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

In re:	)	
GUAM WATERWORKS AUTHORITY	)	
	)	NPDES Appeal Nos. 09-15 and 09-16
Northern District Sewage Treatment Plant Agana Sewage Treatment Plant	)	
NPDES Permit Nos. GU0020141 and GU0020087	)	

RESPONSE TO PETITION FOR REVIEW

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RESPONSE TO PETITION FOR REVIEW

Pursuant to the orders of December 16, 2009 and February 24, 2010, Region 9 of the U.S. Environmental Protection Agency ("EPA" or the "Region") respectfully submits to the Environmental Appeals Board ("Board") this response to the petition for review filed by the Guam Waterworks Authority ("GWA" or "Petitioner") in the above-captioned matter.[1] The Petitioner seeks review of the Region's decisions[2] to deny GWA's requests for renewal of modifications of the Agana[3] and Northern District sewage treatment plants ("Agana" and

[1] Consistent with the Board's practice, the Region also is filing a certified index to the administrative record for each facility in this consolidated matter. Though the petitions for review have been consolidated, the Region had initially prepared the administrative records separately. Citations to documents from the administrative record for the Agana facility are preceded with the letters "AGA" and those for Northern District facility preceded with the letters "ND." In addition, the Region submits excerpts from the record of the key documents, specifically GWA's applications for each facility, correspondence between GWA and the Region regarding revisions to the applications in 1997 and 1998, the final and tentative decisions for each treatment plant, and the response-to-comments document which is a single document that applies to both facilities.

[2] On November 27, 2009, the Board issued an Order granting GWA's Motion to Consolidate its challenge of the Region's decisions regarding both the Agana and Northern District facilities into a single administrative appeal. When the bases for the Region's decisions, the comments raised, and/or the Region's responses to comments in the two matters differ, this Response will identify such differences as they arise, either in text or by footnote.

[3] The Petition refers to the Agana facility as Hagåtña (Petitioner's Supplemental Brief ("Pet.Supp.Br.") p.2), which is the current name of the capital of Guam (which now identifies itself as Guåhån). For the purposes of the Region's response (and due to wordprocessing keyboard difficulties), the Region uses the names "Agana" and "Guam," which were the names used prior to 1998 when the initial applications for renewal were submitted.

"Northern District," respectively) pursuant to Section 301(h) of the Clean Water Act ("CWA"), 33 U.S.C. § 1311(h), and to issue National Pollutant Discharge Elimination System ("NPDES") permits that incorporate the modified limits.

Region 9 denied GWA's requests because GWA has failed to demonstrate that the Agana and Northern District POTWs' proposed discharges would comply with the statutory requirements set forth in CWA section 301(h). Petitioner's challenge misinterprets these provisions of the Act and EPA's regulations implementing them. As described in greater detail below, the Petitioner's request for review should be denied.[4]

STATEMENT OF THE CASE

I. Statutory and Regulatory Background

Under the CWA, a NPDES permit is required for discharges of pollutants into the waters of the United States from point sources. Sections 301 and 402 of the CWA, 33 U.S.C. §§ 1311, 1342. In Guam, the U.S. Environmental Protection Agency administers the NPDES permit program. Pursuant to section 301(b)(1)(B) of the CWA, 33 U.S.C. § 1311(b)(1)(B), a POTW must achieve, among other things, effluent limitations based upon secondary treatment as defined by the EPA Administrator. The Administrator has defined effluent limits based on secondary treatment in terms of three pollutant parameters: biochemical oxygen demand measured over five days ("BOD_5"), suspended solids ("SS"),[5] and pH. These uniform national effluent limitations are included in permits for POTWs. 40 CFR 125.3(a)(1)(i); 40 CFR Part

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[4] As discussed herein, EPA cannot grant a 301(h) variance unless all the criteria set forth in the Act are satisfied. Thus, in order to overturn the Region's decisions and/or remand to the Region, the Board must find for GWA on its challenges to every one of the Region's findings.

[5] Suspended Solids are also referred to as Total Suspended Solids ("TSS"), and BOD_5 as BOD.

133, esp. 133.102. The CWA required POTWs to have complied with these limitations by July 1, 1977. 33 U.S.C. § 1311(b)(1)(B).

A. Modification of secondary treatment requirements for POTWs discharging to ocean waters

1. CWA section 301(h)

In 1977, Congress amended the CWA to add a new section 301(h), with subsequent amendments in 1981 and 1987, to authorize the Administrator to issue NPDES permits that modify the secondary treatment requirements of the CWA for POTWs that discharge into marine waters. 33 U.S.C. § 1311(h). Pursuant to section 301(h), the Administrator,[6] with the concurrence of the State,[7] may issue a NPDES permit that modifies secondary treatment limits for such a POTW if the applicant makes a satisfactory demonstration that it meets nine statutory criteria set forth in section 301(h). The nine criteria are designed to ensure that, even with less stringent effluent limits than the technology-based secondary treatment limits, water quality standards will be achieved and marine habitats and recreation will be fully protected under a modified permit.[8] Accordingly, the data required to be submitted in support of a 301(h) application and the associated EPA evaluation are more extensive and comprehensive than are otherwise necessary for submission and evaluation in a permit application not accompanied by a 301(h)-modified permit request. EPA's regulations implementing these statutory criteria are set forth at 40 CFR Part 125, Subpart G.

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[6] The authority to make the decision to grant or deny a section 301(h) modification request and to issue such a NPDES permit has been delegated to the Regional Administrator. EPA Delegation 2-44.

[7] Under the Clean Water Act, the term "State" includes States and Territories, specifically including Guam. 33 U.S.C. § 1362(3).

[8] The modification of an NPDES permit based on these criteria is also referred to as a "301(h) variance" or "301(h) waiver." These terms are used interchangeably. The associated permit is sometimes referred to as a "301(h)-modified permit."

2. Regulations implementing section 301(h)

As noted above, EPA has issued regulations that implement section 301(h) which can be found at 40 CFR Part 125 Subpart G (125.56-68 with appendices). These regulations generally track and expand upon the language of the nine statutory criteria. The Region applied these regulations in its analysis of GWA's applications and found that GWA has failed to demonstrate compliance with most of them.

EPA's 301(h) regulations also include requirements for submitting data to EPA to support a 301(h) request. As explained above, the data required to support a request for a modified permit under section 301(h) are more extensive and comprehensive than otherwise would be necessary for an NPDES permit application that is not accompanied by a request for a 301(h) variance. The regulations require an initial submittal of information as well as on-going monitoring results. 40 CFR 125.59(c)(4)("in addition to the requirements of § 125.59(c)(1) to (3), applicants for permit renewal shall support continuation of the modification by supplying to EPA the results of studies and monitoring performed in accordance with § 125.63 during the life of the permit.") The regulations explain that "[u]pon a demonstration meeting the statutory criteria and requirements of this subpart, the permit may be renewed under the applicable procedures of 40 CFR Part 124." 40 CFR 125.59(c)(4). If an application is based on an altered or improved discharge, the applicant must demonstrate that such improvements or alterations have been thoroughly planned and studied and can be completed or implemented expeditiously, include detailed analyses projecting changes in monthly flow rates and composition of the applicant's discharge that are expected to result from the proposed alterations and improvements, and include an analysis of how the planned improvements or alterations will comply with protective water quality requirements. 40 CFR 125.62(e).

Implementing regulations establish procedures, deadlines, and standards applicable to revisions of applications, as well as requirements for submission of additional information. 40 CFR 125.59(d), (f), and (g). *See generally In Re Arecibo & Aguadilla Regional Wastewater Treatment Plants*, 12 E.A.D. 97 (EAB 2005). Subsection (g) addresses information requested or developed after the receipt of the application. 40 CFR 125.59(g). Subsection (g)(1) allows the Region to "authorize or request an applicant to submit additional information by a specified date not to exceed one year from the date of authorization or request." 40 CFR 125.59(g)(1). Subsection (g)(2) allows applicants to seek such authorization from the Region to submit additional information on current/modified discharge characteristics, water quality, biological conditions or oceanographic characteristics, though applicants seeking to submit such additional information must demonstrate inability to have done so previously and a plan of study for review by EPA. 40 CFR 125.59(g)(2). An application may be revised when additional information submitted under subsection (g) supports changes to proposed treatment levels, but such an application must be submitted concurrently with any additional information submitted pursuant to subsection (g). 40 CFR 125.59(d)(3) and (f)(2)(ii). Under the regulations implementing section 301(h), "revisions to applications" does not mean submittal of <u>any</u> information but is limited to information related to "changes in treatment levels and/or outfall and diffuser location and design. 40 CFR 125.59(d).

II. Factual and Procedural Background

A. Historical permitting

GWA operates the Agana and Northern District POTWs, which are currently discharging at less than secondary treatment levels pursuant to 301(h) modified NPDES permits issued previously. In the two actions challenged by GWA, the Region denied GWA's requests for renewal of the 301(h)-modified permits. The two decisions were signed by the Regional

Administrator on September 30, 2009, indicating that the effective date would be November 5, 2009 if petitions for review were not filed. [AGA 1; ND 1 (FDDs)]

The existing permit for the Agana POTW became effective on June 30, 1986, and expired on June 30, 1991. Pursuant to 40 CFR 122.6, the terms of the permit have been administratively extended. The existing 301(h)-modified permit for the Northern District POTW also became effective on June 30, 1986, and expired on June 30, 1991; it is also administratively extended. Administrative extension occurred automatically when GWA submitted timely applications for renewal.

1. Marcus letter of April 1997

GWA submitted timely applications for renewal of both modified permits on December 28, 1990. [AGA 12; ND 12 (FDDs)] Between 1991 and 1997, however, the Region required GWA to submit additional information to supplement its renewal applications. [Id.] GWA did not provide complete information in a timely manner and the Region issued a tentative decision in the form of a letter from Regional Administrator Felicia Marcus dated April 4, 1997, notifying GWA of the Region's intention to deny both 301(h) renewal applications. [AGA 2647-2652; ND 2597-2602 (1997 Marcus Letter)] The 1997 Marcus Letter indicated the Region's frustration regarding GWA's failure to respond to earlier information requests that could convince the Region that renewal was warranted, specifically, updated outfall inspection reports and specific historical databases, as well as completed water quality and biological data reports. [Id.] The 1997 Marcus Letter explained that GWA (1) failed to carry out sufficient monitoring to support its application, including two years when no monitoring was reported and (2) failed to demonstrate that the discharges would not adversely impact public health or coral reef communities. [Id.] Of particular concern was data indicating exceedances of Guam's Water

Quality Standards for fecal coliform, deteriorating trends regarding dissolved oxygen (DO), and detrimental impacts on coral reefs. [Id.] In the 1997 tentative decision, the Region urged Guam to provide additional information, and suggested that extension of the outfalls combined with proper diffuser maintenance would increase the likelihood that the Region might ultimately decide against denial of the renewal applications. [Id.] The letter provided GWA with 45 days to submit a letter of intent to revise its section 301(h) applications. [Id.] The 1997 Marcus Letter reiterated that the revised applications needed to address the entire Applicant Questionnaire[9] in sufficient detail to adequately demonstrate compliance with all 301(h) requirements. [Id.]

On May 6, 1997, the Region received GWA's letter of intent, which stated GWA's willingness to "make certain that the entire Applicant Questionnaire is filled with sufficient detail to adequately demonstrate compliance with all [section] 301(h) requirements." [AGA 2653-56; ND 2603-06 (1997 Letter of Intent)] In that letter, GWA indicated its intention to extend the outfalls for each facility, including a schedule indicating completion at the end of 2000 for the Agana outfall extension.

2. Strauss letter of June of 1997

On June 18, 1997, the Region confirmed its receipt of GWA's 1997 Letter of Intent, including its intention to extend the ocean outfalls for both facilities and to revise both renewal applications. [AGA 2657-58; ND 2607-08 (1997 Strauss Letter)] In addition, the 1997 Strauss Letter suggested approaches for completing acceptable revised permit applications. [Id.] The letter explained that the revised applications had to be submitted within a year, by May 6, 1998, and that each application required a completed section 301(h) Questionnaire with sufficient detail to adequately demonstrate compliance with all section 301(h) requirements. [Id.] The

[9] The applicant is required to complete the Applicant Questionnaire, which appears in 40 CFR Part 125, Subpart G, Appendix A, Questionnaire (hereinafter "Questionnaire").

Region also provided guidelines on collecting baseline data for the planned new outfalls, such as effluent and receiving water monitoring data, including data on benthic fauna, sediment quality, toxic pollutants, chronic toxicity, and other necessary information to assess compliance with section 301(h) criteria. [Id.] The 1997 Strauss Letter recommended use of a number of specific EPA guidance documents, including the 1994 Amended Section 301(h) Technical Support Document ("ATSD"). Finally, the Region clarified that both facilities would be considered "large applicants" due to growth in the service populations. [Id.]

In response, GWA submitted revised section 301(h) renewal applications to the Region on March 27, 1998 for each facility.[10] [AGA 1760; ND 1383 (1998 Revised Applications)] In the 1998 Revised Applications, GWA provided architectural and engineering design and construction schedules for the Agana and Northern District proposed outfall extensions, stating that the Northern District outfall would be completed by 1999 and providing no date for the Agana outfall completion. [Id.] In addition, GWA indicated that baseline surveys in the areas of the new outfalls had begun but had not been completed, and that funding was not secured for construction of the outfalls but efforts were underway to identify potential funding sources. [Id.] Both applications, however, were inadequate and incomplete, as they lacked priority pollutant test results and industrial user surveys for the pretreatment program, among other things.

