.1, at 7-8, Doc. H.1.5, pp. H-01-167 - H-01-168; Sand Island Response To Comments C4.1, at 6-7, Doc. S.1.5, pp. S-01-126 - S-01-128; *see also* Region 9 Br. at 32-33. Region 9’s Responses to Comments, significantly, show that Region 9 perfectly well understood CCH’s comments as raising the issue of where water quality standard compliance should be measured.

As this Court requires, during the comment period CCH made all reasonably available arguments in support of all reasonably ascertainable issues. *See In re*

Dominion Energy Brayton Point LLC (formerly USGen New England), Brayton Point Station, 12 E.A.D. 490, 509-510 (EAB 2006) (“*In re Dominion Energy Brayton Point*”); *see also* 40 C.F.R. §§ 124.13, 124.19(a). CCH’s consolidated brief responds to the new argument Region 9 propounded (reliance on the EPA regulation) only after the comment period closed. Far from raising arguments dilatorily, the consolidated brief “substantively confront[s] the permit issuer’s subsequent explanations,” *In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33, 46 n.58 (EAB 2005), and “demonstrate[s] why the permit issuer’s response to [objections made during the comment period] (*i.e.*, the permit issuer’s basis for its decision) is clearly erroneous.” *In re Dominion Energy Brayton Point*, 12 E.A.D. at 509-510. The petition, in short, shows why Region 9’s belated justification for the permit denials is erroneous as a matter of law. This Court therefore should consider the petition’s ZID / ZOM arguments on the merits.

B. CCH’s Arguments Matter.

Region 9 also contends that CCH’s arguments are “largely academic” because the Region believes they have no effect on its decisions denying CCH’s 301(h) waiver applications. Region 9 Br. at 47-48. Undeniably, the record discloses some violations of some of Hawaii’s water quality standards at the edge of the ZOMs. *See id.* Yet the decisions below were not based on those violations; the Final Decisions simply used them as evidence “that the number of exceedances

at the ZID, where 301(h) regulations require attainment of water quality standards, would be greater.” *See* Sand Island Final Decision at 63-64, Doc. S.1.2., pp. S-01-65 - S-01-66. It was the number of exceedances occurring at the edge of the ZID that drove Region 9’s ultimate denials of CCH’s waivers (except for the bacteria standard, violations of which were found for another, erroneous reason). *See* CCH Br. at 16-17.

Region 9 has consistently taken the position that water quality violations must cross uncertain thresholds of frequency and importance before they justify denying a 301(h) waiver application. *See, e.g.,* Sand Island Final Decision at 38, Doc. S.1.2, p. S-01-40 (finding that CCH complied with state standards for dissolved oxygen and turbidity (light extinction coefficient) despite a “few occasions” of exceedance); *compare* Region 9 Br. at 67 n.50 (referring to “sufficient exceedances”). Region 9 based its findings of violation on its judgment that there were sufficient exceedances *at the ZID*. In its Brief, however, Region 9 now asserts that the exceedances at the edge of the ZOM are, by themselves, sufficient to cross the threshold and require denial of the waivers. Because CCH and the public have not yet had an opportunity to comment on that brand new position, the case must be remanded if CCH prevails in challenging Region 9’s focus on the ZID. *See, e.g., In re Mille Lacs Wastewater Treatment Facility & Sewage Lagoons*, NPDES Appeal No. 01-16, 2002 WL 31009339 (EAB

Sept. 3, 2002) (“*In re Mille Lacs*”) (“Because our review is concerned with the adequacy of the decisions actually rendered rather than decisions that might have been, the more appropriate course under the circumstances is to remand the permit to the Region so that, if the Region intends to rely on a new basis for its jurisdiction to issue the permit, the permit can be reissued on that basis.”); *see also In re Wash. Aqueduct Water Supply Sys.*, 11 E.A.D. 565, 589 (EAB 2004) (“[T]he Region cannot through its arguments on appeal augment the record upon which the permit decision was based.”); *In re Beckman Prod. Servs.*, 8 E.A.D. 302, 313, slip op. at 14-15 (EAB 1999) (when the Region appears to have changed the rationale for its determination, remand for further proceedings to clarify the rationale is appropriate); *In re Austin Powder Co.*, 6 E.A.D. 713, 719 (EAB 1997); *In re Chem. Waste Mgmt. of Ind., Inc.*, 6 E.A.D. 144, 151-52 (EAB 1995) (rejecting the permit issuer’s explanation for a permit condition because it was raised for first time on appeal, rather than in the Response To Comments); *In re GSX Servs. of S.C., Inc.*, 4 E.A.D. 451, 454 (EAB 1992) (the administrative record must reflect the “considered judgment” necessary to support the Region’s permit determination).

C. Hawaii’s ZOMs Apply to All Its Water Quality Standards, Except Where the Permits Specify Otherwise.

Citing only the Sand Island and Honouliuli permits, which require that the plants’ discharges not violate certain water quality standards (nutrients, pH, temperature, and salinity) beyond the ZOM, Region 9 argues that, for all other

standards, compliance must be measured at the ZID, *i.e.*, that the ZOM is ineffective for all other standards. *See* Region 9 Br. at 29, 47-48. Region 9's conclusion does not follow from its premise. Both permits require compliance at the ZID only for certain water quality standards (light, turbidity, and dissolved oxygen) not at issue; both permits recognize that each plant has just one ZOM; and neither tethers the ZOMs, or the ZOMs' dimensions, to particular water quality standards. *See* Doc. S.12.2, p. S-12-128; Doc. H.12.4, p. H-12-1172. For the bulk of the standards at issue (bacteria, chlordane, dieldrin, and whole effluent toxicity), the permits are silent about whether to measure compliance at the ZID or the ZOM. Region 9, in short, has cited nothing to suggest that CCH's ZOMs are somehow limited to particular water quality standards.

Hawaii's ZOM regulation confirms CCH's position. Region 9 claims that the regulation limits ZOMs to particular water quality standards. *See* Region 9 Br. at 37. The regulation, however, only requires that an applicant demonstrate that compliance with some existing water quality standard is difficult and without great benefit to the public. *See* HAR § 11-54-9(c)(5)(C), Doc. S.19.1, pp. S-19-48 - S-19-49. That an applicant must identify particular standards as meriting a ZOM does not mean that, for all unidentified standards, the applicant's ZOM is ineffective. If ZOMs were tied to particular standards, in fact, it would be strange for CCH to have just one ZOM for each plant, rather than many ZOMs, the sizes of

which are tailored to particular water quality standards. CCH's ZOMs govern for all Hawaii water quality standards, unless the permit specifies otherwise (which it does so only for standards not at issue here), or the discharger has applied for a variance for those standards (which CCH did only as to BOD and TSS). As Region 9 itself correctly stated in its 1988 Tentative Decision, the "dimensions of an approved ZOM would take precedence in determining compliance with State water quality standards" except as to "parameters for which the applicant is requesting a variance." 1988 Honouliuli Tentative Decision at 24, Doc. H.12.3, p. H-12-1116.

D. Federal Law Does Not Justify Region 9's Finding of State Water Quality Violations at the Edge of the ZID.

Region 9 attempts to justify its irrational position -- that state water quality standards were somehow violated where they expressly do not apply -- by invoking EPA regulations that incorporate the ZID. *See* Region 9 Br. at 38-44. Those regulations, however, can only be reasonably understood as requiring ZID testing for secondary-treatment-related standards, which CCH did not violate at the ZID.

- 1. The term "applicable" water quality standards is defined by § 125.61 to mean standards for which a variance is requested.*

In its consolidated brief, CCH argued that the "applicable" water quality standards that, according to EPA regulations, CCH must satisfy at the ZID (40

C.F.R. § 125.62(a)(1)) are not, as Region 9 now contends, *all* water quality standards, but are just the standards “applicable to the pollutant(s) for which a section 301(h) modified permit is requested” (40 C.F.R. § 125.61(a)), which is the view Region 9 unerringly took in the twenty years before CCH applied for the 301(h) waivers in dispute. Because CCH, as it has always done, sought a waiver only for BOD and TSS, EPA’s regulations did not authorize Region 9 to deny the waiver on account of supposed violations, measured at the ZID, of water quality standards for other pollutants which the State requires to be measured at the ZOM. Region 9’s reliance upon those irrelevant findings is error.

2. *Region 9’s proposed alternative definitions are inconsistent with the regulatory text.*

Significantly, Region 9 agrees with CCH that the term “applicable” should have the same meaning as it “is used in both sections 125.61 and 125.62(a).” Region 9 Br. at 41.¹ Yet the two novel meanings of “applicable” that Region 9’s Brief advances are plainly contradicted by the text of 125.61(a). “Applicable water

¹ Inasmuch as Region 9 contends that the two regulations use “applicable” to mean different things, the most reasonable meaning of “applicable” in its context in 125.62(a)(1) (*i.e.*, an applicant’s discharge must “not exceed at and beyond the zone of initial dilution . . . all applicable water quality standards”) refers to standards that must be met at the ZID (as specified in the immediately preceding section 125.61). *See* Webster’s Third New Int’l Dictionary 105 (unabridged ed. 2002) (defining “applicable” as “capable of being applied” and “fit, suitable, or right to be applied”). The regulation thus requires an applicant to demonstrate it can comply with all standards capable of or suitable for being applied at the ZID. Because CCH has obtained ZOMs for its two plants, and because the relevant ZIDs are within those ZOMs, *no* state standards are capable of or suitable for being applied at the ZID, other than the standards expressly mentioned in the plants’ permits as applying at the ZID -- light extinction coefficient, turbidity, and dissolved oxygen.

quality standards” means what the text of that regulation states expressly -- “standards applicable to the pollutant(s) for which a section 301(h) modified permit is requested.” 40 C.F.R. § 125.61(a). It thus cannot mean, as Region 9 non-textually proposes, standards applicable to the “receiving waters” (*see* Region 9 Br. at 41) or standards applicable to Section 301(h)(2) requirements. *See* Region 9 Br. at 42. Region 9 has so utterly failed to grasp the import of the regulatory text that it even falsely accuses CCH of relying upon just the *heading* of 125.61 in support of its interpretation of “applicable water quality standards.” *See* Region 9 Br. at 41. It is the *text* of 125.61 -- not its title -- that defines the water quality standards at issue as the standards “applicable to the pollutant(s) for which a section 310(h) modified permit is requested.” 40 C.F.R. § 125.61(a).