3. Strauss letter of April 1998

On April 21, 1998, upon review of the 1998 Revised Applications, the Region warned GWA that the applications were "significantly deficient in providing sufficient information" to support the proposed outfall extensions and that they had not adequately demonstrated compliance with all section 301(h) requirements. [AGA 2664-5; ND 2614-5 (1998 Strauss

[10] Agana's application had an error on its cover page, as it referred to the "Northern District" application. In fact, the materials provided with this cover letter pertain to the Agana POTW.

Letter)] The 1998 Strauss Letter explained that it did "not appear that GWA [had] made good faith efforts committed to in [the 1997 Letter of Intent], where GWA indicated its awareness that the revised (modified) applications shall account for the outfall extensions and ensure that the modified applications will sufficiently and adequately demonstrate compliance with all 301(h) requirements," noting that the GWA had only initiated efforts to perform necessary baseline studies and designs a month earlier. [Id.] Among other things, the applications did not include the necessary baseline studies nor a revised schedule for commencing implementation of, much less completing, the baseline studies or outfall extension designs. [Id.] The 1998 Strauss Letter directed GWA to submit revised schedules and identify secured funding sources by May 31, 1998. [Id.] The letter also required a more detailed description of the methods, locations and time of sampling for the baseline study. [Id.] The letter strongly encouraged that GWA consult the Region regarding adequacy of monitoring in order to assess the impact of the extended outfalls. [Id.] The Region clearly stated that "[f]ailure to supply the necessary information can result in a final waiver denial, based on the grounds that a satisfactory demonstration of compliance with all 301(h) requirements was not met (40 CFR 125.59(b)(1)), and GWA will be required to comply with secondary treatment requirements." [Id.] The 1998 Strauss Letter closed with names of phone numbers of EPA personnel who could assist GWA.

On June 30, 2000, GWA responded with additional information in support of its application for the Agana facility, which it labeled "revised modified permit application."[11] [AGA 1417-2058] In August 2001, GWA submitted a "Basis of Design" report that detailed plans and configurations for the new Agana outfall that would discharge farther offshore in

[11] Although GWA labeled this submission a "revised application," the Region treated it more as a supplement to the 1998 revised application in which the new outfall was proposed, rather than a separate revision proposing "changes to treatment levels and/or outfall and diffuser location and design," as revised applications are defined in 40 CFR 125.59(d)(1).

deeper water. [AGA 2733-2849] On February 5, 2001, GWA had submitted a "Basis of Design" report for the Northern District facility that detailed plans and configurations for the new outfall that would discharge farther offshore in deeper water. [ND 1426-2007] GWA's submittals for both facilities included partial responses to portions of the Applicant Questionnaire. [AGA 1417-2058; ND 1426-2007]

GWA has since completed construction of the Agana extended outfall, which was put in operation in December 2008. Construction of the Northern District outfall extension was completed in January 2009 but GWA has not yet installed the diffuser for the Northern District facility outfall. The new outfall is currently being operated without the diffuser.

Between 2001 and 2009, the Region maintained only intermittent and informal communications with GWA regarding the pending section 301(h) renewal applications, but the Region did request and GWA did provide additional information during that period. For example, on July 17, 2008, the Region requested via email information regarding whole effluent toxicity ("WET"). [AGA 3828-30; ND 3703-05] GWA responded with test results for one WET sample taken on October 16, 2007 for the Northern District facility. For the Agana facility, GWA submitted results for one WET sample taken on December 17, 2007. [AGA 3831-3872] As noted in the Petition, while the Region was preparing its Tentative Decisions, the Region also participated with GWA representatives in a conference call in March 2008 to explain the status of the Region's review of the applications, as well as to suggest the likely direction of the Region's decision-making.[12]

[12] GWA's Petition at Exhibit H makes reference to an April 3, 2008 conference call. Throughout the Petition itself, however, the conference call was identified as having occurred in March of 2008, Pet. Br. pp. 11 and 30, which is consistent with the Region's notes of the call indicating a March 30, 2008 date.

Since 1998, GWA has provided very little data to support its revised applications. GWA had the responsibility to demonstrate that its proposed discharges would attain applicable water quality standards for bacteria, toxic pollutants, nutrients and whole effluent toxicity (WET), but it failed to provide sufficient and adequate data to make this demonstration. GWA has submitted no data on concentrations of bacteria (enteroccoci) in either effluent or receiving water of either facility, as explained below. For toxic pollutants, GWA provided a single analysis (March 1998) for each facility, but failed to specify whether the samples were for dry or wet weather, as required by EPA's 301(h) regulations. Similarly, for nutrients, GWA provided receiving water data from March to December 1989 only. As for WET tests results, GWA did not provide any with its 1998 applications. The Region asked for WET test results in 2008, and in response, GWA submitted inadequate test results, based on a fresh water test species.

In 1998 GWA proposed a biological monitoring program that would be insufficient to enable comparisons with baseline conditions and verification by subsequent sampling at control stations/reference sites. The 1997 Strauss Letter instructed GWA to conduct such baseline biological monitoring at the new outfall locations starting in 1997 in order to support its section 301(h) applications. GWA, however, failed to do so. The 1997 Strauss Letter also instructed GWA to monitor the water quality parameters in its current NPDES permits at the new outfalls' discharge sites on a quarterly basis starting in 1997. GWA did not continue such monitoring. By the time the Region issued its Tentative Decisions, GWA had submitted only one baseline receiving water monitoring survey taken in September 2000.

Similarly, in regards to the required demonstration of acceptable biological conditions at the new outfall locations, GWA did not provide any predictive assessments of the physical, chemical, and biological conditions that would occur after the construction of the new outfalls,

notwithstanding guidance in the ATSD (mentioned in the 1997 Strauss Letter). The Region, nonetheless, sought to assess compliance with 40 CFR 125.62(c) for the proposed discharges based on information available from discharges through the old outfalls. However, given the serious gaps in the actual monitoring data submitted for the old outfalls, the Region ultimately concluded that the applications lacked sufficient information to demonstrate that acceptable biological conditions would occur at the locations of the new outfalls.

B. Recent procedural history

On January 5, 2009, the Region issued Tentative Decision Documents proposing that the applications for renewed modified permits be denied. [AGA 72-138; ND 125-193 (TDDs)] The Region held a public hearing on the Tentative Decisions on June 3, 2009 and accepted public comments on the Tentative Decisions through June 30, 2009. [AGA 145-147; ND 200-202 (Notice of Public Hearings)] After receipt and consideration of public comments, the Region prepared written responses. [AGA 162-207 (RTC)[13]

The Region issued the Final Decisions for the both facilities on September 30, 2009, indicating that the decisions would become effective on November 5, 2009 unless petitions for review were filed. [AGA 1-71; ND 1-72 (FDDs)] After filing summary petitions and a motion requesting that the Board consolidate the two petitions, which the Board granted, GWA filed its supplemental brief in support of its Consolidated Petition on December 4, 2009.

On December 11, 2009, the Region and GWA filed a joint motion with the Board requesting the Board establish a filing date for the Region's Response to GWA's Consolidated Petition for review of the two Final Decisions. In their joint motion, the parties requested that the Board establish February 26, 2010 as the deadline for the Region's Response. The Board

[13] As explained above, there is a single document entitled "Response to Comments Document" (RTC) that applies to both facilities. It appears in its entirety at AGA 162-207.

granted the parties' motion on December 16, 2009. On February 23, 2010, the Region filed a motion for an extension of time for its Response, which GWA opposed. On February 24, 2010, the Board granted the motion ordering the Region to file its Response by March 12, 2010.

C. Bases for Region 9's decisions not to re-issue modified permits

The Region found that GWA's applications for renewal for the Agana and Northern District POTWs did not make the demonstrations required by CWA section 301(h). The Region's findings were based on consideration of all of the available information submitted by GWA since the original applications for renewal in 1990, as well as the 1998 Revised Applications (including extended outfall-based revisions), and also the 2000 and 2001 supplemental information submissions. The Region also considered data submitted by GWA pursuant to its ongoing (1986) permit requirements, including data submitted after 2001, such as the Discharge Monitoring Reports ("DMRs") submitted by GWA through June 2009. Based on this information and the applicable statutory and regulatory requirements, the Region made the following relevant adverse findings for each POTW:

- GWA's proposed discharge will not comply with primary treatment requirements. See section 301(h)(9) of the CWA; 40 CFR 125.60.

- GWA has not shown that it can consistently achieve Guam water quality standards beyond the zone of initial dilution. The specific water quality standard GWA cannot consistently achieve is the standard for bacteria. In addition, GWA has failed to submit the information required to assess whether or not the proposed discharge would achieve water quality standards for nutrients, toxic pollutants, and whole effluent toxicity. See section 301(h)(9) of the CWA; 40 CFR 125.62(a)(1)(i) and 122.44(d).

- GWA's proposed discharge may interfere with the protection and propagation of a balanced indigenous population of fish, shellfish, and wildlife, and may adversely affect recreational activities.[14] See section 301(h)(2) of the CWA; 40 CFR 125.62(b)-(d).

[14] The Petition does not contest the Region's findings regarding possible adverse effects to recreational activities, although it challenges the Region's conclusions regarding bacteria and toxic pollutants, which are related to the recreation finding. As discussed above, the applicant needs to demonstrate compliance with *all* the 301(h) criteria in order for the Region to issue a renewed 301(h)-modified permit.

- GWA has not fully carried out the monitoring program specified in its current section 301(h)-modified permit, and even if it had, the current monitoring program is not all that is required for purposes of section 301(h). See section 301(h)(3) of the CWA; 40 CFR 125.63.

- GWA failed to demonstrate how it will implement a pretreatment program. See section 301(h)(5) and (7) of the CWA; 40 CFR 125.65 and 125.66. GWA failed to meet the requirements for submit the necessary toxic pollutant analyses in accordance with 40 CFR 125.66(a). Thus, GWA failed to identify and categorize known or suspected sources of toxic pollutants or pesticides (40 CFR 125.66(b)). Further, GWA also failed to develop and implement a nonindustrial source control program that would have informed the public about nonpoint and wastewater issues and household toxic control measures. 40 CFR 125.66(d).

  [AGA 9-11; ND 9-11 (FDDs)]

STANDARD OF REVIEW AND THRESHOLD REQUIREMENTS

I. Standard of Review

A. Petitioner bears the burden of showing that review is warranted.

For appeals of NPDES permit decisions, EPA regulations require a petition for review to demonstrate that the permit condition (or as applicable in this case, a finding in a decision to deny renewal of a CWA section 301(h)-modified permit) for which review is sought is based on either: (1) a clear error of law or fact, or (2) an exercise of discretion or an important policy matter that the Board should, in its discretion, review. *See* 40 CFR 124.19(a)(1) and (2); *see also In re Dominion Energy Brayton Point,* 12 E.A.D. 490, 509 (EAB 2006). A petitioner bears the burden of establishing that review is appropriate. 40 CFR 124.19(a); *see Rohm & Hass*, 9 E.A.D. 499, 504 (EAB 2000). A petitioner must argue with specificity why the Board should grant review. *In re Puerto Rico Electric Power Authority*, 6 E.A.D. 253, 255 (EAB 1995). To meet the threshold of specificity required under 40 CFR 124.19(a), a petitioner must take two necessary steps: (1) state the objections to the permit decision that are being raised for review, and (2) explain why the Region's previous response to those objections is clearly erroneous or otherwise warrants review. *See Michigan Dep't of Envtl. Quality v. EPA*, 318 F. 3d 705, 708-09

(6th Cir. 2003) (citing *In re Puerto Rico Elec. Power Auth.*, 6 E.A.D. at 255). Thus, the mere repetition of objections made during the comment period or the "mere allegation of error" without specific supporting information is insufficient to warrant review. *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 496, 520 (EAB 2002); *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000).

When a petitioner seeks review of a permit decision based on issues that are fundamentally technical in nature, the burden is even greater. *In re Dominion Energy Brayton* Point, 12 E.A.D. 490, 510 (EAB 2006). Additionally, clear error or reviewable exercise of discretion is not established simply because petitioner presents a difference of opinion or alternative theory regarding a technical matter. *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 667 (EAB 2001). Instead, when a petitioner challenges the Region's technical judgment, "[p]etitioners must provide compelling arguments as to why the Region's technical judgments or its previous explanations of those judgments are clearly erroneous or worthy of discretionary review." *Id.* at 668 (citing *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 404 (EAB 1997)).

B. Threshold requirements

EPA regulations controlling the appeal of a NPDES permit decision require a petition for review to demonstrate that any issues raised in the petition had been raised in comments during the public comment period on the permit decision. 40 C.F.R. 124.19(a). The Board has explained that comments need to be raised during the public comment period to give the Region an opportunity to address potential problems before the permit becomes final, thereby promoting the Agency's longstanding policy that most permit issues should be resolved at the regional level. *Arecibo & Aguadilla Regional Wastewater Treatment Plants*, 12 E.A.D. 97, 116-7 (EAB

2005). Comments must be made with specificity, so that "the permit issuer ... need not guess the meaning behind imprecise comments." *In re Dominion Energy Brayton Point*, 12 E.A.D. 490, 510 (EAB 2006), citing previous decisions. The Board has often denied review of specific issues raised on appeal that the commenter did not raise with requisite specificity during the public comment period. *Id.*

ARGUMENT

The Board should deny the Petition because the Region's decision-making properly applies the facts at issue to relevant statutory and regulatory considerations, and it represents a reasonable exercise of Agency discretion under the Clean Water Act. Petitioner's attempts to portray itself as a hapless victim misled by extended Regional inaction should be rejected. The Region identified deficiencies with the renewal applications and provided relevant regulatory guidance and provided the Petitioner information that the applications for renewals could be denied. The Region allowed the Petitioner more than seven years to provide necessary information. In that entire time and continuing through the public comment period, Petitioner did not support the demonstrations required under CWA section 301(h) and now, in its Petition, claims that the Region did not instruct it in how to do so. Pet. Supp. Br. p. 4. The Region's decisions did not, as urged by Petitioner, represent a change in "policy" (Pet. Supp. Br. pp. 2, 10), much less an unreasoned one. The Region's decisions are based on application of facts to law, not a "policy" choice.

In CWA section 301(h), Congress authorized EPA to issue a permit modifying the otherwise applicable limitations based on secondary treatment only if all the nine statutory 301(h) criteria are met. The Region disapproved the requests to renew the 301(h)-modified permits for the Agana and Northern District POTWs based on findings that GWA failed to

demonstrate compliance with all nine 301(h) statutory criteria and, in many cases, GWA arguably failed even to attempt to do so. CWA section 301(h) places the burden on the applicant to "demonstrate to the satisfaction of the Administrator" compliance with the statutory requirements for allowing a 301(h)-modified permit. In order to prevail before the Board, GWA must succeed in its challenges to every one of the Region's findings for each facility. GWA cannot do so.

GWA cannot demonstrate that the Region's decisions were based on clear error of law or fact or raise important policy considerations meriting review. Some of the issues raised in the Petition were not raised before the Region at all or, if so, were not raised with adequate specificity to give the Region an opportunity to respond during the comment period. Petitioner's challenges misinterpret portions of the CWA and EPA's implementing regulations. Moreover, some of the issues raised by GWA are outside the scope of the nine criteria specified in detail CWA 301(h). For the arguments that GWA did raise earlier in comments to the Region, GWA fails to explain why the Region's responses are clearly erroneous and warrant the Board's attention. Therefore, Petitioner's request for review should be denied on these bases alone.

Throughout its Petition, GWA repeatedly and incorrectly alleges that the Region prevented the submittal of additional information after 2001. The Region did work with GWA after 2001, taking into account the socioeconomic challenges in Guam, providing guidance to assist GWA with its renewal applications and continuing to ask GWA for information. As explained below, GWA failed to provide complete initial applications for renewal of its 301(h)-modified permits, it failed to provide complete supplemental applications, it failed to conduct the necessary on-going monitoring to support its applications, and it also failed to provide detailed

analyses regarding the proposed discharges, which included proposed alterations since the previous permits were issued.

GWA's repeated failure to provide adequate or complete information in support of its applications eventually led the Region to conclude that additional time for GWA to cure the deficiencies in its applications would not be productive and that the necessary information to support the required demonstrations would not be forthcoming. In 2009, after nearly eight years of futility, the Region prepared the Tentative and Final Decisions denying the applications.

In the following sections, the Region will first address the issue of whether the Region allowed GWA to submit information after 2001, as this is a recurring point in GWA's Petition, then explain the bases for denying GWA's applications challenged in the Petition, and lastly, respond to GWA's arguments regarding issues beyond the scope of the section 301(h) statutory and regulatory criteria.

I. The Region Did Not "Close the Window" and Prevent GWA from Submitting Information in Support of the Pending Applications.

GWA repeats throughout its Petition that the Region prevented the submittal of additional information in support of its applications after 2001. This is incorrect. The Region did in fact urge Petitioner to submit additional information and it considered this information in preparing its Tentative and Final Decisions. The Region did, however, advise GWA that it could not revise its applications a second time after 1998, specifically to propose changes to treatment levels based on installation of disinfection. GWA could have but did not, despite requests by the Region, avail itself of the opportunity to submit adequate information in support of its pending applications. The outfall plans and configurations provided by GWA in 2000 and 2001 were consistent with the application revisions proposed in GWA's 1997 Letter of Intent. Applicable regulations, however, distinguish between application revisions and subsequent information

submissions.

A. Regulations concerning revisions and submittal of additional information

As explained above, section 301(h) regulations establish procedures, deadlines, and standards applicable to revisions of applications, as well as requirements for submission of additional information. 40 CFR 125.59(d), (f), and (g). *See generally In Re Arecibo & Aguadilla Regional Wastewater Treatment Plants*, 12 E.A.D. 97 (EAB 2005). Subsection (d) addresses revisions to applications. Subsection (g) addresses information requested or developed after the receipt of the application or a revised application. 40 CFR 125.59(g).

The distinction between subsections (d) and (g) is most relevant to GWA's allegation that the Region denied it the opportunity to submit additional information. Subsection (g)(1) allows the Region to "authorize or request an applicant to submit additional information by a specified date not to exceed one year from the date of authorization or request." 40 CFR 125.59(g)(1). Subsection (g)(2) allows applicants to seek such authorization from the Region to submit additional information on current/modified discharge characteristics, water quality, biological conditions or oceanographic characteristics. 40 CFR 125.59(g)(2). In seeking such authorization, however, applicants must show that they made a "diligent effort" to provide such information with the applications and were unable to do so, as well as submit a plan and schedule for data collection and submittal of the additional information. 40 CFR 125.59(g)(2))(i) and (ii). By contrast, under the regulations implementing section 301(h), submission of information related to "changes in treatment levels and/or outfall and diffuser location and design" is considered to be a revised permit application. 40 CFR 125.59(d). Thus not all submissions of information in support of an application are "revisions." Only specific information regarding

changes in treatment and/or outfall and diffuser location and design are considered "revisions." An applicant does not have a right to either revise or supplement its application. See id.

B. Relevant facts

As described in detail above, upon review of the revised renewal applications submitted pursuant to 40 CFR 125.59(g)(1) in 1998, the Region explained to GWA that its applications were "significantly deficient in providing sufficient information" to support the proposed outfall extensions and that they did not demonstrate compliance with all section 301(h) requirements. [AGA 2664-65; ND 2614-15 (1998 Strauss Letter)] In response, GWA submitted additional information to supplement its applications, including the June 30, 2000 submittal for Agana. [AGA 1417-1758] In August 2001, GWA submitted a Basis of Design report for a new outfall for the Agana POTW. [AGA 2733-2849] Also in 2001, GWA submitted additional information and a Basis of Design report for the Northern District POTW's new outfall. [ND 1426-1595; ND 1889-2007]

Between 2001 and 2009, the Region had intermittent discussions with GWA regarding the applications. As the Region worked on its Tentative Decisions, it sought additional information from GWA. [AGA 49; ND 52 (FDDs)] On March 20, 2008, GWA and the Region discussed the issue of disinfection and revisions to GWA's applications while discussing GWA's application for a mixing zone. [See AGA 190-91 (RTC); see also AGA 2730-2732; ND 2658-60 (2008 EPA Letter)] During that call, GWA suggested that it could begin to disinfect its discharges to address the bacteria issue. The Region responded that it could not accept additional information regarding disinfection under the section 301(h) regulations because that would constitute revisions to the applications and that the window to change the bases of the

applications closed in 2001. [See id.] As discussed below, this response was reasonable and consistent with EPA regulations.

Having explained that it would not allow further revisions to the applications, the Region considered other information submitted by GWA in 2008 that did not seek to fundamentally change the bases of the applications. [See id.] In fact, the Region actively solicited information from GWA. For example, in an e-mail dated July 17, 2008 --well after the March 2008 call-- the Region asked GWA for additional toxicity information. [AGA 3828-30; ND 3703-05 (email)] In response, GWA submitted a sample for Whole Effluent Toxicity (WET) taken on October 16, 2007 for the Northern District POTW. [ND 3679-3702] For the Agana POTW, GWA submitted a WET sample taken on December 17, 2007. [AGA 3830-3872]

The Region also evaluated DMRs submitted by GWA up to June 2009. For the Agana POTW, the Region evaluated DMR data submitted from March 2007 through June 2009 to evaluate compliance with the primary treatment requirements. [AGA 26 (FDD)] For the Northern District POTW, the Region reviewed monitoring data in DMRs from August 2005 through June 2009 to evaluate compliance with the primary treatment requirements. [ND 26-27 (FDD)] These DMRs were clearly submitted after 2001.

C. Submittal of supporting information is different than revision of an application.

Throughout its Petition, GWA repeatedly refers to the teleconference in March 2008 and cites Exhibit G ("November 3, 2009 Declarations of Julie Shane, GWA Senior Engineer Supervisor and Paul Kemp, GWA Asst. GM for Compliance and Safety," which describe an April 30, 2008 call), which was not submitted during the comment period and thus should not be considered part of the Administrative Record.[15] GWA states that "per the EPA, the 'window' to

[15] The Administrative Record includes documents upon which the Region relied, directly or indirectly, when

submit additional data was closed" in 2001 despite the need for more data. Pet. Supp. Br. pp.10-11, citing Exhibit G. "The EPA stated in their response to comments that there was no 'window' after which Petitioner was denied the ability to summit [sic] additional date [sic] in support [sic] NPDES permits. In fact, during a March 2008 teleconference with EPA personnel who have oversight over permits in Region IX, an EPA representative specifically stated that the window to submit additional information had closed in 2001." Pet. Supp. Br. p. 11.

GWA's contention is erroneous. First, as explained above, GWA did submit, and the Region considered, information submitted after 2001 in the form of toxicity tests requested by the Region in 2008 [AGA 3828-3872; ND 3679-3705 (WET results and July 2008 email); and AGA 197 (RTC)] and DMRs submitted up to 2009. [AGA 26; ND 26-27 (FDDs)] Second, GWA fails to understand or acknowledge that certain kinds of information, namely information about "changes in treatment levels and/or outfall and diffuser location and design," are considered revisions to applications under the regulations implementing section 301(h), 40 CFR 125.59(d). Moreover, GWA should have made the request formally, pursuant to 40 C.F.R. 125.59(g)(2). Possibly, GWA did not realize that it was seeking another opportunity to revise its applications when it asked about disinfection during the March 2008 conference call. The Region, having allowed GWA to revise its defective applications in 1998 and having received

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formulating its Final Decisions regarding the Agana and Northern District POTWs. *See generally Citizens to Preserve Overton Park v. Volpe,* 401 U.S 402, 416 (1971); *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 519 (EAB 2006). The Board has described the principles it uses regarding the documents it will consider as the Administrative Record for a petition for review. *Id. at* 516-528. The Board explained that under EPA regulations, "the administrative record in an NPDES permit proceeding is considered complete on the date the final permit is issued [citing 40 CFR 124.18(c)]. We interpret this to mean that the record is closed at the time of permit issuance and that documents submitted subsequent to permit issuance cannot be considered part of the administrative record." *Id.* at 518 (citing *In re Peabody W. Coal Co.,* 12 E.A.D. 22, 40 n. 42 (EAB 2005)). The Board also explained why it will not supplement an Administrative Record with certain documents, such as post-decisional material, and that "courts have been reluctant to include in an administrative record materials that were not actually before the agency when it made its decision." *Id.* at 519 (citing *Thompson v. U.S. Dep't of Labor*, 885 F.2d 551, 555 (9th Cir. 1989)). Here, the Declarations in Exhibit G were prepared on November 3, 2009 and were not submitted to the Region until December 3, 2009. The Declarations were appended to GWA's Petition after the Region had issued its Final Decisions on September 30, 2009, and thus the Region could not have considered them as part of its decision-making. Thus, Exhibit G should not be considered part of the Administrative Record.

inadequate and incomplete supplements as late as 2001, informed GWA that it would not allow GWA to once again change the bases of its applications. [AGA 191 (RTC)]

In its response to comments, the Region clearly stated that GWA was incorrect when it claimed that the Region only allowed submission of data until 2001. [Id.] In regards to revisions to the applications, which are regulated under 40 CFR 125.59(d), the Region clarified that it had allowed GWA to revise its applications when GWA stated it intended to build the extended outfalls in 1998, but acknowledged that it did not offer an opportunity for GWA to revise its applications a second time. [Id.] The Region explained that "[t]he 301(h) regulations do not contemplate that a discharger will be given multiple opportunities to revise its application in an attempt to find the minimum level of treatment that would meet the 301(h) criteria. Further, as the permits under which the Northern District and Agana POTWs are operating were issued in 1986, EPA does not believe that an additional round of waiver applications and tentative decisions would be appropriate." [Id.]

The Petition does not allege a factual basis for excusing GWA's non-responsiveness to the 1997-98 correspondence from the Region instructing GWA on the information necessary to support its revised applications. The Petition implies that GWA may have lost the letters from the Region submitted in the 1997-98 time frame. Pet. Supp. Br. p. 13 ("... much of Petitioner's record keeping during the 'pre-CCU' period is currently unavailable ...."). GWA does not allege, however, that it lost the 1997 Marcus Letter, the 1997 Strauss Letter, or the 1998 Strauss Letter. Indeed, the Petition itself cites to the 1997 Marcus Letter and 1998 Strauss Letter in several places. Pet. Supp. Br. pp. 3-4, 7, 15, 18. Regardless of whether GWA has a "pre-CCU" or "post-CCU" identity for the purposes of record keeping, GWA itself, not the CCU or its oversight predecessor, has remained the applicant for the modified discharges throughout. Most

importantly, the instructions that the Region provided in the 1997-98 correspondence are premised on and consistent with the implementing regulations, which have not changed. The Amended Section 301(h) Technical Support Document ("ATSD") [AGA 2179-2565] has been available to applicants for 301(h)-modified permits since 1994, thus pre-dating the revised applications themselves submitted in 1998. The Board should reject GWA's suggestions that it is entitled to relief from applicable regulatory requirements based on arguments that it was not informed of the standards and criteria against which the applications would be evaluated.