In addition to being irreconcilable with the regulatory text, Region 9’s proposed meanings of “applicable water quality standards” are unreasonable on their own. In its first and broadest reading, Region 9 suggests that “applicable” simply differentiates between standards that apply to “the receiving waters” and those that do not; in Region 9’s own words, “standards for marine water could be ‘applicable’ in a 301(h) analysis, but standards for freshwater would not.” Region 9 Br. at 41. Yet on that view, without the word “applicable” the regulations would have authorized Region 9 to deny CCH’s applications on the ground that Sand Island and Honouliuli failed freshwater water quality standards. That is absurd.

Congress expressly limited the availability of 301(h) waivers to publicly owned treatment works that discharge “into marine waters,” *i.e.*, deep-sea waters and certain saline estuarine waters. *See* 33 U.S.C. § 1311(h). By Congress’s prescription, marine water quality standards are the only relevant standards to begin with. Thus, on Region 9’s view, “all applicable water quality standards” has the same meaning as “all water quality standards,” rendering “applicable” totally meaningless. But “a court should interpret a regulation so that, ‘if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant.’” *Morales v. Sociedad Espanola de Auxilio Mutuo Y Beneficencia*, 524 F.3d 54, 59 (1st Cir. 2008), *cert. denied*, 129 S. Ct. 898 (2009) (quoting *TRW Inc. v. Andrews*, 534 U.S. 19, 31 (2001)). This is particularly true when another regulation -- in this case, 125.61(a) -- supplies a ready, reasonable meaning for the word.

In its second proposed reading of the word, Region 9 suggests that “applicable” is a “historical vestige” from EPA’s original regulations and supposedly refers “to water quality standards related to protection of aquatic life or related to recreation,” which include more than BOD and TSS. Region 9 Br. at 42-43. As a general matter, what “applicable” might have meant in superseded regulations says little about its present meaning, since it is not a term-of-art but rather derives its meaning from how it is used. (If anything, by keeping the term

“applicable” in 125.61(a) and 125.62(a) while deleting it from subsections related to biological and recreational impacts -- the subsections on which Region 9’s “historical vestige” argument hinges -- EPA signaled that the meaning of “applicable” should be read afresh in light of its more limited use.)

3. *Region 9’s proposed alternative definitions are inconsistent with Region 9’s previous position and practice.*

Region 9’s pontification about the possible meaning of the superseded regulations is refuted by actual practice under them. Never before have CCH’s 301(h) waiver applications turned on compliance with state water quality standards evaluated at the edge of the ZID (except for the standards for TSS and BOD, those being the “applicable” pollutants for which CCH sought secondary-treatment waivers). *See, e.g.*, 1988 Honouliuli Tentative Decision at 24, Doc. H.12.3, p. H-12-1116 (“Although dimensions of an approved ZOM would take precedence in determining compliance with State water quality standards, the zone of initial dilution was recalculated by Tetra Tech, Inc. (1987) to determine compliance with 301(h) regulations *for parameters for which the applicant is requesting a variance (i.e., BOD and SS).*”) (emphasis added); 1998 Sand Island Tentative Decision at 13, Doc. S.12.1, p. S-12-13 (“Applicable standards is defined in subsection 125.61 as those standards for pollutants for which the modified permit is requested.”).

In fact, Region 9 essentially admits that its present view of 125.62(a)(1) is a change from prior practice under the superseded *and* present regulations. *See*

Region 9 Br. at 45-47. To support the shift, Region 9 relies upon the rule that an agency *may* change its interpretation of regulations, without establishing that the new interpretation is better than the old, so long as the change is acknowledged and the new interpretation is reasonable. *See FCC v. Fox Television Stations, Inc.*, 129 S. Ct. 1800 (2009). But that rule, which serves principally to limit judicial involvement in agency affairs, does not mean that an agency *should* change positions without a good reason. Here, Region 9's principal justification for the change, supplemented by what Region 9 holds out as EPA's current authoritative policy,² is that its old view was an impermissible interpretation of the regulations. *See* Region 9 Br. at 46. Whatever the incongruities of the old view,³ it was not impermissible and, in fact, remains the most reasonable reconciliation of the regulatory text and statutory context.

² Region 9 seeks shelter in EPA's September 1994 Amended Technical Support Document (ATSD), which in one sentence suggests that all state water quality standards must be met at the ZID. *See* Region 9 Br. at 42. But the ATSD, in its Preface, expressly disclaims that it should be relied upon in this way: "The guidance provided in this TSD . . . does not establish or affect legal rights or obligations. It does not establish a binding norm and is not finally determinative of the issues addressed." Doc. S.19.4, p. S-19-153. *See also* the ATSD's Acknowledgement, which explains that the ATSD is a "guidance document" prepared "by Tetra Tech, Inc. for the U.S. Environmental Protection Agency." Doc. S.19.4, p. S-19-154; *see Alaska Dep't of Env'tl. Conservation v. EPA*, 540 U.S. 461, 487-488 (2004) (EPA's internal guidance documents do not deserve deference).

³ Region 9 argues that using the meaning of "applicable" from 125.61(a) would cause 125.62(a)(2) to make no sense insofar as it relates to carcinogens. *See* Region 9 Br. at 42.

4. *Region 9's previous position was the most reasonable reconciliation of the regulatory text and the statute. Its present position is inconsistent with the statute.*

Section 301(h) waivers exempt a public works treatment plant from installing costly secondary treatment, and, as EPA clearly agrees, secondary treatment directly ameliorates the problems of only BOD, TSS, and pH. *See* 40 C.F.R. §§ 125.619(a), 133.102 (defining the minimum effluent quality attainable by secondary treatment in terms of just those three pollutants); *see also* Secondary Treatment Information, 48 Fed. Reg. 52,272, 52,273 (Nov. 16, 1983) (“[N]utrients . . . were not specified for inclusion, because secondary treatment, under normal conditions, does not effectively or consistently remove them.”). To condition a 301(h) waiver on compliance with water quality standards unrelated to and unaffected by secondary treatment would be arbitrary and, hence, unlawful.

A reasonable interpretation of regulations is one that conforms to their purpose. *See Martin v. Occupational Safety & Health Review Comm'n*, 499 U.S. 144, 151 (1991). No rational regulatory purpose supports Region 9's view that all state water quality standards must be met at the ZID. That view not only transforms the 301(h) application process into a redundant permit-compliance proceeding; but by adopting the ZID instead of the ZOM for every standard, that view makes the 301(h) application process *more* demanding than permit-compliance proceedings. Such an interpretation would negate Congress's goal of

making it easier for seaside public works to discharge into marine waters. *Cf. Morales*, 524 F.3d at 61 (“Presented with an imprecise statute, an unenlightening regulation, and an absence of any clear agency interpretation of what that regulation means, we must rely on the manifest purpose of the statute to interpret the critical statutory phrase.”).

Indeed, construing and applying the regulations, as Region 9 does, to require compliance with all state water quality standards at the edge of a ZID within the borders of a state ZOM would be an unlawful derogation of congressional intent.⁴ *See Chevron, U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 843 (1984) (an agency “must give effect to the unambiguously expressed intent of Congress”).

A central feature of the Clean Water Act is deference to a state’s knowledge of local conditions reflected in the state’s water quality standards and mixing zones.

⁴ Region 9 contends that, to the extent CCH challenges 40 CFR § 125.62(a), it is too late. *See* Region 9 Br. at 39 & n.30 (discussing 33 U.S.C. § 1369(b)). Section 1369(b)(2) bars judicial review of “[a]ction of the administrator” that could have been reviewed under § 1369(b)(1). 33 U.S.C. § 1369(b). Region 9 argues that CCH’s arguments should have been made in an action brought under § 1369(b)(1)(E), which govern actions challenging the administrator’s action “in approving or promulgating any effluent limitation or other limitation under section 1311, 1312, 1316, or 1345 of this title,” *Id.* § 1369(b)(1)(E) (emphasis added). Section 1369(b)(1)(E) provides the exclusive means for pre-enforcement, facial challenges to certain of the administrator’s regulations -- thus the emphasis on the administrator’s approval or promulgation of regulations. CCH’s arguments, however, are neither facial attacks nor pre-enforcement challenges; CCH is not challenging the approval or promulgation of a limitation. Rather, CCH challenges Region 9’s *novel and unlawful interpretation and application* of the regulation to CCH in its 301(h) waiver proceedings, neither of which CCH could have foreseen in the 1990s when Region 9 was interpreting and applying the regulation in a different, correct way. (In all events, as argued in CCH’s consolidated brief, CCH is not challenging “any effluent limitation or other limitation,” nor should § 1369(b)(2) be read to apply to administrative appeals before the EAB. *See* CCH Br. at 22 n.16.) Also, CCH could not have challenged the regulation when it was issued. *Id.*

Region 9 contends that Congress's principal intent in Section 301(h) was to ensure that the reference to "initial mixing" not be "interpreted expansively." Region 9 Br. at 41. But since testing at the ZOM defers to states' assessments of local conditions, the regulations would interpret "initial mixing" too expansively only if they authorized testing *beyond* a state-approved ZOM, which they do not. See 40 C.F.R. § 125.58(dd). Region 9 claims that Congress's preference for state expertise is cabined by EPA's oversight role in approving state water quality standards and mixing zones. See Region 9 Br. at 45. But that ignores the fact that EPA's oversight is restricted to approval through separate processes, which EPA has admitted afford it ample opportunity to evaluate state standards and mixing zones. See CCH Br. at 27-28. Region 9 also observes (Region 9 BR. at 38) that Hawaii requires ZOMs to comply with Section 301(h). See HAR § 11-54-9(c)(7), Doc. S.19.1, p. S-19-50. Though true, the observation tells nothing about what Congress intended in Section 301(h) or that Hawaii's ZOMs are subservient to ZIDs.⁵

⁵ Region 9 argues that its interpretation and application of Section 125.62(a)(1) cannot conflict with Hawaii's water quality standard for ZOMs, HAR § 11-54-9, because that standard does not define a particular ZOM, but just defines the process and criteria for obtaining one. See Region 9 Br. at 35-38. EPA, however, has recognized that state regulations expressing policies on mixing zones, though they do not define individual mixing zones, are just as important as state water quality standards. See 63 Fed. Reg. 36,742, 36,787 (July 7, 1998) ("States . . . may adopt policies on mixing zones If included in their water quality standards or other implementing regulations, States . . . are required to submit such policies to EPA for review and approval. *The policies governing the implementation of water quality standards are inseparable from the standards themselves*") (emphasis added)). Furthermore, in CCH's case, it has

In short, in nothing that Region 9 identifies did Congress override the statutory policy of deference to state standards, including state mixing zones, which are the very premise of the 301(h) waiver regime. *See* CCH Br. at 25-26. If EPA believes the state mixing zones are inadequate, all it has to do is disapprove the state standards. But EPA approved the Hawaii standards at issue here, including the state mixing zones. When a permittee applies for a 301(h) waiver of secondary treatment, the regulations leave it open for the Region to apply a stricter federal mixing zone for the secondary treatment related standards for which the waiver is requested -- here, BOD and TSS. But beyond those standards, there is no justification in the regulation or the statute for refusing to defer to the EPA-approved state mixing zones.