In its Petition, GWA fails to describe why the Region's responses are inadequate and instead relies repeatedly on its erroneous contention that the Region prohibited GWA from submitting additional data after 2001. GWA totally overlooks the fact that the Region requested and waited for information from GWA for years, in an attempt to work cooperatively with GWA, in order to complete its section 301(h) analyses. Eventually, the Region came to the conclusion that the information was not forthcoming. As emphasized by EPA in adopting its first 301(h) regulations in 1979, "[T]he legislative history of the Act makes it clear that the relief afforded by section 301(h) was intended for those communities which had accumulated, or could accumulate on a timely basis, the information necessary to make their case for a modification." 44 FR 34784, 34791. Based on "Congress' objective that the 301(h) process not be protracted," EPA wrote, "EPA will not allow the 301(h) process to be used as a mechanism for delay." Id. at 34794.

II. The Region Reasonably Denied GWA's Applications for Re-issuance Based on CWA Section 301(h) because GWA Failed to Meet All the Statutory and Regulatory Criteria.

Petitioner GWA argues that the Region's denials constitute an "abuse of discretion." Pet. Supp. Br. p. 2. The Region, however, lacks discretion to grant GWA's applications for renewals

of its modified permits unless GWA showed that all nine statutory criteria were met for each application. *Arecibo & Aguadilla Regional Wastewater Treatment Plants*, 12 E.A.D. 97, 100 (EAB 2005). ("Section 301(h) of the CWA allows for waivers from secondary treatment standards with respect to WWTPs that discharge into the ocean, provided that the plants meet the criteria set forth in CWA § 301(h)(1) to (9) and its implementing regulations.") *In the Matter of: Mayaguez Regional Sewage Treatment Plant; Puerto Rico Aqueduct and Sewer Authority*, 4 E.A.D. 772, 774 n. 4 (EAB 1993). As explained below and in the Final Decisions, the Region found that GWA did not demonstrate that its modified discharges would meet the section 301(h) requirements concerning the following: primary treatment; water quality standards for bacteria, nutrients, toxicity, toxic pollutants and pesticides; monitoring programs; water quality protective of a balanced indigenous population of shellfish, fish, and wildlife, and recreational activities; monitoring programs; and pretreatment programs.

A. The modified discharges do not satisfy CWA section 301(h)(9).

1. The modified discharges do not meet primary treatment requirements.

Under section 301(h)(9) of the CWA, an applicant's wastewater effluent must be receiving at least primary treatment at the time its section 301(h)-modified permit becomes effective. Section 301(h)(9) states that "primary or equivalent treatment means treatment by screening, sedimentation, and skimming adequate to remove at least 30% of the biological oxygen demanding material and of the suspended solids in the treatment work's influent, and disinfection, where appropriate." Implementing regulations at 40 CFR 125.60(b) require that the applicant perform influent and effluent monitoring to ensure, based on the monthly average results of monitoring, that the effluent it discharges has received primary or equivalent treatment.

Subsection (c) allows applicants to use a longer averaging period (no less frequently than annually) based on specified demonstrations. 40 CFR 125.60(c).

The Region found that the Agana POTW failed to meet the primary treatment requirement for BOD, and the Northern District POTW failed to meet the primary treatment requirement for both BOD and TSS. [AGA 26; ND 29 (FDDs)] The most recent data shows that the Agana facility does not achieve the 30% removal standard for BOD (on an average monthly basis) nearly 90% of the time and that the Northern District facility does not achieve the standard nearly 40% of the time. For TSS removal, the Agana facility could reliably achieve the standard, but the Northern District could not do so nearly 50% of the time.

In the application for the Agana facility, GWA provided data for BOD and TSS from January to December 1997, and April 1999 to March 2000. [AGA 24 (FDD)] Since March 2000, GWA has submitted DMRs to the Region that include both influent and effluent data. Due to renovations conducted between June 2006 and February 2007 to improve treatment efficiency at the Agana facility, the Region evaluated only the DMR data beginning in March 2007 after the renovations were completed. [AGA 24-25 (FDD)] Of the 28 months that were assessed for BOD removal, the Agana POTW did not achieve the 30% removal requirement 89% of the time. [AGA 26 (FDD)] Reported removal efficiency rates for monthly averaged percent removal for BOD ranged between -14.29% (minus 14.29%) (meaning that in some cases the amount of BOD was actually increased during treatment) to 36.76%. [Id.] Of the 28 months that were assessed for TSS removal at Agana, GWA met the percent removal requirement for TSS 100% of the time. [Id.] Reported removal efficiency rates for monthly averaged TSS data ranged from 33.33% to 63.0%. [Id.]

Although GWA did not request using a longer averaging period for meeting the percent removal requirements for BOD and TSS, the Region also reviewed the available data to evaluate whether the 30% removal requirement would have been achieved based on the annual average of removal rates. [AGA 26; FDD] The Region found that the Agana POTW would meet the 30% removal requirement for TSS but would not be able to consistently meet the requirement for BOD based a longer averaging period. [AGA 26-27]

For the Northern District facility, GWA provided in its application data for BOD and TSS from January 1997 to December 1997, and from October 1999 to September 2000. [ND 26 (FDD)] The Region also reviewed data from DMRs from August 2005 through June 2009. [Id.] In the Final Decision for Northern District, the Region provided a summary of monthly average TSS and BOD influent and effluent concentrations and average percent removals. [ND 26-28 (FDD)] Of the 70 months that were assessed for BOD removal, GWA did not achieve the 30% removal requirement 39% of the time. [ND 26] Reported removal efficiency rates for monthly averaged percent removal of BOD ranged between -20.83% (minus 20.83%) to 81.17%. [Id.] Of the 70 months that were assessed for TSS removal at the Northern District facility, GWA failed to meet the percent removal requirement for TSS 50% of the time. [Id.] Reported efficiency rates for monthly averaged TSS data ranged from -284% (minus 284%) to 79.2%. [Id.] The Region also assessed whether the 30% removal requirement would have been achieved based on the annual average of removal rates if GWA had requested (which it did not) and been granted a longer averaging period pursuant to 40 CFR 125.60(c)(1). GWA would not be able to consistently meet the minimum 30% removal requirement for BOD and TSS at the Northern District POTW based on a longer averaging period. [ND 26, 29 (FDD)]

Because GWA cannot meet primary treatment removal requirements, that failure alone represents a basis to uphold the Region's decisions to deny renewal of the CWA 301(h) modified permits.

a. GWA's sole argument regarding primary treatment lacks merit.

The Petition does not provide a basis to refute the Region's conclusions regarding the primary treatment requirement. GWA offers that EPA's regulations allow for consideration of "circumstances beyond the applicant's control" as long as they do not include weak influent due to excessive inflow and infiltration. Pet. Supp. Br. p. 35, citing 40 CFR 125.60(c)(1)(iii). GWA goes on to claim that it "has clearly demonstrated that excessive inflow and infiltration is not the cause of low influent BOD because BOD levels do not fluctuate with rainfall." Id. However, the cited regulation at 40 CFR 125.60(c)(1)(iii) allows for consideration of "circumstances beyond the applicant's control" only as a criterion for allowing use of a longer term averaging period, not as a justification for waiving the requirement for the 30% removal demonstration. As noted, the Region did evaluate the available data using annual averaging and found that both POTWs failed to meet the 30% removal requirement.[16]

GWA has failed to meet the requirement of section 301(h)(9) of the CWA that the effluent at the Agana and Northern District POTWs receive at least primary treatment. On this basis alone, the Region was precluded from granting GWA's requests for continued variances, because a facility must meet all the section 301(h) statutory requirements in order to obtain a 301(h) variance. *Arecibo & Aguadilla Regional Wastewater Treatment Plants*, 12 E.A.D. at 100.

[16] Further, GWA did not explain what, if any, were the circumstances beyond its control.

2. The modified discharges would not meet Guam water quality standards at and beyond the zone of initial dilution.

Under 301(h)(9), an applicant must demonstrate that its discharge would meet water quality criteria after initial mixing in the receiving water. EPA interprets this provision to require the applicant to demonstrate that the discharge would not exceed, at and beyond the Zone of Initial Dilution ("ZID"), all applicable water quality standards, nor exceed CWA section 304(a) criteria for pollutants for which there are no applicable EPA-approved standards. 40 CFR 125.62(a). In addition, 40 CFR 125.59(b)(1) prohibits issuance of a modified permit that would not assure compliance with all applicable NPDES requirements of 40 CFR Part 122; under these requirements a permit must ensure compliance with all water quality standards. 40 CFR 122.4(d) and 122.44(d).

The Region concluded that GWA has not demonstrated that the modified discharges would meet the applicable criteria in Guam water quality standards after initial mixing in the waters surrounding or adjacent to the point of discharge, and thus that GWA failed to make the demonstration required by CWA section 301(h)(9). GWA did not demonstrate that the modified discharge would meet water quality criteria (after initial dilution) for bacteria, toxic pollutants, whole effluent toxicity, and nutrients.

Depending on the pollutant parameter of concern, the Region's decisions were based on a range of sources of data and information. For bacteria, the conclusion was premised on GWA's own outfall design information. The conclusion was confirmed with effluent data. Effluent data also provided the bases for the Region's decisions concerning attainment of water quality criteria for toxic pollutants and whole effluent toxicity. To evaluate whether the discharges would meet nutrient criteria, the Region evaluated the available receiving water data.

Agana discharges into coastal waters that are located off Agana Bay on the central and

western shoreline of Guam. [AGA 18 (FDD)] As specified in section 5102 of Guam's Water Quality Standards (GWQS), these coastal waters are considered "Category M-2 Good" marine waters. [AGA 2068 (GWQS)] The designated uses for this category of waters include the propagation and survival of marine organisms, particularly shellfish and coral reefs. [Id.] Other important and intended uses include mariculture activities, aesthetic enjoyment, and compatible recreation, including whole body contact and related activities. Northern District discharges into coastal waters that are located south of Tanguisson Point on the northern shoreline of Guam. [ND 18 (FDD)] As specified in section 5102 of GWQS, these are also considered "Category M-2 Good" marine waters. [AGA 2068 (GWQS)]

GWA's revised applications were based on improved discharges involving new outfalls at each POTW discharging farther offshore and in deeper water, but still into the waters of Guam. The new outfall at the Agana POTW went into operation in December 2008. GWA did not provide results from receiving water monitoring near the new outfall subsequent to December 2008 prior to the time the Region performed its analysis for the Tentative Decisions. GWA did provide, and the Region considered, data from baseline receiving water monitoring collected prior to operation of the new outfall. [AGA 43 (FDD)] Similarly, for the Northern District POTW, construction of the new outfall ended in January 2009. [ND 45 (FDD)] GWA had not installed a diffuser on the new outfall as of the date of issuance of the Final Decision, and thus data representative of discharges from the new Northern District outfall are not available. [Id.]

The Region assessed compliance with receiving water quality standards for the proposed discharges at both POTWs using data collected near the previous outfalls when discharges were occurring through those outfalls, to the extent such data was available. Specifically, the Region

used data from receiving water monitoring in the vicinity of the previous outfalls for assessing attainment of water quality standards for nutrients, temperature, salinity, and pH. [17] [AGA 43; ND 45 (FDDs)] Dilution is automatically taken into consideration with receiving water data, as the effluent is diluted prior to sampling. Based on receiving water data, the Region concluded that the modified discharges would not meet applicable criteria (after initial mixing) from Guam water quality standards for nutrients. The Region could not evaluate receiving water from the current outfalls because GWA did not provide such data.

For those pollutants for which only effluent data were available, the Region assessed attainment of water quality criteria after initial dilution using a critical initial dilution ("CID") factor developed by GWA in its design of the new outfalls. GWA developed a CID of 100:1 for the discharge through the extended outfall at Agana, and a CID of 200:1 for Northern District. Using available effluent data and the dilution factors developed by GWA, the Region concluded that GWA did not make the required demonstration for meeting water quality criteria after dilution for bacteria, toxic pollutants, and whole effluent toxicity. [AGA 43; ND 45 (FDDs)]

As with the issue of primary treatment requirements, the Board could deny GWA's Petition on this basis alone, as GWA has the burden to meet all the section 301(h) statutory requirements in order to obtain a remand. *See Arecibo & Aguadilla Regional Wastewater Treatment Plants*, 12 E.A.D. at 100.

a. Bacteria

i. EPA reasonably concluded that GWA failed to demonstrate that the modified discharges would meet applicable water quality criteria for bacteria after initial mixing.

The Region concluded that GWA did not make the required demonstration for bacteria water quality standards based on GWA's own design data for the outfall extensions. Guam

[17] The Region found the proposed discharges would meet water quality standards for temperature, salinity and pH.

water quality standards specify the applicable marine water quality criteria for bacteria using enterococcus as the relevant indicator organism. GWA's outfall extension design projections specified that attainment of the applicable standard would require dilutions an order of magnitude greater than the outfalls actually designed and built. That the modified discharges would not meet the applicable bacteria criteria after initial dilution should not be surprising. GWA's Petition does not attempt to refute this conclusion.

Guam's water quality standards enumerate acceptable levels for pathogenic bacteria in marine waters using an indicator organism. Generally, undisinfected wastewater from sewage treatment plants contains high levels of pathogenic organisms that can adversely affect receiving water quality and the uses the receiving water supports. [AGA 43; ND 45 (FDDs)] Enterococcus concentrations are important bacterial indicators in assessing the impact of pathogens on recreational uses. [AGA 43; ND 46 (FDDs)] Section 5102(B)(2) of Guam's Water Quality Standards establishes water quality criteria for enterococcus to protect whole body contact recreation for Category M-2 marine waters. [AGA 2068 (GWQS)] Section 5103(C)(1) provides that the number of enterococcus bacteria shall not exceed 35 cfu enterococci per 100 ml based on a geometric mean of five (5) sequential samples over a period of thirty (30) days nor have a single sample exceeding 104 cfu enterococci per 100 ml. [AGA 2078-79 (GWQS)]

In its applications, GWA did not provide any data or information on concentrations of enterococci in either the effluent or receiving water for either facility. As a result, the Region could not determine directly whether the enterococcus criterion is met at and beyond the ZID in accordance with 40 CFR 125.62(a). [AGA 43-44; ND 46 (FDDs)] Instead, the Region based its analysis on information provided by GWA in its Basis of Design reports, which described the outfall extensions.

In these reports, GWA indicated that a dilution of up to 8,000:1 would be necessary to meet water quality criteria for enterococcus at the boundary of the ZID for the proposed discharges. [AGA 2733-2849; ND 1889-2007 (Basis of Design Report)] GWA designed the new outfall for the Agana facility, however, to attain an initial dilution of 100:1 and therefore the Region determined that it was unlikely that the proposed discharge through the new outfall would meet Guam's Water Quality Standards for enterococcus. [AGA 2750-51 (Basis of Design Report); and AGA 44 (FDD)] Similarly, GWA designed the new Northern District outfall to attain an initial dilution of 200:1, leading the Region to the same conclusion about the ability of that outfall to meet the applicable criteria after initial mixing. [ND 1909-10 (Basis of Design Report) and ND 46 (FDD)]

ii. GWA raises new issues it failed to describe during the comment period and the issues previously raised lack merit.

GWA's argument that enterococcus is a "faulty indicator" organism[18] (Pet. Supp. Br. pp. 27-30) should be rejected because the applicable water quality standard, established by Guam,relies on enterococcus measurements as indicators of bacteria that are pathogenic to humans. [AGA 36-37 (RTC)] GWA's challenge rests on a challenge to the Guam water quality standards themselves, not to the Region's decision-making regarding the ability of the modified effluent to meet those standards. As the Region responded to the comment received, "[t]he discussion of whether or not enterococci is an appropriate water quality indicator in tropical environments may be an interesting topic for further research, but it is not germane to EPA's decisions regarding 301(h) waivers from secondary treatment and EPA is not acting arbitrarily

[18] Although GWA commented during the comment period that enterococcus is a faulty indicator, it did not submit the documents labeled as Exhibits KK and LL as part of its comments [AGA 191-92 (RTC)], so the Region did not provide a substantive response regarding the allegation. As late comments, the Board should strike the exhibits from its consideration of the Administrative Record before the Agency.

by basing its decisions on existing water quality standards." [Id.] GWA does not and cannot explain why this response is "clearly erroneous or otherwise warrants review." *Michigan Dep't of Envtl. Quality v. EPA*, 318 F. 3d 705, 708-09 (6th Cir. 2003)

GWA's passing argument that, with a properly designed outfall, there is no impact to recreational waters from primary-treated waste water (Pet. Supp. Br. p. 29), should be rejected. GWA does not repudiate its own design data indicating that discharges from the new outfalls will not meet the concentrations in the applicable water quality standards after mixing. Regardless, GWA did not raise this issue during the comment period[19] and thus waives the opportunity to do so in its Petition. 40 CFR 124.19(a); *In re Dominion Energy Brayton Point*, 12 E.A.D. 490, 510 (EAB 2006). Accordingly, the Board need not even address this issue on appeal.

Because GWA cannot and does not refute the Region's bacteria conclusions based on Guam's own design documents, GWA instead urges the Board to remand the matter so that GWA can develop a proposal for disinfection. Pet. Supp. Br. p. 30. The Board should resist GWA's entreaty. As explained in the Petition at p.30, in a March 2008 teleconference, GWA did suggest disinfection as a means to respond to the Region's likely bacteria non-attainment finding. During that teleconference, the Region had responded that the applications for renewal, initially submitted in 1990 and revised in 1998, did not propose to include disinfection and that the applications could not be revised once again. [Id.] The Region explained in its response to comments that "[t]he 301(h) regulations do not contemplate that a discharger will be given multiple opportunities to revise its application in an attempt to find the minimum level of

[19] Likewise, GWA did not submit the 1996 article submitted as Exhibit MM during the comment period and therefore the Board should strike the material from the Administrative Record.

treatment that would meet the 301(h) criteria." [AGA 191 (RTC)][20]

After the Region issued its Tentative Decisions, GWA did not directly contest the Region's determination that the modified discharges would not meet Guam's water quality criteria for bacteria. Similarly, the Petition does not and cannot argue now that the Region's finding or its response to comments received are "clearly erroneous or otherwise warrants review." *Michigan Dep't of Envtl. Quality v. EPA*, 318 F. 3d 705, 708-09 (6th Cir. 2003). For these reasons, the Board should uphold the Region's conclusion that GWA did not demonstrate that the modified discharges would meet applicable bacteria criteria after initial dilution.

b. Toxic Pollutants

i. EPA reasonably concluded that GWA's did not demonstrate that the modified discharges would meet water quality standards for toxic pollutants.

The Region found that GWA failed to demonstrate that the modified discharges would meet the applicable water quality criteria for toxic pollutants after initial dilution primarily because GWA did not provide sufficient effluent data to support such a demonstration.

Pursuant to 40 CFR 125.62(a), an applicant for a 301(h)-modified permit must demonstrate that, at and beyond the ZID, the discharge does not exceed applicable water quality standards or CWA section 304(a) water quality criteria, including standards for toxic pollutants and pesticides. Section 5103(C)(11)(B) of Guam's Water Quality Standards establishes numeric water quality criteria for toxic pollutants for Category M-2 marine waters, including a saltwater criterion continuous concentration (CCC) for lead of 8.1 µg/l. [AGA 2070-85 (GWQS)]

In 1997, the Region advised GWA of the need for effluent data concerning toxic pollutants, emphasizing that while only one priority pollutant scan would be expected initially,

[20] Even if the Region had offered GWA a second opportunity to revise its applications to propose disinfection, GWA would not have been able to demonstrate compliance with all the section 301(h) statutory and regulatory requirements. As described in Argument Section II, GWA failed to meet the primary treatment requirements, among others.

such data should thereafter be submitted annually. [AGA 2657-58; ND 2607-08 (1997 Strauss Letter)] The 1997 Strauss letter also explained that GWA would be subject to the information requirements for large dischargers. These include 40 CFR 125.66(a)(1), which requires that a large applicant submit chemical analyses of toxic pollutants in its discharges from samples collected during both wet and dry weather conditions.[21] GWA provided only a single toxic pollutant analysis of discharges from each facility conducted in March of 1998,[22] and did not specify whether the March 1998 samples were taken during wet or dry conditions. [AGA 3759-3785; ND 1537-1564] The submittal included data indicating that the Northern District facility discharged lead at a level that exceeded the applicable water quality criteria after initial dilution. The Region requested additional toxic pollutant information in email correspondence to GWA dated July 17, 2008, but this did not result in any additional data. [AGA 3828-29; ND 3703-05; AGA 197 (RTC)]

Based on review of data from the single sampling event from the Agana facility, the March 1998 toxic pollutant analysis, the Region determined that eight toxic pollutants were detected in the effluent, but after consideration of initial dilution, not at levels that would exceed applicable numeric criteria for *p*-dichlorobenzene, chloroform, copper, di(2-ethylhexyl)phthalate, silver, tetrachloroethylene, toluene, and zinc. [AGA 45 (FDD)] While the one data set did not

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[21] While 125.66(a) requires these toxic pollutants analyses in order to determine whether the large applicant must have an industrial pretreatment program to control such toxic pollutants, these analyses provide information that may be used to analyze the applicant's ability to meet water quality standards for toxic pollutants. The ATSD, in fact, specifically advises small dischargers (which are not subject to 125.66(a) but must conduct such analyses at least once during their permit terms under applicable monitoring program requirements) that these analyses should also be used to demonstrate compliance with water quality standards. [AGA 2300 (ATDS)]. Moreover, the ATSD specifically states that monitoring to demonstrate compliance with water quality standards "should reflect conditions during *all* critical environmental periods as defined in the 301(h) application (e.g., dry weather flow or maximum 2- to 3-hour flow conditions)." [AGA 2258 (ATSD) (emphasis added)]

[22] GWA provided the test data to the Region more than two years after its analysis. [AGA 197 (RTC)] Toxic pollutant analysis on the Northern District effluent was conducted on March 9, 1998, and submitted to the Region on February 5, 2001. The analysis of the Agana effluent was conducted on March 10, 1998, and submitted to the Region on February 5, 2001.

show water quality standards exceedances, the Region found that because GWA had only provided the single toxic pollutant analysis, despite the Region's informing GWA that annual analyses were needed so that the Region could calculate the impacts of the proposed 301(h) discharges, the Region "cannot be reasonably assured that the proposed discharge will attain water quality criteria for toxic pollutants at and beyond the ZID." [AGA 45 (FDD)]

Review of data from the March 1998 toxic pollutant analysis for the Northern District discharge indicated five toxic pollutants in the effluent: copper, lead, zinc, toluene, and p-dichlorobenzene (1,4-DCB). [ND 47 (FDD)] Except for lead, concentrations of all four of the detected toxic pollutants were estimated to be below water quality criteria at the ZID with consideration of critical initial dilution. [Id.] Based on a lead concentration of 2,900 µg/l detected in the effluent, receiving water concentrations of lead were predicted to be 14.50 µg/l, and thus exceed the saltwater CCC of 8.1 µg/l at the ZID. [ND 48 (FDD)] In its 2001 submission, GWA asserted that the March 1998 toxic pollutant analysis for the Northern District facility was a misrepresentation of its effluent quality and it presented a survey of lead concentrations in effluents from other wastewater treatment plants. [ND 1906-07] Beyond this comparison survey, the revised application did not provide any information or explanation to support its assertion of misrepresentation of the *Northern District effluent* nor did GWA submit any additional or subsequent toxic pollutant analyses that GWA deemed to be representative.

Absent a more robust effluent data set or even an indication of intention to collect such data, and, further, based on the fact that the single sample result for the Northern District POTW demonstrated an exceedance of Guam's water quality standard for lead, the Region concluded that GWA failed to demonstrate that the discharges would meet the applicable water quality criteria. As explained in the Federal Register preamble to the first 301(h) regulations, "the relief

afforded by section 301(h) was intended for those communities which had accumulated, or could accumulate on a timely basis, the information necessary to make their case for a modification." 44 FR 34784, 34791 (June 15, 1979). GWA has made no effort to gather and provide such information.

ii. GWA's arguments concerning toxic pollutants lack merit.

In the Tentative Decisions proposing to deny the revised renewal applications, the Region articulated its denial rationale. [AGA 112; ND 166-67 (TDDs)] GWA did not contradict the reasoning nor request the opportunity to conduct remedial monitoring during the comment period. In its Petition, however, GWA now argues that the priority pollutant scans of the samples collected in 1998 demonstrate that the discharges are not toxic (Pet. Supp. Br. p. 33), that GWA conducted additional toxic pollutant analyses in 2003 (and 2007 and 2008) confirming that the discharge is non-toxic (Pet. Supp. Br. pp. 33-34), and that the Region failed to request additional annual toxic pollutant analyzes after 1997 (Pet. Supp. Br. p. 34). Each of these arguments should be rejected. As a threshold, as discussed above, the Region did request additional data after 1997. Moreover, of the single sample analyses for the two facilities conducted in 1998, the analysis of the Northern District facility effluent clearly indicated non-attainment of the water quality criteria for lead.[23]

Though the Petition attempts to contradict the Region's explanation that it did not receive data in 2003 (and 2007 and 2008), GWA did not provide any documentation to substantiate that claim, either during the comment period or with the Petition. Rather, GWA cites to and appends Exhibit S to its Petition for not only its contention that it provided the data to the Region, but also its contention that the data demonstrates the effluent from the two plants is not toxic. GWA did

[23] This argument also fails to account for the absence of a second data set for each facility. The 1998 submittal does not indicate whether the samples evaluated were dry weather or wet weather samples. The regulation, 40 CFR 125.66(a), requires one of each. (See fn. 18, above.) Of the 1998 results, one was missing for each facility.

not submit these materials to the Region during the comment period, and accordingly the reports should not be considered part of the Administrative Record.

Exhibit S consists of reports submitted by a laboratory to GWA; there is no indication that the reports were ever submitted to the Region. Moreover, even if the Board does evaluate Exhibit S to consider GWA's alleged demonstration that the discharges will meet applicable water quality criteria for toxic pollutants after initial mixing, the Board should reject the contention. Exhibit S does not provide the required demonstration supported by analysis of additional effluent data of toxic pollutants from the POTWs, as GWA claims. First, 8 of the 14 laboratory reference reports provided in Exhibit S are labeled "Drinking Water." Only 6 of the reports provided are labeled "Wastewater." The reports themselves, moreover, do not contain any actual data related to wastewater, but merely acknowledge receipt of samples for testing. The reports do not indicate whether the samples received represent plant influent or effluent, were collected during dry weather or wet weather, or other relevant sample identification information. Upon close review of the contents of Exhibit S, nothing therein demonstrates that the modified discharges meet applicable water quality standards for toxic pollutants, much less that GWA submitted the requested information to the Region. The first four pages of the Exhibit are duplicates, indicating the results from the 1998 testing. The next four pages of the Exhibit indicate receipt of samples from the "NDSS" (presumably Northern District) and Agana plants on January 15, 2001 and 2000, respectively. The next two pages indicate receipt in 2007 of a composite sample from the Northern District facility. The following four pages indicate receipt of composite samples in 2003 and 2007 from the Agana facility for WET testing. The next four pages acknowledge receipt in 2008 of Agana samples for metals and WET testing. Two more pages indicate receipt of a 2007 sample from the "Agat" facility for NPDES compliance

testing.[24] The remaining documents, all generated in 2009, indicate receipt of samples for testing of metals, WET, PCBs, and/or certain pesticides for the Agat plant and the Baza plant. In sum, none of the documents in Exhibit S indicate the results of any of the testing conducted or demonstrate submission, much less receipt by, the Region.