II. REGION 9 ERRED IN CONCLUDING THAT CCH DID NOT MEET SECTION 301(h)(2).

Relying entirely on violations of state water quality standards, erroneously measured and calculated at the ZID, Region 9 concluded that CCH's plants failed Section 301(h)(2) -- *i.e.*, that their effluent will interfere "with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of

complied with Hawaii's regulations and has obtained state- and EPA-approved ZOMs for both plants. Those ZOMs are equally an expression of state policy and knowledge of local conditions. While Region 9 is correct in saying that a ZOM is not "a permanent entitlement," (*see* Region 9 Br. at 37), that is irrelevant where, as here, CCH's entitlement is embedded in permits that remain in effect.

shellfish, fish, and wildlife, and allows recreational activities,” 33 U.S.C.

§ 1311(h)(2) -- even though the biological and empirical data did not support finding any impact on the environment and recreation. *See* CCH Br. at 30-31 (discussing Region 9’s findings and conclusions); *see also* Region 9 Br. at 50-51 (same). That determination must be reversed because, as just shown, state water quality standards cannot be violated where they do not apply.

It must be reversed for another reason, too: by exclusively relying on water quality standards violations in the face of uniformly contradictory biological and empirical data, Region 9 unlawfully transformed Section 301(h)(2) into a standards-enforcement provision. As its plain language states, the focus of Section 301(h)(2) is harm to public water supplies, aquatic life, and recreation. When, despite technical violations of water quality standards, all the biological and empirical data show no harm, Section 301(h)(2) is satisfied.⁶ Yet when, as in this case, the region reaches the opposite conclusion -- *i.e.*, when it acknowledges the uniformly favorable data yet nonetheless concludes, solely because of the technical water quality standards violations, that Section 301(h)(2) has not been satisfied -- the region effectively makes Section 301(h)(2) into a standards-enforcement

⁶ Region 9 faults CCH for arguing that compliance with water quality standards “should not even be considered in the 301(h)(2) analysis.” Region 9 Br. at 54. That inaccurately characterizes CCH’s position. CCH agrees that water quality standards are not wholly irrelevant to Section 301(h)(2). When, for instance, the biological and empirical data are mixed, a region may decide to give dispositive weight to the unfavorable data because of the permittee’s prior violations of water quality standards.

provision that is entirely redundant with Section 301(h)(9) and the Clean Water Act's actual standards-enforcement provision, Section 402(a)(1) (which requires that permits comply with Section 301, including 301(b)(1)(C)'s requirement of effluent limitations "necessary to meet water quality standards").⁷ See CCH Br. at 29-30. Section 301(h)(2) must accomplish something distinct. But in asserting that water quality standards violations, by themselves, permit it to conclude that a permittee has violated multiple statutory provisions, Region 9 reads Section 301(h)(2) right out of the statute. It cannot do that. See *Earth Island Inst. v. Hogarth*, 494 F.3d 757, 765 (9th Cir. 2007) ("An agency may not ignore factors Congress explicitly required be taken into account.") (citation omitted); see also *Shelby v. Bartlett*, 391 F.3d 1061, 1064 (9th Cir. 2004) ("We must 'interpret statutes as a whole, giving effect to each word and making every effort not to interpret a provision in a manner that renders other provisions of the same statute inconsistent, meaningless or superfluous.'") (citation omitted).

⁷ In a footnote that repeats the mischaracterization of CCH's position, Region 9 halfheartedly suggests that CCH has not preserved its argument. See Region 9 Br. at 54 n.37 (asserting that CCH has not preserved the argument that water quality standards "should *never* be considered in the 301(h)(2) evaluation"). Region 9 admits, however, that the "drift" of CCH's comments on the tentative decisions was that the biological and empirical data should control because all of the data favored CCH. See *id.* Indeed, that was the clear meaning of CCH's comments, not just their "drift." Sand Island Comment C.4.1, at 7, Doc. S.1.5, p. S-01-127 (accusing Region 9 of "discount[ing] real-world biomonitoring of conditions in Mamala Bay"); Honouliuli Comment C4, at 6, Doc. H.1.5, p. H-01-166. In its Responses To Comments, Region 9 asserted that, despite the evidence, the water quality standards violations *alone* sufficed under Section 301(h)(2) (see Region 9 Br. at 51-53), and it is that new, honed justification that CCH's Brief attacks. See *In re Peabody W. Coal Co.*, 12 E.A.D. at 33, 46 n.58 (appellate arguments must confront "the permit issuer's subsequent explanations"); see also pp. 5-6, *supra* (discussing similar cases).

In support of its argument, Region 9 relies on statements by EPA tying water quality standards to Section 301(h)(2). *See* Region 9 Br. at 55-56. All the quoted statements, however, were made before Congress added Section 301(h)(9). Region 9 suggests that it would be “strange indeed” if Section 301(h)(9) changed the scope of analysis under Section 301(h)(2) (Region 9 Br. at 56 n. 38), but it is not so strange to think that Congress wanted to confine consideration of water quality standards to Section 301(h)(9) and have Section 301(h)(2) focus directly on harm and impact. Stranger is Region 9’s position that violations of identical water quality standards doom an applicant under both sections.⁸

In short, Section 301(h)(2) focuses exclusively on actual environmental impact. Section 301(h)(9), on the other hand, provides for enforcement of EPA water quality criteria, which State standards typically reflect. To conclude, as Region 9 does, that water quality standards violation are the *sole* basis for finding a violation of Section 301(h)(2) converts that provision into a mechanism for enforcing water quality standards and makes Section 301(h)(9) redundant, contrary to basic principles of statutory construction.

⁸ Region 9 further argues that permitting water quality standards to be considered under Section 301(h)(2) would not “make Section 301(h)(9) superfluous.” Region 9 Br. at 56 n.38. Although CCH strenuously disagrees with Region 9’s background view that *all* water quality standards may be considered under Section 301(h)(9), it is worth pointing out that, on Region 9’s view of the two sections, Section 301(h)(2) is the provision made superfluous.

III. REGION 9 ERRED IN REFUSING TO CONSIDER THE SAND ISLAND DATA SHOWING SUCCESSFUL DISINFECTION OF PRIMARY TREATED EFFLUENT.

When CCH alerted Region 9 to the results of the successful, experimental test of disinfection on primary treated effluent at Sand Island, Region 9 responded that it was too late for CCH to bring up disinfection and to alter its application to include disinfection of primary treated wastewater. *See* Honouliuli Comments C5.3 & C21 and Responses at 8, 27-29, Doc. H.1.5, pp. H-01-168, H-01-187 - H-01-189. It treated CCH's comments as attempts to submit the information and alter the Honouliuli application, but then rejected the attempts for failing to satisfy the diligence exception to the bar on post-TDD application changes. *See* 40 C.F.R. § 125.59(g)(2)(i) ("Applicants seeking authorization to submit additional information . . . must . . . demonstrate that they made a diligent effort to provide such information with their application but were unable to do so."). In Region 9's own words:

EPA regulations do not allow applications for permit renewal to be revised in most circumstances subsequent to a tentative decision, as set forth in 40 CFR 125.59(d)(5).

While EPA regulations at 40 CFR 125.59(d)(3) and 125.59(g) allow revisions in some circumstances when the applicant has additional information it was previously not able to provide despite diligent efforts, and EPA has specifically authorized the submission of such information, those provisions do not apply here, *as CCH has been aware for several years that it would not be able to meet the new criteria for bacteria.*

Honouliuli Response To Comments C21, at 29, Doc. H.1.5, p. H-01-189 (emphasis added); *see* Region 9 Br. at 61-62.

Region 9 persists with that position, believing that CCH could have (and should have) raised disinfection in its renewal application, and the revisions and clarifications thereto, because CCH should have known that Honouliuli's discharge had exceeded criteria for bacteria. Region 9 concedes that there were no binding bacteria standards when the application was filed, but says that CCH knew they were coming. Region 9 Br. at 59-60, 64-65. But even if one accepts Region 9's position that CCH was bound to comply with regulations that were then only proposed, these regulations tell us nothing about when CCH became aware of the disinfection solution it later proposed. Region 9 does not disagree that, even now, disinfection of primary treated effluent is "not well understood" (Sand Island Final Decision at 48, Doc. S.1.2, p. S-01-50), notwithstanding the successful experiment at Sand Island. Before those results, it would have been foolhardy for CCH to have proposed an unproven solution to Honouliuli's (supposed) bacteria problem.

Moreover, CCH was contesting the relevance of the bacteria violations, which were overwhelmingly at levels well below the depths that recreational divers reach. CCH made that contention during the comment period here, and it was a good-faith contention. Honouliuli Comment C20 and Response, at 25, 26, Doc. H.1.5, pp. H-01-184, H-01-185. Indeed, the Hawaii Governor recently signed

legislation limiting the depth at which the bacteria standards apply. *See* p. 30-31 *infra*.

It is true, as Region 9 notes, that CCH formally and timely proposed the same method of disinfection in Sand Island's 301(h) waiver application, which, like the Honouliuli application, was filed before CCH had the results of its disinfection experiment. *See* Region 9 Br. at 65-66. But the discrepancy does not mean that CCH was not diligent in failing to propose disinfection at Honouliuli. At the time the Sand Island application was filed, Sand Island was gearing up for an experimental test of disinfection, after a year of which EPA was to decide whether to require disinfection at Sand Island. *See* 1998 Sand Island Permit J.7, Doc. S.12.2, p. S-12-165 ("Following at least one year of continuous operation of the Sand Island WWTP Disinfection Facility, at the request of the Permittee, the EPA and DOH will re-evaluate the need for continuous effluent disinfection."). CCH understood that disinfection at Honouliuli was to await the results of the Sand Island experiment; as the Honouliuli permit stated, "If the results of [the Sand Island] monitoring program indicate that disinfection of the Sand Island WWTP effluent shall be required, disinfection of the Honouliuli WWTP effluent shall also be required."² 1991 Honouliuli Permit at 60, ¶20, Doc. H.12.4, p. H-12-1228.