Because GWA did not provide adequate data to demonstrate that the modified discharges from the two POTWs would meet water quality criteria for toxic pollutants after initial dilution, the Region concluded in its Final Decisions for both POTWs that GWA failed to meet this section 301(h) requirement. [AGA 45; ND 47 (FDDs)] In its petition, GWA does not discuss why the Region's response on this issue is "clearly erroneous or otherwise warrants review." *Michigan Dep't of Envtl. Quality v. EPA*, 318 F. 3d 705, 708-09 (6th Cir. 2003). Accordingly, the Petition should be denied.

c. Nutrients

i. EPA reasonably concluded that GWA failed to demonstrate that discharges from the two facilities would meet water quality standards for nutrients.

The Region concluded that GWA failed to demonstrate that the discharges, represented only by receiving water data from the old outfalls, would meet applicable water quality standards for nutrients, such as nitrogen and phosphate compounds. Appropriate levels of such nutrients play a critical role in the health and productivity of the marine environment. Domestic wastewater, however, may contain high levels of phosphorus and nitrogen, which can result in excessive algal growth and eutrophication that can adversely impact marine biota and habitats. [AGA 46; ND 49 (FDDs)] Section 5103(C)(3) of Guam's Water Quality Standards establishes that concentrations of nitrate-nitrogen (NO_3-N) and orthophosphate (PO_4-P) shall not exceed

[24] The reports indicating "chain of custody record" all indicate the samples are to be tested for compliance testing for NPDES, presumably a reference to the NPDES permit.

0.20 mg/l and 0.05 mg/l, respectively, to protect the designated beneficial uses of Category M-2 marine waters. [AGA 2080 (GWQS)] GWA did not demonstrate that its proposed discharges would meet these criteria after initial mixing.

GWA provided receiving water monitoring data from samples collected between March 1989 and December 1989 for nitrogen oxides (or "NO_x") and free-reactive phosphate. [AGA 46; ND 49 (FDDs)] GWA never provided any data from samples collected after December 1989. Based on the data that GWA did submit, the Region was unable to adequately evaluate whether the proposed discharges would attain water quality criteria for nutrients after initial dilution. [AGA 46; ND 49 (FDDs)] Although receiving water monitoring data for the discharges through the previous outfalls could have been be useful in predicting the potential receiving water impacts for proposed discharges through the new outfalls, GWA made no attempt to do conduct such monitoring after 1989. The little data provided did not have a direct comparison regarding attainment of applicable water quality criteria.

GWA did not provide nutrient data collected subsequent to 1989 notwithstanding the specific request to do so in the 1997 Strauss Letter. In that letter the Region specified the need for quarterly receiving water data regarding two nutrients, orthophosphate and nitrate-nitrogen, that should be collected at four locations. [AGA 2657-58; ND 2607-08 (1997 Strauss Letter)] Since that time, including through the comment period and up to the date of this Response, GWA has not provided this information. Thus, the Board should uphold the Region's determination regarding the inadequacy of the demonstration related to water quality criteria for nutrients. As the Agency emphasized in Federal Register preamble to its first 301(h) regulations that "the relief afforded by section 301(h) was intended for those communities which had accumulated, or could accumulate on a timely basis, the information necessary to make their case for a

modification." 44 FR 34784, 34791 (June 15, 1979). GWA has made no effort to accumulate such information.

ii. GWA's arguments concerning nutrients lack merit.

GWA's Petition does not dispute that GWA has not submitted nutrient data (or modeling) to the Region since its 2001 submittal of data from 1989, but instead implies that it should not have been required to do so because the new outfalls have only recently become operational and were "designed to meet nutrient concentration compliance" (Pet. Supp. Br. p. 30), and because it has "received no written feedback on the 1998 data submittal." Id. p. 31. To demonstrate that the new outfalls were designed to meet the applicable nutrient criteria, the Petition cites to the "Basis of Design" document for the Northern District facility (listed as Petition Exhibit NN) without page citation. Pet Supp. Br. p. 31. Table 2.3 on p. 2-10 in Exhibit NN does indicate the applicable water quality criteria, noting in a footnote that bolded and italicized values are estimated based on a primary treated effluent from Oahu. Id. The value for orthophosphate, which the Petition identifies as the "limiting factor" (Pet. Supp. Br. pp. 31-32), is bolded and the Table indicates that the required dilution is 85:1. The Table, however, does not represent a demonstration that GWA's proposed discharges would attain the water quality criteria for nutrients. Further, as noted previously, GWA has not demonstrated that its plants receive primary treatment or the equivalent (see Argument Section II.A.1), and it otherwise remains unclear why GWA needed to rely on primary treated effluent from a Hawaiian plant. Regardless, subsequent to 1998, GWA provided no data to the Region (much less quarterly samples per the instruction in the 1997 Strauss Letter) even after the time the new outfalls became operational.

To the extent GWA believed that construction of the new outfalls should provide relief

from the need to demonstrate meeting the water quality criteria for nutrients, at no time after the Region sent the 1997 Strauss Letter did GWA make any effort to communicate that belief or seek confirmation from the Region. Instead, GWA now urges that the Region was obliged to provide written feedback to the 2001 data submittal (which GWA incorrectly characterizes as the "1998" submittal), which the Region did not do, thus supposedly relieving GWA of its demonstration obligations.[25] As the Region explained in response to GWA's comment, "[a]s a waiver applicant, GWA had a duty to provide adequate data to demonstrate compliance of the proposed discharges with all water quality standards at the ZID. GWA could have based its demonstration on actual data for the old outfalls and/or modeling for the new outfalls." [AGA 188 (RTC)] In fact, the Region had suggested to GWA that it refer to the 301(h) Amended Technical Support Document (ATSD) in order to implement the monitoring requirements applicable to its 301(h) waiver applications. [Id.]

Perhaps recognizing that it neglected its demonstration obligation, and that the Region was not obliged to provide continuing reminders, GWA adds in its argument that the Region "closed the window" on new information as to nutrients in 2001. Pet. Supp. Br. p. 32. However, even assuming that GWA was foreclosed from submitting new information as of 2001, GWA itself concedes that it was unaware of the allegedly closed window until March of 2008. During the 11 years between the 1997 Strauss Letter and the March 2008 teleconference, GWA did not offer an explanation for neglecting the instruction in the 1997 Strauss Letter to collect and

[25] GWA also urges that it was relieved of the nutrient water quality criteria demonstration requirement because the Region approved GWA "leaving out the diffuser at the Northern District STP pending the provision of more concrete information regarding the military buildup and the diffuser would have to be in place to conduct proper testing to ensure" GWA meets the appropriate water quality standards. (Pet. Supp. Br. p. 31)(citing Exhibit PP, a September 28, 2009 letter from EPA (Mike Lee) to GWA (Julie Shane)). Exhibit PP was not submitted to the Region during the comment period and thus the Board should strike it from its consideration of the administrative record. Even assuming that GWA's interpretation of the letter is correct, the argument does not rebut the Region's conclusion regarding GWA's failure to make the required demonstration. GWA's burden was to provide the necessary information regarding nutrients, taking into account a functioning diffuser if necessary and using modeling if appropriate. GWA failed to provide any such data.

analyze quarterly test samples to measure for compliance with Guam water quality criteria for nutrients. For this reason, the Board should uphold the Region's decision-making on GWA's failure to demonstrate the discharges would meet water quality criteria for nutrients after initial mixing. The Region's responses to comments regarding nutrients are not clearly erroneous or otherwise warrant review. *Michigan Dep't of Envtl. Quality v. EPA*, 318 F. 3d 705, 708-09 (6th Cir. 2003).

d. Toxicity (Whole Effluent Toxicity)

i. EPA reasonably concluded that GWA had not demonstrated that its proposed discharges would meet water quality criteria for whole effluent toxicity after initial dilution.

GWA has not demonstrated that the proposed discharges would meet water quality criteria for whole effluent toxicity ("WET") after initial dilution because GWA has not submitted WET tests results using marine organisms. "WET" is "the aggregate toxic effect of an effluent measured directly by a toxicity test" (54 Fed. Reg. 23895, June 2, 1989). "Aquatic toxicity tests are laboratory tests that measure the biological effect (e.g., an acute effect such as mortality and chronic effects such as impairment of growth and reproduction) of effluents or receiving waters on aquatic organisms." [AGA 49; ND 51-52 (FDDs)] Organisms are held in test chambers and exposed to different concentrations of an aqueous sample (e.g., effluent, dilution water containing different concentrations of effluent or a particular pollutant, or receiving water). [Id.] The measured responses of the test organisms are used to evaluate the effects of the aqueous test sample. [Id.]

WET test results are used to evaluate the toxicity of wastewater discharges and compliance with narrative water quality standards that prohibit the discharge of toxic pollutants in toxic amounts, or otherwise provide for the maintenance and propagation of a balanced population of aquatic life. [Id.] Regulations at 40 CFR 122.44(d)(1) describe procedures for

determining when water quality-based effluent limits for WET are required in NPDES permits. [Id.] Section 5103(C)(11)(A) of Guam Water Quality Standards provides narrative water quality criteria for toxicity, specifically, that "all waters shall be maintained free of toxic substances in concentrations that produce detrimental responses in human, plant, animal, aquatic life, or consumable harvestable aquatic life." [AGA 2070 (GWQS)] GWQS do not provide a numeric standard for toxicity. [AGA 2059-2178 (GWQS)]

In 1998, GWA did not submit any WET test results with its initial applications for renewal of the modified permits. In the 1997 Strauss Letter, the Region had instructed GWA that "chronic toxicity studies should be performed on 24-hour flow-weighted effluent samples every year" as part of its revised section 301(h) applications for renewal of its variances. [AGA 2657-58; ND 2607-08 (1997 Strauss Letter) (emphasis added)] The Region also referred GWA to the EPA WET testing procedures manual, specifically, *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA/600/R-95/136 or its most recent edition. [Id.; see also AGA 3805 (EPA 1995)] The reference to "marine and estuarine organisms" in the title of the document was intended to instruct GWA regarding the relevant WET tests to be conducted on marine organisms, not freshwater organisms. GWA did not submit such results in support of the revised applications any time between 1997 and 2008. [AGA 49; ND 52 (FDDs)] In fact, GWA did not provide the Region with any WET data to assess whether the proposed discharges would attain water quality standards for toxicity until 2008, and what was submitted at that time was inadequate.

In response to a reminder from the Region via a July 17, 2008 email, GWA submitted results of a single WET test of the Agana discharge from a test conducted in December 2007. [AGA 3679-3705 (December 2007 WET test)] The test was conducted using *Ceriodaphnia*

dubia, a freshwater test organism. [Id.] Results of the test showed no observable toxic effects at 100% effluent. [Id.] No tests using marine organisms were submitted.

Similarly, for the Northern District discharge GWA submitted results of a single WET test from a test conducted in October 2007. [ND 3806-3872 (Oct. 2007 WET test)] This test was also conducted using *Ceriodaphnia dubia*, and results of the test showed no observable toxic effects at 100% effluent for this freshwater test organism. [Id.] Again, no tests using marine organisms were submitted.

Despite the test results showing no toxicity using the freshwater organism, the Region was not reasonably assured that toxic impacts would not occur as a result of the proposed discharges and re-issuance of modified permits. [AGA 50; ND 52 (FDDs)] Due to the lack of sufficient data, both in terms of data points and relevance to the receiving waters, the Region was unable to adequately assess whether the proposed discharges will meet the water quality standards for toxicity. [Id.] Consequently, the Region concluded that GWA did not demonstrate that the proposed discharges through the new outfalls would meet water quality criteria for toxicity at and beyond the ZID. [Id.]

ii. GWA's arguments concerning whole effluent toxicity lack merit.

GWA re-asserts that the Region should have requested that GWA perform additional WET tests after 1997 (Pet. Supp. Br. pp. 32-33), that it submitted a WET test result for the Agana facility in 2003, identified as Exhibit S, and that the Region failed to provide written guidance regarding the species to be used for the WET test. Pet. Supp. Br. p. 33. GWA urges that the Board postpone decision-making until adequate testing can be completed. Id. The Region's response regarding the respective obligations of the Region and applicants for renewal of modified permits is provided in Argument Section I above. As explained in Argument

Section II. A. 2. b. above, the alleged test "results" from 2003 attached to the Petition in Exhibit S indicate that test samples were received by the laboratory but GWA provides no basis to conclude that the testing was actually conducted, what the results of that testing may have been, or that the results were presented to the Region. The Region also notes that, though GWA submitted similar comments during the comment period, it did not submit Exhibit S, and thus the Board should not consider the Exhibit.

Finally, the Petition itself acknowledges that the WET testing that GWA conducted in 2007 used a freshwater species rather than a marine species based only on the listing of such freshwater species in two other NPDES permits, both of which involve facilities discharging into freshwater receiving bodies. Pet. Supp. Br. p. 33. GWA argues that it lacked guidance from the Region, notwithstanding the 1997 Strauss Letter directing GWA to conduct annual monitoring using marine species. GWA does not explain why it would be reasonable to conclude that freshwater testing would be representative of the Agana or Northern District discharges' effect on attainment of the water quality criteria for toxicity applicable to those facilities' marine receiving waters. Here again, the responsibility for making the required demonstrations lies with the applicant,[26] and the applicant did not meet the burden. [AGA 197 (RTC)]

The Region reasonably concluded that GWA did not demonstrate that the proposed discharges would meet water quality criteria for toxicity at and beyond the ZID. [AGA 50; ND 52 (FDDs)] In its Petition, GWA does not discuss why the Region's responses regarding toxicity (WET) are clearly erroneous or otherwise warrant review. *Michigan Dep't of Envtl. Quality v. EPA*, 318 F. 3d 705, 708-09 (6th Cir. 2003). Therefore, the Board should uphold the Region's decision-making on these grounds.

[26] GWA failed to provide any additional data on WET during the public comment period to assist in the assessment of whether the proposed discharges would meet water quality standards and protect marine life. [AGA 197 (RTC)]

3. Conclusion on water quality criteria

As explained in detail above, GWA has failed to demonstrate that its proposed discharges will meet Guam's water quality criteria for bacteria, toxic pollutants, nutrients, and toxicity at and/or beyond the ZID. On this basis alone, the Board should deny GWA's Petition because GWA has not met its burden to make each of the demonstrations required to meet CWA section 301(h). GWA's Petition does not explain why the Region's findings and the Region's responses to GWA's comments are inadequate. Accordingly, the Petition should be denied.

B. GWA has not established a system for monitoring the impact of the modified discharges, as required by section 301(h)(3).

Regulations implementing CWA section 301(h)(3) require an applicant to conduct a monitoring program to evaluate the impact of the proposed discharge on the marine biota, demonstrate compliance with applicable water quality standards and measure toxic substances in the proposed discharge. 40 CFR 125.63. "The frequency and extent of the program are to be determined by taking into consideration the applicant's rate of discharge, quantities of toxic pollutants discharged, and the potential for significant impacts in the receiving water." [AGA 57; ND 60 (FDDs), citing 40 CFR 125.63(a)(1)(iv)] The regulations specify three program components: biological monitoring; receiving water quality monitoring; and effluent monitoring. 40 CFR 125.63 (b)-(d).

The Region concluded that GWA had not established a monitoring program meeting the requirements of CWA section 301(h)(3) and the implementing regulations at 40 CFR 125.63 because the GWA program was deficient in each of the three required components: biological monitoring; receiving water quality monitoring; and effluent monitoring. [AGA 58; ND 60; AGA 60; ND 63; AGA 61; ND 63-64 (FDDs)] GWA's current permits already require these three monitoring components for the previous outfalls [AGA 57; ND 60 (FDDs)], but the

proposed monitoring programs for the extended outfalls did not include all the components necessary to support its 301(h) application. [AGA 58-61; ND 60-63; AGA 188; (RTC)] In its revised applications, GWA submitted a biological monitoring program for its previous discharges and a baseline biological monitoring program for the proposed discharges but did not include the annual surveys for the proposed program. [AGA 58; ND 60-61 (FDDs)] The Region reviewed GWA's monitoring program for the proposed discharges to assess compliance with the applicable requirements of 40 CFR 125.63(a) through (d), and determined that the application was deficient as it related to each of the required components: biological, receiving water, and effluent. [AGA 57-62; ND 59-64 (FDDs)]

1. Biological monitoring program

Under 40 CFR 125.63(b), an applicant must have a biological monitoring program to provide adequate data to evaluate the impact of the proposed discharge on the marine biota. Pursuant to 40 CFR 125.63(b)(3)(iii), if the application is based on an improved discharge involving outfall relocation, the applicant must have a biological program that includes the previous discharge site until such discharge ceases. "The applicant must also provide baseline data at the relocation site to demonstrate the impact of the discharge and demonstrate that the requirements of 40 CFR 125.62(c) will be met."[27] 40 CFR 125.63(b)(3)(iii). The applicant's biological monitoring program must include (1) periodic surveys of control sites and biological communities most likely to be affected by the discharge; (2) periodic bioaccumulation studies and examination of possible adverse effects of effluent-related toxic substances; (3) periodic sampling of sediments for toxic pollutants and pesticides; and (4) periodic assessment of fisheries. 40 CFR 125.63(b)(1)(i-iv)

[27] The regulation at 40 CFR 125.62(c) requires that "the applicant's modified discharge must allow for the attainment or maintenance of water quality which assures protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife."

GWA proposed a biological monitoring program that would be insufficient to evaluate the impact of modified discharges of the extended outfalls on the surrounding biological community, specifically, to enable comparisons with baseline conditions and verified by subsequent sampling at control stations/reference sites. The ability to do so is required by the regulations at 40 CFR 125.63(b)(1)(i). In its 1998 revised applications for the two facilities, GWA described biological monitoring programs for the previous discharges and baseline biological monitoring programs for the proposed discharges that called for quarterly surveys of benthic and fish community structure, coral reef assemblages, and sediment. [AGA 58; ND 60 (FDDs)] GWA did not, however, include biological monitoring programs for the proposed discharges that would be implemented upon completion of the new outfalls, nor bioaccumulation studies, nor monitoring of toxic pollutants in sediments for the previous discharges, as required by 40 CFR 125.63(b)(1)(i) through (iv). [Id.]

The 1997 Strauss Letter instructed GWA to conduct such baseline biological monitoring at the new outfall locations starting in 1997 in order to support its section 301(h) applications, and to continue the monitoring until the outfalls were completed. [AGA 2657-58; ND 2607-08 (1997 Strauss letter)] The 1997 Strauss Letter also indicated that monitoring should include quantitative information on the benthic fauna and sediment quality in the area of the proposed discharge. While GWA did eventually conduct baseline benthic monitoring surveys for the proposed discharges,[28] the baseline monitoring conducted was not consistent with the 1997 Strauss Letter or the regulations at 40 CFR 125.63(b)(1)(iii). The associated monitoring program submitted would not generate the data necessary to predict whether unacceptable biological conditions would occur as a result of the proposed discharge based on a comparison of biological

[28] GWA provided baseline benthic monitoring surveys for the proposed discharges conducted in August 2005, March 2006, and January 2007. [AGA 53; ND 56 (FDDs)] However, GWA did not provide any analysis predicting whether "unacceptable biological conditions would occur as a result" of the proposed discharges. [Id.]

monitoring data at each site and the attributes of the proposed discharge. [AGA 53; ND 56 (FDDs)] In addition, GWA did not propose to include the sediment quality surveys in biological monitoring programs submitted for the new outfalls. [AGA 58; ND 60 (FDDs)]

Because the GWA's biological monitoring program did not meet the requirements of 40 CFR 125.63(b)(1)(i) through (iv), the Region concluded that GWA failed to establish an adequate biological monitoring program to evaluate the impact of the proposed discharges and that GWA failed to make the demonstration required by CWA section 301(h)(3). [AGA 53; ND 56 (FDDs)]

2. Receiving water monitoring program

Under 40 CFR 125.63(c), an applicant must have a receiving water monitoring program to provide adequate data for evaluating compliance with water quality standards or criteria, and to measure the presence of toxic pollutants that have been identified or are expected to be in the effluent discharged to the receiving water.

GWA failed to demonstrate it would have a receiving water quality monitoring program sufficient to meet the requirements of 40 CFR 125.63(c). In the revised applications, GWA proposed receiving water monitoring to evaluate baseline water quality conditions associated with the location of the new outfall locations, but it did not clearly indicate whether this would continue after the new outfalls were completed. [AGA 59; ND 61(FDDs)]

The1997 Strauss Letter instructed GWA to monitor the parameters in its current NPDES permits at the new outfalls' discharge sites on a quarterly basis starting in 1997 and to continue that monitoring until the outfalls were completed in order to support its section 301(h) applications. [AGA 2657-58; ND 2607-08 (1997 Strauss Letter); AGA 59; ND 62 (FDDs)] GWA did not, however, continue such monitoring. By the time the Region issued its Tentative

Decisions, GWA had submitted only one baseline receiving water monitoring survey taken in September 2000. [Id.] GWA did not submit any other, more recent surveys during the comment period.

To support its revised applications, GWA submitted the receiving water monitoring data required by its current permits for the time period from March 1989 to July 1997 for the old outfalls, but GWA did not submit any receiving water monitoring data generated after July 1997. [AGA 59; ND 62 (FDDs)] As of September 2008, GWA reinstated the collection of quarterly water column physical-chemical data consistent with the receiving water monitoring permit requirements. [AGA 60; ND 62 (FDDs)] GWA did not, however, monitor for toxic pollutants. [Id.] GWA submitted the data to the Region in quarterly DMRs for the first, second, and third quarters of 2009. [Id.] The Region evaluated this additional data and concluded that it not change its assessment of water quality impacts, namely that the proposed discharges would not met Guam's water quality criteria for bacteria, toxic pollutants, nutrients and toxicity at and/or beyond the ZID. [AGA 43-50, 60; ND 45-52, 62 (FDDs)]

Because GWA failed for so many years to conduct the required receiving water monitoring under its current permits and instructed in the Region's 1997 letter, the Region determined that GWA had not demonstrated that it could consistently conduct receiving water monitoring pursuant to 40 CFR 125.63(c). Thus, the Region could not be reasonably assured that GWA would adequately implement a receiving water monitoring program. The Region concluded that GWA had not made the demonstration required by CWA section 301(h)(3). [AGA 60; ND 63 (FDDs)]

3. Effluent monitoring program

Under 40 CFR 125.63(d), an applicant must have an effluent monitoring program that

provides "quantitative and qualitative data that measures toxic substances and pesticides in the effluent and the effectiveness of the toxic control program" (40 CFR 125.63(d)(1), and data for evaluating compliance with the percent removal efficiency requirements under 40 CFR 125.60. [AGA 60; ND 63 (FDDs)] EPA's ATSD explains that the major objectives of effluent monitoring are to provide data for determining compliance with permit effluent limitations and CWA section 304(a) water quality criteria (or in this case, the applicable water quality standards), measure the effectiveness of the toxic substances control programs, and analyze effluent impacts to biological and water quality conditions of the receiving water. [AGA 60; ND 63 (FDDs); and AGA 2294 (ATSD)] In addition, influent and effluent monitoring provides data for assessment of treatment plant compliance with primary treatment requirements for BOD and TSS. [Id.]

The Region concluded that GWA has not established an effluent monitoring program that meets the requirements of 40 CFR 125.63(d) because GWA did not propose to monitor for whole effluent toxicity (WET), and because GWA had not consistently conducted effluent monitoring for its current permits and the previous discharges. In its revised applications, GWA proposed an effluent monitoring program for the proposed discharge at each POTW that included monitoring of toxic substances and pesticides as required by 40 CFR 125.63(d). [AGA 61; ND 63 (FDDs)] The purpose of the effluent monitoring, however, is to provide quantitative and qualitative that measures not only toxic substances and pesticides in the effluent, but also the effectiveness of the toxic control program. 40 CFR 125.63(d). GWA did not propose WET testing, even though the 1997 Strauss Letter instructed GWA to conduct both annual toxic pollutant analyses and WET testing to evaluate the effectiveness of the toxic control program for the two facilities. [Id.] As noted above in Argument Section II.A.2.d., GWA provided the

Region a single WET test result for each of the two marine discharges (using a freshwater test organism) approximately eleven years after the 1997 Strauss Letter, and the WET test results were insufficient to evaluate the effectiveness the toxic control program, as well as to provide an additional measure of toxic substances in the discharges. Additionally, GWA did not consistently conduct effluent monitoring for its previous discharges under its current permits and as instructed by the Region in 1997. [AGA 61; ND 63-64 (FDDs)] The Region therefore reasonably concluded that GWA's effluent monitoring programs did not and were not likely to provide data as required by 40 CFR 125.63(d).

4. GWA's arguments regarding monitoring lack specificity and merit.

The Petition refers to monitoring throughout but does not argue precisely why the Region's detailed findings in the Final Decisions and/or the Region's responses to its comments are inadequate. The Petition argues that the 1997 Marcus Letter required additional monitoring but it "described the monitoring required to install the new outfalls and nothing more" (Pet. Supp. Br. p. 18), implying that nothing more might have been required, for example, under the regulations. The 1997 Marcus Letter did not discuss additional monitoring. The 1997 Strauss letter, however, did describe required baseline monitoring that would support revisions to the renewal applications and specified that toxic pollutant and WET test monitoring begin and continue on an annual basis until the outfalls were completed, but it also indicated that collection of the specified information would "establish the groundwork" for GWA's ongoing monitoring program. [AGA 2657; ND 2607 (1997 Strauss Letter)]

The Petition further argues that GWA has been conducting monitoring since the new outfalls' completion and this information should be considered (Pet. Supp. Br. p. 30-31), but the Region did consider that data, and as a result removed the findings it had made in the Tentative

Decisions that GWA did not have the resources to conduct monitoring. However, when weighed against GWA's failure to submit – for years – the monitoring data required in the existing permits, and the additional monitoring data required as part of its 301(h) applications, the Region concluded that GWA had not established an adequate monitoring program as required by 40 CFR 125.63. [AGA 62, ND 64 (FDDs); AGA 189 (RTC)]

In its Petition, GWA fails to explain why the Region's responses to its comments on monitoring are clearly erroneous or otherwise warrant review. *See Michigan Dep't of Envtl. Quality v. EPA*, 318 F. 3d 705, 708-09 (6th Cir. 2003). Accordingly, review should be denied.