² Region 9 argues that disinfection had already been "required" at Sand Island before the experiment because Sand Island's 1998 permit "required" the experiment. *See* Region 9 Br. at 66 n.49. As noted in the text, however, the Sand Island permit is clear that the decision to

Region 9, in arguing that CCH should not have waited for the Sand Island results but should have formally proposed to run a redundant experiment at Honouliuli, now seeks to penalize CCH for doing exactly what Region 9 asked.

Accordingly, CCH diligently raised the possibility of disinfection at Honouliuli. Perhaps in recognition of its tenuous position, Region 9 for the first time asserts that it was right to overlook the possibility of disinfection because CCH failed to invoke formal procedures to have Region 9 address the possibility of disinfection at Honouliuli. *See* Region 9 Br. at 62-64. Although Region 9 claims that CCH's comments did not even appear to raise the possibility of disinfecting Honouliuli's primary treated effluent (*see* Region 9 Br. at 63), Region 9's actual response (quoted above) is strong contrary evidence, since Region 9 rejected CCH's position on grounds that apply only to attempts to raise new information.

In any event, CCH's comments substantially complied with procedures; since no "plan of study" was necessary to convey the results of Sand Island's experimental use of disinfection, CCH only needed to be diligent in seeking authorization to submit additional information. *See* 40 C.F.R. § 125.59(g). And as just shown, CCH diligently alerted Region 9 to the favorable Sand Island

require disinfection at Sand Island was to follow the experiment. In that respect, the 1998 Sand Island permit was an extension of, and not materially different from, Sand Island's 1990 permit, which originally established the bacteria and disinfection monitoring program incorporated by reference in Honouliuli's 1991 permit. *See* 1990 Sand Island Permit C.3, Doc. S.12.5, S-12-2004 – S-12-2005 (describing Sand Island's original disinfection-related monitoring program, including a 12-month test of disinfection, after which the Director was to "make a final determination concerning disinfection requirements").

disinfection data, the new information justifying disinfection at Honouliuli. Furthermore, to require strict compliance with the formal amendment procedures would unfairly sandbag CCH. CCH had been actively contesting Region 9's conclusion that there even were violations of the bacteria standards at Honouliuli, yet Region 9 insists that it will not consider "alternative discharge proposals." Region 9 Br. at 64. The Region's position, essentially, is that applicants must either concede alleged violations that they plan to challenge in good faith and propose remedies, or else limit themselves to a challenge of the violations and risk having an application denied altogether. That is inconsistent with the fair procedures to which EPA is committed.

IV. REGION 9'S FINDING THAT THE HONOULIULI DISCHARGE COULD NOT MEET BACTERIA WATER QUALITY STANDARDS WAS ARBITRARY AND CAPRICIOUS.

A. CCH's Challenge to the Bacteria Findings is Not "Academic."

CCH has challenged two elements of Region 9's conclusion that bacteria violations preclude a 301(h) waiver for the Honouliuli discharge: (1) the Region's refusal to consider disinfection without secondary treatment as a remedy; and (2) the Region's finding of violations based on application of the geometric mean measurement to single samples. We have discussed in point III above CCH's challenge to the Region's refusal to consider disinfection without secondary

treatment as a remedy. That challenge is not “academic,” and we do not understand the Region to argue that it is.

Region 9 argues that CCH’s challenge to its use of the geometric mean measure as applied to single samples is “purely academic,” because geometric mean measurements for 2007 and 2008 were based on multiple samples and are not challenged by CCH, and because there were single sample violations that CCH does not challenge. Region 9 Br. at 69-70, 74.

But Region 9 based its decision on its conclusion that “water quality criteria were consistently exceeded from 2005 through 2008 due to the discharge.” Honouliuli Final Decision at 59, Doc. H.1.2, p. H-01-61. That includes the data from 2005 and 2006 when geometric means were calculated based on single samples. Region 9 referred to the data from 2007 and 2008 as “confirming” the prior data. *Id.* But data that are meaningless cannot be “confirmed.” The crucial question is whether Region 9 would have come to the same conclusion on the basis of the 2007 and 2008 data alone, and Region 9’s Final Decision does not answer that question. Moreover, Region 9’s final conclusion also apparently rests on an assumption we now know to be an error -- *i.e.*, that secondary treatment was needed to allow disinfection. *Id.* at 59-60, pp. H-01-61 - H-01-62.

Region 9’s “Conclusion” regarding bacteria violations for Honouliuli contains five paragraphs. *Id.* The first sets forth Region 9’s general conclusion

that the Honouliuli discharge does not meet current water quality standards based on EPA's review of monitoring data and EPA criteria for bacteria. The second and third paragraphs set forth the detailed basis for this conclusion.

The second paragraph refers to later measurements taken "when sampling was increased." *Id.* at 59, p. H-01-61. The third paragraph describes sampling in 2005 and 2006, where geometric mean violations were found on the basis of single samples, as well as sampling in 2007 and 2008, when multiple samples were used. Neither paragraph makes clear whether the two groups of samples were considered cumulatively, or as separate bases for the ultimate finding.

The ambiguity created by the second and third paragraphs is not resolved by the remaining two paragraphs of Region 9's "Conclusion." The fourth paragraph emphasizes that Region 9 is relying on its now outdated assumption that secondary treatment is needed for successful disinfection -- thus ignoring the results of the recent Sand Island test showing that disinfection works for primary treated effluent. And the fifth paragraph makes a prediction of continuing violation unless secondary treatment is used -- a prediction that also ignores the possible use of disinfection in combination with primary treatment.

In sum, Region 9 has not made it clear whether it would have adhered to its general conclusion of failure to meet the bacteria standards, if the Region's

positions on geometric mean measurements based on single samples were invalidated. Accordingly, the Court must reach CCH's challenge on this issue.

As previously pointed out, this Court's review "is concerned with the adequacy of the decisions actually rendered rather than decisions that might have been." *In re Mille Lacs*, 2002 WL 31009339. Because the decision actually rendered depended in large part on invalid geometric mean measurements from 2005 and 2006, as well as the now outdated assumption that secondary treatment is needed for disinfection to work, "the more appropriate course under the circumstances is to remand the case to the Region" so the Region can determine whether the 2007 and 2008 data by themselves are sufficient to justify denial of the 301(h) waiver. *In re Mille Lacs, supra*.

On remand, Region 9 would also have to consider the impact of recent Hawaii legislation. On June 16, 2009, the Governor of Hawaii signed legislation that adopts State water quality standards for *Enterococcus* for all waters up to three miles from shore to a depth of 33 meters. State of Hawaii, Act 126, 25th Legislature, 2009 (copy appended as Attach. 1). This legislation represents, among other things, a policy judgment by the State as to what depths must be reached in Hawaii by bacteria protection standards to protect recreational divers.¹⁰ If

¹⁰ In testimony supporting the legislation, the Hawaii Director of Health stated that "we understand that most recreational diving activity occurs within thirty-three meters of the surface." Committee on Finance, SB 1008, HD1 Relating to Water Quality Standards,

approved by EPA, these standards would replace the federal Enterococcus standard that Region 9 found was violated here. While the new legislation retains the 35 cfu geometric mean standard and the 501 cfu single sample standard that Region 9 found were violated, the 33-meter depth limitation would eliminate most of the violations Region 9 relied on as a basis for disqualifying Honouliuli. Region 9 relied primarily on findings of violation at the bottom sampling stations, and the offshore bottom stations were located at 41 to 102 meters (134 to 335 feet).

Honouliuli Final Decision at 50, Doc. H.1.2., p. H-01-52. If bacteria readings were limited to ZOM stations at the surface and middle depths above 33 meters, and to geometric means from 2007-2008 and single samples, there would be very few violations left and it is unclear whether Region 9 would find sufficient violations to disqualify CCH's application. *Id.* at 50-54, pp. H-01-52 - H-01-56.¹¹

Testimony of Chiyome Leinaala Fukimo, M.D., Director of Health (April 6, 2009), at 3. A HDOH rationale document attached to the Director's testimony explained: "While DOH acknowledges that commercial and extreme/adventurous water contact activities occur in waters deeper than 33 meters, the attendant dangers, limited light, and bottom time restrictions qualify these as non-recreational activities (Environmental Planning Office, 2005) that appear to pose greater risks to the health of divers than would high Enterococcus counts." HDOH, Rationale for the Proposed Revisions to Department of Health Water Quality Standards (March 18, 2009) at 11. A copy of Ms. Fukimo's testimony, with the attached HDOH rationale document, is appended as Attach. 2.

¹¹ Using the State of Hawaii's recently adopted water quality standards, there were 5 mid-depth and 1 surface exceedance of the geometric mean standard and 3 mid-depth and 3 surface exceedances of single sample standard at the ZOM at the 33 meter depth or less for the 2007-2008 period. (This count excludes station HM3, which is at 51 meters.) These exceedances were out of a total of 184 samples in 2007 and 174 samples in 2008 (excluding station HM3). See Honouliuli Final Decision at 129, 132 Tables 11b, 11e, Doc. H.1.2, pp. H-01-131, H-01-134.

B. There Was No Basis For EPA's Use of Geometric Means Based on Single Samples.

Region 9's brief does not contest its own statement (in the Honouliuli Final Decision) that the geometric mean "represents the central tendency of a series of data points." Honouliuli Final Decision at 48, Doc. H.1.2, p. H-01-50. Nor does the Region's brief explain how a measurement based on one data point can measure the central tendency of "a series of data points." Instead, the Region argues that because the water quality standards included a geometric mean standard, it was obligated to make a finding of a geometric mean -- even where the data needed for a valid geometric mean measurement did not exist. Region 9 Br. at 72-73.

This is an astonishing argument. Most agencies have findings the governing statute requires them to make in cases that come before them. Yet until now, we are unaware that the government has ever argued that the legal requirement to make a finding excuses the lack of evidence to support it. Region 9 has cited no case that has so held, and we are aware of none.

Region 9 quotes the statement it made, in its response to comments, that adequate data would have been available "[i]f CCH had monitored more frequently." Region 9 Br. at 73 (quoting Honouliuli Response To Comment C16, Doc. H.1.5, p. H-01-180). But CCH was monitoring in accordance with the requirements of its permit, which Region 9 reviewed and approved. If Region 9

was dissatisfied with the frequency of monitoring, the remedy was to require more monitoring, not to rely on inadequate data. (EPA never did require more frequent monitoring; CCH voluntarily increased the frequency in 2007.)

Region 9 does not attempt to base use of single-sample geometric means on EPA's own BEACH Act regulations, but instead argues that it "used Hawaii's geometric mean provisions for nearshore waters as guidance and calculated a geometric mean using whatever samples -- *or sample* -- were taken that month. Region 9 Br. at 76 (emphasis added). But Region 9 does not explain how reliance on a single sample squares with the Hawaii standard's requirement that where there are fewer than five samples in thirty days, the geometric mean must be measured on the basis of "these *samples*" (in the plural) (emphasis added). HAR § 11-54-8(b)(2), Doc. S.19.1, p. S-19-47. Nor does Region 9 explain how its disregard of the requirement for "samples" (in the plural) squares with the conceded purpose of a geometric mean to measure the central tendency of "a series of data points" (also in the plural). Honouliuli Final Decision at 48, Doc. H.1.2, P. H-01-50.

Finally, Region 9 argues that it "reinforced" its conclusion based on single samples by calculating the geometric mean based on data averaged over a year's period. Region 9 Br. at 76-77. It concedes that such a method of calculation is not consistent with Hawaii's requirement of calculating geometric means based on

data taken within a 30-day period. Region 9 Br. at 76. Nor is it consistent with EPA's preamble to its BEACH Act criteria, which suggests that States might stretch the averaging period for as long as the summer recreation period. 69 Fed. Reg. 67,218, 67,224 (Nov. 16, 2004). In addition, it resorted to another method that it concedes is "not favored" -- *i.e.*, averaging measurements at different depths. Region 9 Br. at 76-77. Region 9 does not explain how a series of measurements that do not comply with applicable requirements can make up for measurements that do. That is certainly not the approach Region 9 takes with test data applicants submit to it -- as illustrated in this case by the Region's rejection of test results submitted by CCH for dieldrin concentrations relying on an alternative test method.

Finally, Region 9 seeks to rescue its finding by pointing out that in 2007 to 2008, it found violations based on three to six samples a month. Region 9 Br. at 77. However, as previously pointed out, Region 9 did not explain whether it would have placed sole reliance on the 2007 and 2008 geometric mean data, if the previous data were disregarded. Thus the Board cannot affirm based on the 2007 and 2008 data alone. *In re Mille Lacs, supra.*

V. REGION 9 DID NOT ADEQUATELY RESPOND TO COMMENTS QUESTIONING THE RELIABILITY OF THE TESTING IT USED TO SUPPORT ITS FINDING OF VIOLATIONS OF HAWAII'S TOXICITY STANDARD.

A. Region 9 Does Not Answer CCH's Comments Concerning the *T. Gratilla* Test.

1. *Region 9 did not explain the reason why it relied on a test that it had not approved for compliance testing under the permit.*

CCH's comments on the Sand Island permit had questioned why *T. gratilla* was considered reliable as a test species for whole effluent toxicity for purposes of eligibility for a 301(h) variance, when it had not been considered reliable enough for purposes of determining compliance with the Sand Island permit. Sand Island Comment C32, Doc. S.1.5, pp. S-01-151 - S-01-152. In response, Region 9 simply asserted that EPA used the *T. gratilla* test result "as part of its assessment of whether or not the proposed discharge would meet the requirements of section 301(h), not to determine compliance with the permit." Response to Sand Island Comment C32, Doc. S.1.5, p. S-01-152. That is an assertion, not an explanation. The only explanation Region 9 gave was that the toxicity limit in the permit was 94 TUc, while the Region used a limit of 103 TUc for its 301(h) testing. In our opening brief, we pointed out that Region 9 did not explain why a 94 TUc limit required more reliable testing than a 103 TUc limit. Nor did the Region explain why it was reasonable to allow a lesser standard of test reliability for measuring

compliance with water quality standards when the purpose was to determine 301(h) eligibility than when the purpose was to determine permit compliance.

In its Brief, Region 9 does not even attempt to defend the rationality of having looser standards for 301(h) testing than for permit compliance testing. Instead, Region 9 ignores that issue altogether and argues that the other reasons cited in its response to CCH's comments support the use of *T. gratilla* for 301(h) testing. Region 9 Br. at 79-91. Specifically, Region 9 argues that some other Hawaii permits allow use of the *T. gratilla* test for permit compliance testing, and that is a sufficient reason to support its use for 301(h) testing for this permit. Region 9 Br. at 88-89. Region 9 also argues that *T. gratilla* is a reliable test for various other reasons.

But government lawyers may not defend an agency decision without defending one of the principal reasons the agency gave for its decision. If there is no valid reason for the distinction drawn in Region 9's response to comments between testing for permit compliance and testing for 301(h) compliance (a distinction Region 9's brief does not defend), then Region 9's decision to base its finding of toxicity on *T. gratilla* testing has to be viewed in light of the invalidity of the principal reason it gave for its decision. Asking this Court to affirm Region 9's decision on the basis of the other reasons it gave amounts to a request to affirm

a decision “that might have been” rather than “the decision[] actually rendered.” *In re Mille Lacs*, 2002 WL 31009339.

Region 9 concedes that it “accommodated CCH’s request to not use the *T. gratilla* test for compliance purposes in the 1998 Sand Island permit.” Sand Island Response to Comment C32 at 33. It asserts that since then the State has “routinely” issued permits requiring *T. gratilla* use in compliance monitoring. *Id.* But Region 9 cites only two permits to support this assertion, and only one of these is a wastewater treatment plant where secondary treatment could be an issue. Region 9 Br. at Ex. A. (The other cited permit is for discharges from an electric generating station.) Moreover, the wastewater treatment plant permit Region 9 cites (Waialua WWTP) *already has secondary treatment*.¹² That means that if there is a violation shown by *T. gratilla* testing, the consequence would not be installation of secondary treatment (which the plant already has). Instead, as the permit itself requires, there would be a “Toxicity Reduction Evaluation,” possibly followed by a “Toxicity Identification Evaluation” -- all with the purpose of (i) finding out what pollutant was causing the *T. gratilla* test results and (ii) formulating a plan for resolving the problem. *Id.*, at 8-9. Even if the initial test results are deemed to be a permit violation, that does not change the fact that the

¹² Region 9 Br. at Ex. A, Waialua WWTP permit, at 1 (authorizing discharge of “secondary treated domestic wastewater”).

consequence of the violations is to initiate a search for an appropriate remedy to eliminate the cause. By contrast, Region 9 in this case is attempting to use *T. gratilla* as a device to require the CCH plants to adopt secondary treatment, which may or may not be the appropriate remedy for whatever pollutant may be causing these results.

For example, EPA itself, in discussing treatment options for toxic pollution for wastewater treatment plants, has stated that “[p]retreatment control options” may be developed.¹³ Additional pretreatment might be the result of a permit compliance proceeding that might emerge from *T. gratilla* testing under the permits Region 9 cites. But none of these permits is a precedent for imposing secondary treatment as a result of *T. gratilla* violations.

2. *Region 9 did not adequately explain why it ignored biological significance in assessing T. gratilla test results.*

In its brief, Region 9 asserts that the test results demonstrate “a continuing pattern of toxicity” resulting from the Sand Island and Honouliuli effluents. Region 9 Br. at 80. However, Region 9 is using the terms “toxic” and “toxicity” in a very special sense. Basically, the Region is now saying that a pollutant is toxic if

¹³ “Pretreatment control options can be developed by public works managers to prevent the pass-through of toxicants, toxicity, and inhibitory material that have been traced to indirect dischargers. The primary advantages of pretreatment control of toxicity are that a smaller volume of waste can be managed by addressing individual sources and the costs are usually the responsibility of the industrial users.” EPA, Office of Wastewater Management, Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002 (Aug. 1999), at 56 available at <http://h2o.enr.state.nc.us/esb/ATUwww/EPA%20Municipal%20TRE%20Guide.pdf>.

it causes *any observable effect*, whether biologically significant or not. That is certainly not the ordinary meaning of “toxic,” nor the meaning Congress has ascribed to the term. The Clean Water Act defines “toxic pollutant” as pollutants that “cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in [any] organisms or their offspring.” 33 U.S.C. § 1362(13). To justify its decision, Region 9 has been forced to rely on a broader definition of “toxic,” because the environmental data in this case show that the discharges have not been “toxic” in the usual sense of that word.

In its comments on the proposed decisions, CCH criticized the Region’s use of *T. gratilla* test results on the ground that the Region failed to consider whether the test results were biologically significant. In its opening brief, CCH argued that Region 9’s response to this comment was inadequate, because it addressed only whether the test was statistically significant -- *i.e.*, whether its results reliably reflected what actually happened in the real world. CCH argued that this response did not address the issue it had raised -- *i.e.*, whether what was happening in the real world was biologically significant. For example, if the test showed that the effluent reduced *T. gratilla*’s fertility rate from 95% to 90%, the result might be statistically significant, but not biologically significant.

Region 9 now argues the Hawaii water quality standards themselves have made the determination of “biological significance” by requiring that “the NOEC [no observed effect concentration] shall not be less than one hundred divided by the minimum dilution.” Region 9 Br. at 92.¹⁴ The key element of this test is the “No Observed Effect Concentration,” which the Hawaii standards define as meaning the highest concentration “which causes no observable *adverse* effect in a chronic toxicity test.” HAR § 11-54-4(b)(1)(D), Doc. S.19.1, p. S-19-13 (emphasis added). The EPA document that Region 9 itself cites as authoritative with respect whole effluent toxicity testing also explains that the “NOEC is the highest concentration of toxicant, in terms of percent effluent, to which the test organisms are exposed that causes no observable *adverse* effects.” EPA, Office of Water Enforcement and Permits, Technical Support Document for Water Quality-Based Toxics Control, EPA/505/2-90-001 (Mar. 1991) at 4, Doc. H.2.4, p. H-02-1831 (emphasis added). Region 9 obviously thinks that *any* effect on the *T. gratilla*’s fertilization rate qualifies as “adverse.” But the focus of Hawaii water quality standards is not just on *any* effect, but on effects that are “toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water.” HAR § 11-54-4(a)(4), Doc. S.19.1, p. S-19-13.

¹⁴ As Region 9’s brief explains, the one hundred figure is not a determination of biological significance. It is simply a designed to “convert the percentage value [of NOEC] into a decimal figure.” Region 9 Br. at 16.

In short, the Hawaii standard requires toxicity testing to show an “adverse” effect. By challenging Region 9’s failure to consider whether the *T. gratilla* test results showed effects that were biologically significant, CCH was challenging whether they were “adverse.”

Region 9 argues its studies “have confirmed that WET test results accurately predict real-world effects.” Region 9 Br. at 93-94. But that argument ignores the key issue, which is whether these “real-world effects” are biologically significant.

In addition, Region 9 argues that its “explanations based on statistics do not ignore biological significance.” Region 9 Br. at 94. But Region 9’s justification for this assertion rests solely on the so-called “PMSD” procedure, which Region 9 itself describes as a “statistical tool” that is designed to “ensure the tests were not unfairly evaluated due to the laboratory’s high level of test precision.” Region 9 Br. at 96, 102-3. That has nothing to do with the issue CCH raised -- which is not whether the test results were obtained with a high level of laboratory test precision or produced measurable real-world effects of the effluent, but rather whether those effects are biologically significant.

As part of its comments, CCH argued that the *T. gratilla* testing was deficient “relative to the biological variability inherent in this indigenous sea urchin.” Sand Island Response and Comments at II-17, Doc. S.2.1, p. S-02-54. Given that variability, CCH argued, small inherent fluctuations in fertilization rates

are not likely to be biologically significant. Region 9 now complains because in its brief CCH used a different analysis to describe the extent of the sea urchin's biological variability. CCH Br. at 52. But the basic point of CCH's comments was that the *T. gratilla* test's sole focus on statistical significance and its failure to consider biological significance was particularly important in light of the sea urchin's inherent biological variability. That point does not hinge on how that biological variability is measured.

Region 9's brief offers a new justification for failure to take biological variability into account in assessing the significance of fluctuating fertilization rates. It argues that the sea urchin's variability may result from resilience to "natural stressors"; that "[e]ffluent from POTW plants . . . is not [a] 'natural' stressor"; and that the Hawaii water quality requires that there be "no observed effect" from the POTW effluent at the critical initial dilution. Region 9 Br. at 101. Significantly, at this point of its argument Region 9 drops the word "adverse," interpreting the Hawaii standard to require "no observed effect," although, at other parts of its brief, Region 9 describes the standard as requiring no observed "adverse effect." Region 9 Br. at 16, 80 n.59. The latter description is more accurate, since, as previously described, Hawaii's standard incorporates the "NOEC" requirement, which EPA's technical documents define as "the highest concentration of toxicant . . . that causes no observable *adverse* effects." EPA,

Technical Support Document for Water Quality-Based Toxics Control at 4, Doc. H.2.4, p. H-02-1831 (emphasis added).

What Region 9 is really arguing is that *any* observable effect on the sea urchin's fertilization rate is *ipso facto* "adverse" and thus proscribed by the WET toxicity standard. In other words, *any* effect is deemed to be biologically significant. In short, biological significance does not matter, or is simply presumed. This is a significant issue, that Region 9 did not address in its Final Decision or its Response to Comments. It also represents an extreme view, contrary to the position EPA itself has taken in other contexts. For example, in carrying out the Clean Air Act's mandate to set air quality standards protecting public health with an adequate margin of safety, EPA takes the position that "a distinction must be made between health effects that are considered 'adverse' and those that are not."¹⁵ Adopting that view, EPA revised the air quality standard for ozone at a level it deemed necessary to protect the public against "an array of

¹⁵ EPA, Office of Research and Development, Air Quality Criteria for Ozone and Related Photochemical Oxidants, Vol. I, EPA 600/R-05/004aF (Feb. 2008) at 8-65, *available at* <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=149923>: "Exposure to ambient O₃ is associated with a variety of health outcomes, including increased incidence of cough, reduction in lung function, increased inflammation, and increased hospital admissions and mortality. In protecting public health, a distinction must be made between health effects that are considered 'adverse' and those that are not. What constitutes an adverse health effect varies for different population groups, with some changes in healthy individuals not being viewed as adverse but those of similar type and magnitude in other susceptible individuals with preexisting disease being seen as adverse."

adverse health effects,” which EPA identified at length.¹⁶ There is nothing in the statutory language of the Clean Water Act to indicate that EPA is relieved of the obligation it assumes under the Clean Air Act to identify whether a pollutant’s effects are adverse.¹⁷ This Court should not adopt such an extreme position based solely on the argument of EPA lawyers, particularly when it appears to be contrary to the position EPA has taken in another context -- notably, a context in which the issue is protection of human beings, not sea urchins. The case should be remanded on the biological significance issue, so that the Court may receive the benefit of the views of the agency itself on this important point.

B. Region 9 Did Not Adequately Explain Why Chlordane Readings That Complied with EPA Water Quality Criteria Were Not Sufficient to Meet Section 301(h)(9) and Why the Region Considered Compliance with EPA’s Criteria Irrelevant under Section 301(h)(2).

In its opening brief, CCH pointed out that Section 301(h)(9) requires the applicant’s discharge under the modified permit to “meet[] the criteria established

¹⁶ EPA concluded that revision of the standard “would result in increased public health protection, especially for members of at-risk groups . . . against an array of adverse health effects. These effects range from health outcomes that could be quantified in the risk assessment, including decreased lung function, respiratory symptoms, serious indicators of respiratory morbidity such as hospital admissions for respiratory causes, and nonaccidental mortality, to health outcomes that could not be directly estimated, including pulmonary inflammation, increased medication use, emergency department visits, and possibly cardiovascular-related morbidity effects.” 73 Fed. Reg. 16,436, 16,475-6 (Mar. 27, 2008).

¹⁷ Primary air quality standards under the Clean Air Act must be set at a level that, “allowing an adequate margin of safety, are requisite to protect the public health.” 42 U.S.C. § 7409(b)(1). Under the Clean Water Act, water quality standards must “protect the public health or welfare, enhance the quality of the water . . . taking into consideration . . . propagation of fish and wildlife. . .” 33 U.S.C. § 1313(c)(2)(A).

under section 304(a)(1) of the Clean Water Act.” CCH Br. at 44. Region 9 does not dispute that there were *no* exceedances of the “criteria established under section 304(a)(1) of the Clean Water Act” for chlordane from either the Honouliuli or the Sand Island discharges. Nevertheless, Region 9 found that because there were exceedances of the much stricter Hawaii water quality standard for chlordane, the requirement of Section 301(h)(2) had not been met with respect to chlordane.

CCH also pointed out that the criteria established under section 304(a)(1) must “accurately reflect[] the latest scientific knowledge” concerning the environmental and health effects of water pollution. *Id.* at 46. Section 301(h)(2) requires EPA to determine whether the proposed discharge would “interfere . . . with . . . protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allow[] recreational activities.” *Id.* CCH argued that it was arbitrary and capricious for EPA to conclude, as it did, that criteria reflecting the “latest scientific knowledge” on the impact of chlordane on aquatic life was “not relevant” to the issue of whether chlordane at the levels set by the criteria would interfere with a balanced, indigenous population of shellfish, fish, and wildlife. Response to Sand Island Comment C26, at 23, Doc. S.1.5, p. S-01-143.

On June 16, 2009, the Governor of Hawaii signed legislation that conforms the State water quality standard for chlordane to the current EPA criteria under

section 304(a)(1). (Attach. 1). The Hawaii Department of Health has already noticed a rulemaking proceeding and conducted a public hearing preparatory to submitting the standards revision to EPA. Upon EPA approval, this legislation will go into effect. There is no reason to believe that Region 9 will disapprove an amendment conforming Hawaii water quality standards to current EPA water quality criteria. The legislation shows that it is no longer true (if it ever was), that Hawaii believes a chlordane standard stricter than the federal criteria is necessary to protect the health of the citizens of the State.

1. CCH's comments sufficiently raised the issue.

Region 9 argues that CCH failed to raise the issue concerning compliance with the EPA water quality criteria during the comment period with sufficient specificity. On the contrary, CCH made the point with great specificity in its Sand Island Comments C25 and C26, which described the revised EPA water quality criteria for chlordane, described how they differed from the Hawaii water quality standard, and pointed out that using the revised water quality criteria "currently considered by EPA to be protective of a fish consumption pathway . . . the annual average concentration of chlordane in the effluent has never exceeded the protective level over the entire evaluation period of 2000-2007." Sand Island Comment C26 at 22-23, Doc. S.1.5, pp. S-01-142 - S-01-143. Region 9's response to makes it clear that the Region understood perfectly well that CCH had raised the

issue of whether the monitoring results were to be measured against the criteria adopted under section 304(a)(1), or against the stricter Hawaii water quality standard. Region 9's response stated:

The value cited in this comment, 0.00081 ug/L [the value specified in the EPA water quality criteria under section 304(a)(1)], is not Hawaii's water quality standard. Therefore, CCH's review of the monitoring data against this value is not relevant.

Response to Sand Island Comment C26, at 23, Doc. S.1.5, p. S-01-143. Similarly, EPA's response to the Honouliuli comments exhibited its understanding of that CCH had raised the issue of whether chlordane concentrations should be measured against the Hawaii water quality standard or the EPA water quality criteria. EPA said:

In sum, it is not valid to assess chlordane concentrations against an unapproved standard, *to assess results against general EPA guidance values when specific state water quality standards exist*

Response to Honouliuli Comment C23, at 32, Doc. H.1.5, p. H-01-192. (emphasis added).¹⁸

Region 9 also points out that CCH's comments raised another issue regarding chlordane that it has not reiterated in this appeal -- a typographical error

¹⁸ The implication that the EPA criteria are "general," as contrasted to Hawaii's "specific" water quality standard, is simply wrong. The criteria provide a specific numeric limit for chlordane (0.00081 ug/L) as does the Hawaii water quality standard (.000016 ug/L in the previous standard, .00081 ug/L in the new standard). EPA, Office of Water, Office of Science and Technology, National Recommended Water Quality Criteria (4304T) (2006), at 8 *available at* <http://www.epa.gov/waterscience/criteria/wqtable/nrwqc-2006.pdf>; Doc. S.19.1, p. S-19-15 (previous Hawaii water quality standard for chlordane). The level of specificity is identical.

in the Hawaii standard. Region 9 Br. at 104-5. However, for Sand Island, CCH made its typographical error point in a separate comment and Region 9 responded separately. Sand Island Comment C23 and Response, 20, Doc. S.1.5, p. S-01-140. And while CCH raised both issues in the same comment with respect to Honouliuli, Region 9's response showed that it well understood that CCH was complaining not only about a typographical error, but also about the separate issue of whether it was appropriate "to assess results against general EPA guidance values when specific state water quality standards exist." Response to Honouliuli Comment C23, at 32, Doc. H.1.5, p. H-01-192.¹⁹

Region 9 also mischaracterizes the argument CCH made in its opening brief, in its attempt to deny that CCH raised the issue in its comments. Region 9 characterizes CCH's opening brief as arguing that Hawaii's water quality standards "should not be considered at all," and on the basis of that mischaracterization says that the argument was not raised in CCH's comments. Region 9 Br. at 108. But CCH has never made that argument. Instead, with respect to Section 301(h)(2), CCH's opening brief argued that it was "legally erroneous for Region 9 to rely *entirely* on CCH's supposed violations of water quality standards for its findings of environmental and recreational harm." CCH Br. at 29 (emphasis added). And

¹⁹ As pointed out in n. 18 *supra*, there is no merit in the suggestion that the EPA criteria are general in contrast to the "specific" Hawaii water quality standards. Both specify a numeric limit for chlordane.

with respect to Section 301(h)(9), CCH's opening brief argued that Region 9 could validly rely on State water quality standards that EPA had approved as consistent with Section 304(a)(1) water quality criteria, but could not do so when the standards were concededly stricter than such criteria -- because under Section 301(h)(9) the federal criteria rather than the state standards are the ultimate measure of compliance. CCH Br. at 44-45. Neither argument suggests that Hawaii's water quality standards "should not be considered at all."

2. *Region 9's explanation of its position is not adequate.*

On the merits, Region 9 has not explained how it can justify deviation from the plain language of Section 301(h)(9), which requires the applicant to meet EPA water quality criteria, not the state water quality standard. The Region relies primarily on 40 C.F.R. 125.62(a)(1). However, as we have previously shown, that regulation applies only to "applicable" water quality standards, which 40 CFR 125.61(a) defines as the water quality standards related to secondary treatment: biochemical oxygen demand or dissolved oxygen, suspended solids, turbidity, light transmission, light scattering or maintenance of the euphotic zone, and pH. *See pp. 10-19 supra.*

Region 9 also argues that it would be "anomalous" to read Section 301(h)(9) to require compliance with EPA water quality criteria, when a permittee must also comply with the State water quality standards. Region 9 Br. at 110. But that is

what Section 301(h)(9) says. Region 9 may not ignore the plain language of the statute simply by dismissing it as “anomalous.”

Moreover, Section 301(h)(9), as written, is not “anomalous.” It is a list of conditions the permittee must meet to obtain a waiver from the secondary treatment requirement. It is not a list of the various conditions the permittee must meet to comply with its permit. Non-compliance with section 301(h)(9) requires the permittee to adopt secondary treatment, whereas non-compliance with the permit requires the permittee to adopt whatever measures are necessary to achieve compliance -- *measures that may or may not involve secondary treatment.*

Region 9 argues that Hawaii had a good reason to have a stricter standard for chlordane than the federal standard, because Hawaii has a higher rate of fish consumption per capita. Region 9 Br. at 111. However, the declaration Region 9 offers to support that conclusion falls woefully short. It states that the Hawaii chlordane standard is “approximately 3.1 times more stringent than the EPA Criteria, because the average daily consumption of fish locally was estimated to be approximately 3.1 times higher than the average underlying the EPA Criteria.” Doc. S.15.8, p. S-15-546. The HDOH document offered in support of this assertion states that the estimated Hawaii consumption is 19.9 grams per day -- 3.1 times the EPA estimated level of 6.5 grams per day. Doc S.5.4, p. S-05-98.

However, those figures, and the HDOH figures underlying them, are now outdated and have been withdrawn. As CCH explained in its comments, EPA revised upward its estimate of daily fish consumption, and its current criteria are based on an assumption of 17.5 grams per day. Sand Island Comment C25, at 22, Doc. S.1.5, p. S-01-142. That is a difference of only 12% from the Hawaii figure of 19.9 grams -- a difference that falls far short of justifying the five-fold difference between the EPA criteria and the Hawaii standard (or a fifty-fold difference if, as Region 9 insists, the typographical error in Hawaii's standard is ignored). Hawaii still has the right to maintain its current standard (although, as previously noted, its Governor has just signed legislation changing the standard to conform to the federal criteria²⁰). But Region 9 cannot rely on outdated (and now withdrawn) figures to pretend that a Hawaii standard five (or fifty) times stricter than the federal criteria can still be viewed an adaptation of the federal criteria to greater fish consumption rates in Hawaii. Moreover, Hawaii has recently accepted the EPA fish consumption figure as appropriate for the State.²¹

²⁰ In a rationale document submitted to the Hawaii legislature in support of the legislation, HDOH stated that its current estimation of fish consumption risk uses the federal figures. See HDOH, Rationale for the Proposed Revisions to Department of Health Water Quality Standards (March 18, 2009) at 5 (Attach. 2). HDOH explained that, because the Hawaii proposed standards provide for a 100-fold safety factor, "we have an adequate margin of safety in using the Federal numbers even for subsistence eaters because of the stringent cancer risk level." *Id.* at 6.

²¹ "Due to the lack of adequate current fish consumption data for Hawaii, we use the updated national default fish consumption rate (used to calculate the 2002 and 2006 EPA

C. Region 9 Has Not Adequately Responded To the Questions Raised By CCH Concerning the Test Results For Dieldrin.

- 1. Region 9 has not explained how its acceptance of less sensitive test results at Point Loma avoids penalizing CCH, in violation of EPA policy, for using a laboratory with more sensitive testing.*

CCH's opening brief raised one issue regarding dieldrin testing that Region 9 has not even attempted to address. CCH pointed out that Region 9's Tentative Decision on the application for a Section 301(h) variance for the Point Loma, California wastewater treatment plant accepted testing a maximum method detection limit (MDL) for dieldrin of 0.05 micrograms per liter (ug/L). That level is well *above* the water quality standard for California, and above the CCH permit limit based on the Hawaii water quality standards. CCH pointed out that if the same MDL had been in effect in this case, more than 88 percent of the reported violations would have been reported as no dieldrin detected. CCH argued that Region 9's reliance in this case on readings below the level of detection the Region found acceptable for Point Loma penalizes CCH for using a laboratory that employed a more precise method than the testing method CCH accepted for Point Loma. This violates Region 9's admitted policy to "avoid penalizing permittees

National Recommended Criteria) to calculate the proposed State criteria. This rate (17.5 grams/person/day) approximates the 90th percentile of freshwater/estuarine finfish and shellfish consumption estimates obtained for adult humans by the national survey . . . those consuming fish and shellfish at 100 times the average rate (almost 4 pounds per day) would still not exceed a 10⁻⁴ risk level. This provides for a 100-fold safety factor in the proposed standards." HDOH, Rationale for the Proposed Revisions to Department of Health Water Quality Standards (March 18, 2009) at 5-6 (Attach. 2).

which use laboratories that achieve unusually high precision in their toxicity tests.” CCH brief at 63, quoting Response to Honouliuli Comment C31, at 51.

Region 9’s response totally ignores CCH’s point. Instead, Region 9 asserts CCH was making a different point -- *i.e.*, that Point Loma was using the same test method (Method 8270) that CCH used to generate test results showing no detectable dieldrin in the Honouliuli or Sand Island effluents. Region 9 Br. at 117, 119. In fact, CCH did not argue that Point Loma used Method 8270. Region 9 is apparently mischaracterizing CCH’s argument so it can confine its response to a point CCH did not make.

The point CCH did make is serious, and cannot go unanswered. Region 9 has explained that, with regard to whole effluent toxicity testing, it employs a special statistical control -- the percent minimum significant difference (PMSD) -- for the express purpose of avoiding penalizing permittees for using laboratories with sensitive test equipment. Response to Honouliuli Comment C31, at 51, Doc. H.1.5, p. H-01-211. Region 9’s brief points out that “EPA guidance encourages the use of the PMSD procedure . . . *so that dischargers using high quality laboratories are not disadvantaged* (compared to dischargers using lower quality laboratories) due to the high precision (low variability) achieved by the high quality laboratories.” Region 9 Br. at 95, citing EPA, Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications under

the National Pollutant Discharge Elimination System Program (June 30, 2000) at 6-8 § 6.4.3, Doc. H.6.16, p. H-06-897 (emphasis added) (“A lower bound is needed to avoid penalizing laboratories that achieve unusually high precision.”).

Yet Region 9 has totally avoided responding to CCH’s point that its acceptance of lesser test sensitivity at Point Loma penalizes CCH, in violation of EPA policy, for using a high quality laboratory. Region 9 may have a valid explanation or it may not -- we simply don’t know. But until it offers a reasonable explanation, its action is arbitrary and capricious and cannot be sustained.

2. *Region 9 did not adequately respond to CCH’s criticism of the dieldrin test results.*
 - a) *CCH adequately raised its criticisms of the dieldrin test results.*

CCH’s comments criticized the dieldrin test results on the ground that testing for pesticides using gas chromatography/mass spectrometry (“GC/MS”) had shown no detectable dieldrin, and very low levels of other pesticides, on split samples for which the more conventional method utilized by Region 9 for Honouliuli and Sand Island gas chromatography/electron capture detector (“GC/ECD”) showed significant levels. Since the levels of concern were at or near the level of detection using GC/ECD, CCH argued that there was a question concerning the validity of the test results Region 9 relied on. Honouliuli Comment C25, at 34, Doc. H.1.5, p. H-01-194; Sand Island Comment C29, at 25,

Doc. S.1.5, p. S-01-145. In its comments, CCH explained that it was running comparative tests under the GC/MS and GC/ECD methods to “further support a recommendation for the most appropriate analytical protocol for pesticides in the next NPDES permit.” Honouliuli Comment C25, at 34, Doc. H.1.5, p. H-01-194; *See also* Sand Island Comment C29, at 25, Doc. S.1.5, p. S-01-145. However, CCH thought that in the meantime Region 9 should consider the question raised as to the validity of the results on which it was relying to support denial of a 301(h) variance.

In response, Region 9 criticized CCH for not using an EPA-approved test method, stating that the regulations require advance approval for use of an alternate procedure. Response to Honouliuli Comment C25, at 34, Doc. H.1.5, p. H-01-194; Response to Sand Island Comment C29, at 26, Doc. S.1.5, p. S-01-146. CCH responded to this critique in its opening brief (as it was entitled to do²²) by explaining again that the testing was done in anticipation of seeking approval for the next permit round, but that the results raised a question Region 9 should consider with respect to the current results. This use of the GC/MS results, CCH argued, was not covered by the regulations. CCH Br. at 59-60.

²² CCH was entitled to “confront the permit issuer’s subsequent explanations,” *In re Peabody W. Coal Co.*, 12 E.A.D. at 33, 46 n.58 and “demonstrate why the permit issuer’s response to [objections made during the comment period] . . . is clearly erroneous.” *In re Dominion Energy Brayton Point*, 12 E.A.D. at 509-10.

Region 9 now criticizes CCH for not raising this argument in the comment period. But CCH stated in its comments that the testing had been done in anticipation of the next permit round, and suggested that the results were relevant and should be considered. Honouliuli Comment C25, at 34, Doc. H.1.5, p. H-01-194; Sand Island Comment C29, at 25, Doc. S.1.5, p. S-01-145. That was sufficient to address the issue of whether the pre-approval regulation applied.

Region 9's Response to Comments also raised some questions concerning the test procedures CCH used. Region 9 pointed out that instead of using Method 8270 for GC/MS testing, CCH could have used Method 625, which also uses GC/MS and has received approval. Response to Honouliuli Comment C25, at 35, Doc. H.1.5, p. H-01-195. In response, CCH submitted an affidavit explaining that CCH conducted its test using techniques that conform to the EPA-approved Method 625. Affidavit of Jeremiah Bishop, attached as Exhibit B to CCH Brief. With its opening brief, CCH also submitted as Exhibit C the Declaration of Kenneth Tenno responding to the questions Region 9 had raised concerning the handling of samples. Response to Honouliuli Comment C25, at 36, Doc. H.1.5, p. H-01-196. CCH is submitting a motion, together with this brief, for inclusion of the Bishop Affidavit and the Tenno Declaration in the record. Inclusion in the record is proper, because this material responds to questions first raised in Region 9's response to comments.

Region 9 argues that this new material is improper, because CCH should have anticipatorily responded to these issues in its comments, before Region 9 raised them in response. But test results are frequently submitted without backup laboratory data sheets and custody forms. The laboratory material is, of course, preserved, so that it is available if the agency has questions and wants to see the back-up data and forms. For example, the Sand Island Permit requires the permittee to submit “[t]he results of all monitoring” required by the permit. Doc. S.12.2, p. S-12-153. The permittee must retain back-up data for 3 years (5 years for some types of data), and make that data available to the State or EPA upon request. Doc. S.12.2, pp. S-12-186 - S-12-187 (Standard NPDES Permit Conditions). The Honouliuli permit is similar. H.12.4, pp. H-12-1203, H-12-1207 - H-12-1208. By initially submitting only the test results, while retaining the back-up data in case Region 9 requested it, CCH was merely following accepted practice.

b) CCH was not required to get pre-approval before citing test results in the section 301(h) notice and comment proceeding.

Region 9 argues that, in any event, the pre-approval regulation does apply, because it covers testing for purposes of permit applications as well as permit compliance. Region 9 Br. at 120. However, the regulation Region 9 cites sets forth a procedure for approving a test method for inclusion in the EPA official list

of approved methods.²³ As CCH explained in its comments, its testing had not yet reached that point; it was conducting the tests preparatory to an application for approval for future permits. But because it had not reached that point does not mean that its results should be totally ignored. CCH legitimately thought its results raised a question that should be considered in the notice-and-comment proceeding.

c) *Region 9's response to the questions CCH raised concerning the dieldrin test results was inadequate.*

Moving finally to the merits of the dieldrin testing issue, Region 9 concedes that the Bishop affidavit and the Tenno declaration answer some of the concerns the Region raised regarding CCH's dieldrin testing results. Region 9 Br. at 120-21. Region 9, however, says that some of its concerns remain.

With respect to the Bishop affidavit, Region 9 challenges Bishop's assertion that CCH's utilization of multiple ions in its Method 8270 testing addressed the concern expressed in Method 8270 that without utilization of multiple ions the test may provide "a lesser degree of confidence in compound identification." Region 9 Br. at 121. Bishop relied on a December, 1996 revision of Method 8270, which states that multiple ion testing relieves the concern about lesser confidence in compound identification. Region 9 responds with a quote from a 2007 revision of

²³ The regulation Region 9 cites requires the Regional Administrator to coordinate applications for approval with EPA Headquarters, and if the Administrator determines the test method is approvable, EPA must formally propose it for inclusion in the list of methods approved for nationwide use. 40 CFR § 136.5(e).

Method 8270 that omits this statement. Region 9 Br. at 121 n. 88. However, Region 9 omits to mention that in *both* versions of Method 8270, the language at issue is immediately preceded by the statement that “use of selected ion monitoring (SIM) [which is what CCH did] is acceptable for applications requiring quantitation limits below the normal range of electron impact mass spectrometry.” Doc. H.5.3, p. H-05-50. This case involves such an application. As CCH’s comments asserted -- without contradiction from Region 9 -- “the WQS for several pesticides are at levels below or very near the levels of detection using the standard analytical techniques specified in the EPA-approved 301(h) monitoring program (EPA Method 608) that uses gas chromatography with an electron capture detector.” Honouliuli Comment C25, at 33, Doc. H.1.5, p. H-01-193; Sand Island Comment C29, at 24, Doc. S.1.5, p. S-01-144. In short, the selected ion monitoring technique CCH used was -- according to the Method language Region 9 quotes -- “acceptable” in the situation presented.

Region 9 also makes the scurrilous suggestion that tests on CCH effluent may have run under Method 625 and the results withheld. Region 9 Br. at 121 and n.88. Region 9 makes this suggestion based on a misreading of a technical memorandum submitted with CCH’s comments. *Id.* (quoting Doc. H.2.2., p. H-02-265; S.2.2, p. S-02-554). The Region relies on the memorandum’s statement, in a discussion entitled “Improvements to Method 625,” that “[f]or analysis of the

effluent samples from Honouliuli WWTP . . . the following changes have been made.” *Id.* Since this portion of the memorandum, Region 9 argues, “discusses only Method 625,” Region 9 infers that Method 625 testing must have been done without reporting the results.

But as the quote itself states, Honouliuli effluent was tested under what the writer of the technical memorandum (Jeremiah Bishop, the supervising chemist) described as Method 625 with “the following changes.” The technical memorandum then described a series of changes (summarized in the acronym “LVI-GC/MS-SIM”) which are *the same procedures the laboratory followed in conducting the split-sample tests it submitted to EPA under Method SW8270C-SIM.* That should have been obvious to Region 9 from Mr. Bishop’s Affidavit submitted with CCH’s opening brief (Exhibit B). That Affidavit (at para. 2) cross-referenced Mr. Bishop’s earlier technical memorandum for “justification and method validation for the use of GC/MS/SIM LVI for the analysis of pesticides in the specific matrix involved.”

The Affidavit also explained that the laboratory conducting the tests “was certified . . . to perform GC/MS-SIM LVI analysis of pesticides by method SW8270C-SIM,” and “[f]or this reason all results were reported using this method.” *Id.* para. 3. Indeed, while Mr. Bishop regarded the two methods as “very similar” (*id.*), he had also explained in his technical memorandum that the

modifications adopted to Method 625 for purposes of the Honouliuli testing might require approval as an alternate test procedure. That is another reason why, although Mr. Bishop described the testing method in his technical memorandum as a "Modified Method 625," reporting the test as having been done under Method 625 would have run the risk of being labeled a misrepresentation if Region 9 concluded that the modifications took the test outside the ambit of that Method as EPA had approved it.

In short, there was no clandestine testing under Method 625. The testing CCH discussed in its comments was regarded by the supervising chemist as having been done under a modified Method 625, but with those modifications the testing also conformed to Method 8270 and, for good reasons, was reported as such.

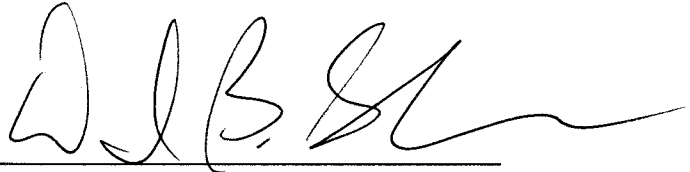
With regard to the Tenno declaration, Region 9 argues that there are still questions concerning use of grab samples rather than composite samples (Tenno had explained that both types were used). Region 9 Br. at 121-22. But Region 9 has ignored CCH's basic point. In its opening brief, CCH carefully explained why grab (rather than composite) samples are perfectly valid for determining whether two different test methods produce the same results. Composite samples are important only if the purpose of the testing is to determine compliance with water quality standards. A composite sample (*i.e.*, a sample collected over time) assures that the reading is not affected by fluctuating levels in the water. But the purpose

of CCH's testing was not to determine compliance with water quality standards. Rather, it was to determine whether testing with GC/MS produced the same result as testing with GC/ECD. For that purpose, it did not matter whether the samples were grab or composite, or some of each, so long as each sample was split so that each lab was testing the same water. CCH Br. at 61. Region 9's only response is to say that this argument should have been made earlier. Region 9 Br. at 122. CCH, however, cannot be criticized for not anticipating an objection that has no conceivable scientific basis. Region 9 points to the permit requirement for composite testing. Region 9 Br. at 122. But as CCH explained in its comments, these test results were not submitted to show compliance with the permit, but to raise a question as to the appropriateness of GC/ECD testing for pesticides at the limit of that method's detection capability.

CONCLUSION

For the reasons set forth above in CCH's opening brief, the petitions for review should be granted.

Respectfully submitted,



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Dated: July 15, 2009

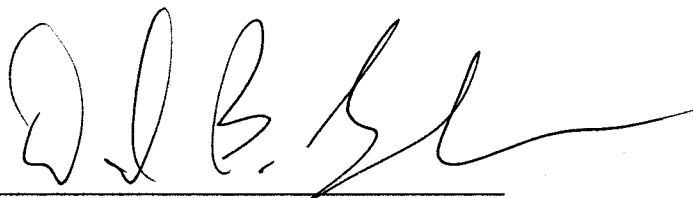
CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Reply Brief In Support Of Consolidated Petition For Review and Motion To Supplement Record On Appeal was sent this 15th day of July, 2009 *via* Federal Express, to the following:

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A handwritten signature in black ink, appearing to read 'D. B. Salmons', written over a horizontal line.

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