C. The modified discharges do not assure attainment or maintenance of water quality which assures the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

The Region reasonably concluded that GWA failed to make the demonstration required by CWA section 301(h)(2) and the implementing regulation at 40 CFR 125.62(c)(1), specifically, that an applicant's proposed discharge must allow for the attainment or maintenance of water quality that assures protection and propagation of a balanced indigenous population ("BIP") of shellfish, fish, and wildlife. [AGA 54; ND 56 (FDDs)] As part of the 301(h)(2) requirements, EPA regulations also require that a BIP must exist immediately beyond the ZID of the applicant's discharge and in all other areas beyond the ZID where marine life is actually or potentially affected by the applicant's proposed discharge,[29] 125.62(c)(2), and conditions within the ZID must not contribute to extreme adverse biological impacts, including, but not limited to, the destruction of distinctive habitats of limited distribution, the presence of disease epicenters, or the stimulation of phytoplankton blooms which have adverse effects beyond the ZID. 40 CFR

[29] As defined in 40 CFR 125.58(f), a balanced indigenous population is an ecological community which "exhibits characteristics similar to those of nearby, healthy communities existing under comparable but unpolluted environmental conditions, or may reasonably be expected to become re-established in the polluted water body segment from adjacent waters if sources of pollution were removed."

126.62(c)(3).

Discharges from wastewater treatment plants can contain a variety of pollutants that can cause adverse impacts to the marine environment. [AGA 50; ND 53 (FDDs)] In its section 301(h)(2) analyses, the Region used a comprehensive approach based on evaluation of chemical-specific data, WET data, and biological data to assess the impact of the proposed discharges on shellfish, fish, and wildlife. [AGA 51; ND 53 (FDDs)]

The Region assessed available information to determine whether protective water quality and a BIP would exist in the vicinity of the proposed discharge for each POTW. [AGA 51; ND 53 (FDDs)] GWA's applications were both based on improved discharges involving new outfalls discharging farther offshore and in deeper water. [Id.] An "improved discharge," defined in 40 CFR 125.58(i), may involve planned improvements to the discharge or alterations of the facility. 40 CFR 125.59(a).

Under 40 CFR 125.59(c), all applications for section 301(h)-modified permits must contain a complete section 301(h)Questionnaire, which requires the applicant to provide information concerning biological conditions in the vicinity of the applicant's current discharge and areas potentially affected by the modified discharge. Guidance for completing the Questionnaire is set forth in EPA's ATSD. [AGA 2268-2283 (ATSD Questionnaire, section III. D.)] To satisfy these requirements, the Questionnaire and EPA's ATSD require large applicants, such as GWA, to collect data and analyze biological conditions and habitat characteristics among different stations at the ZID boundary, nearfield, farfield, and reference areas for both the previous and new outfalls. [Id.]

EPA's ATSD provides guidance regarding how an applicant for an improved discharge, who cannot yet monitor the impacts of that discharge until implementation of the

improvements and/or alterations, can predict the physical, chemical, and biological conditions that would occur in the receiving water following implementation of the proposed improvements or alterations, based on predictive assessments of available data. [AGA 2283 (ATSD)]

Based on the insufficiency of data or information provided, the Region concluded that GWA failed to make the BIP demonstration required by CWA section 301(h)(2). The new Agana outfall did not become operational until December 2008, so the Region conducted the analysis described in its Tentative Decision based only on the baseline monitoring data then available, and in the Final Decision also considered the newly generated data available at the time the Region issued the Final Decision. [AGA 51 (FDD)] Likewise, the new Northern District outfall was not completed until January 2009 and the Region prepared the Tentative Decision using only the available baseline monitoring data. When the Region issued the Final Decision, it also considered the small data set generated after January 2009. [ND 54 (FDD)] As noted, a diffuser had not yet been attached to the new Northern District outfall and thus the newly generated data did not reflect the dilution that otherwise would have been provided by the diffuser. [Id.] Notwithstanding the guidance provided in the ATSD (mentioned in the 1997 Strauss Letter), GWA did not provide any predictive assessments of the physical, chemical, and biological conditions that would occur after the construction of the new outfalls. [AGA 2283 (ATSD)] Accordingly, the Region itself endeavored to assess compliance with 40 CFR 125.62(c) for the proposed discharges based on relevant information available from discharges through the previous outfalls. [AGA 51; ND 54 (FDDs)] Given the serious gaps in the actual monitoring data submitted for the old outfalls, the Region ultimately concluded that the applications lacked

sufficient information to demonstrate that acceptable biological conditions would occur at the locations of the new outfalls. [AGA 53-54; ND 56 (FDDs)]

1. Review of pollutant-specific data

As previously discussed in Argument Section II.A.2.b., GWA did not provide adequate pollutant-specific water quality monitoring data to determine whether levels of toxic and other pollutants, such as nutrients, orthophosphate and nitrate-nitrogen, would consistently comply with Guam's water quality criteria after initial dilution (with actual receiving water data or after modeling of effluent data). [AGA 51; ND 54] Sufficient water quality data do not exist to evaluate potential biological impacts of specific pollutants in the discharges from the previous outfalls, even though the Region requested this information from GWA for the section 301(h) evaluation. [AGA 2657-8; ND 2607-08(1997 Strauss Letter)] The Region therefore could not be reasonably assured that the proposed discharges through the new outfalls would allow for attainment and maintenance of that water quality that assures protection and propagation of a BIP pursuant to 125.62(a)(1). [AGA 51; ND 54 (FDDs)]

2. Review of WET data

In assessing whether the discharges from the new outfalls could interfere with the attainment and maintenance of water quality protective of a BIP, the Region also considered whether discharges from GWA's old outfalls complied with Guam's water quality standard for toxicity (GWQS Section 5103(C)(11)(A)), as measured through analysis of WET . [AGA (49-50); ND 51-52 (FDDs)] The main advantage of using WET over individual, pollutant-specific measurements is that WET integrates the effects of all chemical(s) in an aqueous sample. [AGA 52; ND 54 (FDDs); and AGA 3898 (EPA Region 9 and 10 Toxicity Training Tool, 2007)]

As discussed above in Argument Section II.A.2.d., GWA did not provide representative

WET data. [AGA 52; ND 55 (FDDs)] The March 1998 toxic pollutant analyses had revealed the presence of toxic pollutants in the effluent from both facilities.[30] [AGA 44-45; ND 47 (FDDs)] Even though most of these pollutants measured below water quality criteria in the single analyses conducted, there remains a potential for these pollutants, alone or in combination, to adversely affect marine life in the environment. [AGA 52; ND 55 (FDDs)] Because the Region was unable to determine that the proposed discharges through the new outfalls will meet water quality standards for toxicity, it was unable to rule out the potential that the discharges may contain pollutants that, alone or in combination, may impact marine life. [Id.]

3. Review of biological data

Finally, in attempting to determine whether the discharges from the new outfalls would ensure the presence of a BIP, the Region considered information about biological conditions in the vicinities of the previous outfalls as well as the proposed new outfalls. [AGA 53, ND 55 (FDDs)] Wastewater discharges can affect biological communities in many ways, such as modifying the structure of benthic communities caused by accumulation of discharged solids on the seafloor, increasing algae growth due to nutrient inputs, reducing DO levels due to phytoplankton blooms and subsequent die-offs that result in mass mortalities of fish or invertebrates, and causing bioaccumulation of toxic substances in marine organisms. [AGA 52; ND 55 (FDDs)]

To support its revised renewal applications, GWA conducted biological monitoring at both the previous and new outfall locations. For the Agana POTW, GWA provided the results of a survey conducted in 1971, and quarterly surveys from August 1989 to September 1994. [AGA 1874-1909] For the Northern District POTW, GWA provided results of a 1973 survey and

[30] For Agana, these pollutants included copper, zinc, silver, chloroform, p-dichlorobenzene; di(2-ethylhexyl)phthalate, and toluene. [AGA 44-45, FDD] For Northern District, the pollutants included copper, zinc, lead, p-dichlorobenzene, and toluene. [ND 47; FDD]

quarterly surveys from August 1989 to September 1994. [ND 1723-1750] For baseline benthic community monitoring for the new outfall locations, the both applications were supported with studies conducted in August 2005, March 2006, and January 2007 [AGA 53; ND 56 (FDDs)]

As required by 40 CFR 125.62(e) and instructed in EPA's ATSD, when an improved discharge has not yet been implemented, the applicant should compare attributes of the proposed discharge (e.g., volume and composition) and conditions at the proposed discharge site with discharges and conditions at outfalls that discharge effluent of similar volume and composition and in similar receiving water (in this case, the discharges through the old outfalls at Agana and Northern District) in order to predict whether a BIP would exist as a result of the proposed discharge. [AGA 53; ND 55 (FDDs)] GWA did not attempt to develop predictions concerning biological conditions at the proposed site based on such a comparison, nor was the data which GWA provided sufficient for EPA to evaluate in order to predict the biological impacts of the discharges at the new outfall locations. [AGA 52, ND 56 (FDDs)]

4. GWA's vague arguments relating to the BIP lack merit.

While GWA's Petition does not explicitly challenge the Region's findings concerning protection of a BIP of shellfish, fish and wildlife at each new outfall, some GWA arguments appear to relate to this issue. GWA argues that (1) the Region failed to consider the changes undertaken at both POTWs, specifically initiation of monitoring at the new outfalls, and thus GWA has not had an opportunity to provide relevant information regarding the new discharges (Pet. Supp. Br. pp. 17-18); (2) the Region should have requested specific information from GWA (Pet. Supp. Br. pp. 18-19); and (3) GWA has "relevant marine studies," but the Region has prevented submittal of these studies (Pet. Supp. Br. p. 23).

On the first point, GWA states that it began to conduct offshore monitoring prior to

"putting the new outfalls on line" (Pet. Supp. Br. p. 17), and that "additional environmental reporting for the final installation is now in progress." (Pet. Supp. Br. p. 18). During the comment period, GWA raised the issue of monitoring at the new outfalls and stated that "since the outfall was put on line, there has been no time to perform any studies to show that the effluent as discharged out of this outfall ensures 'protection and propagation' [of a BIP]." [AGA 183 (RTC)] The Region responded that, as the applicant, GWA had the responsibility to provide the necessary data, "which it did not, not even as part of its comments on the tentative decisions to deny the waivers." [AGA 184 (RTC)] As discussed above, EPA's ATSD specifically addresses how an applicant should make predictive assessments of the biological impacts of proposed (but not yet implemented) discharges, based on available data. GWA therefore would not have needed actual discharge data from the new outfalls because it could have used other data, had it actually attempted to gather such data. GWA did not, however, gather adequate pollutant-specific water quality monitoring data, conduct relevant WET testing or gather data sufficient to conduct comparative analyses of biological data with which it could have attempted to demonstrate adequate protection and propagation of a BIP at the new discharge locations. GWA's second point, that the Region should have requested specific information from GWA, is also misplaced. GWA raised this issue during the comment period, stating, ironically, that "on January 18, 2002, EPA sent a letter asking GWA to do additional baseline monitoring. GWA did not complete additional monitoring at that time." [AGA 183(RTC)] Whether GWA would have responded to additional requests that the Region may have made remains unanswered. In fact, GWA did not reinitiate its receiving water monitoring programs for the existing outfalls until September, 2008, nearly six months after the March 2008 teleconference when the Region explained its likely proposal to deny the renewal applications. [AGA 173 (RTCs)]

GWA's final point related to the BIP demonstration is that GWA has "relevant marine studies" conducted by Dr. Laurie Raymundo but the Region prevented submittal of these studies. Pet. Supp. Br. p. 23. In its comments on the tentative decisions, GWA explained that Dr. Raymundo, a Coral Ecologist for the University of Guam's Marine Lab, began a study in February 2009, "to look specifically at potential wastewater impacts on Guam's reefs." [AGA 182-84 (RTC)] GWA noted, however, that it was "too early to see any pattern in the data." [Id.] The Petition references Exhibit EE and describes it as the Raymundo study.[31] Pet. Supp. Br. p. 23. Exhibit EE is undated and appears to be a grant proposal designed to quantify the impact of primary-treated sewage on coral reefs and disease, in particular evaluating relative nutrient (nitrogen) loadings from fertilizer and from sewage. In the summary of the Project Description, the applicants explain: "Results of our research will be disseminated to local government agencies to be used as additional leverage for the need to upgrade sewage treatment on Guam. ... *The proposed project will quantify impacts of sewage pollution on coral health and disease, to provide additional evidence of reef degradation to local agencies responsible for water quality.*" Exhibit EE p. 2 (emphasis in original). In other words, the grant applicants appear to be expecting that their study will show degradation of the reef as a result of inadequate sewage treatment. GWA does not and cannot cite to any text of the proposal suggesting that "the preliminary results from the Raymundo study indicate that the corals in the immediate vicinity of the wastewater treatment plants do not show significant impacts and that those in the area of non-point source pollutants are heavily impacted," as GWA states in its brief. Pet Supp. Br. p. 23. In its Petition, GWA fails to explain why the Region's responses to its comments on monitoring are clearly erroneous or otherwise warrant review. *See Michigan Dep't of Envtl. Quality v. EPA,*

[31] The Petition references Exhibit EE and describes it as the Raymundo study. There is no date for this document, and it is therefore impossible to determine whether this was created after the Final Decisions were made.

318 F. 3d 705, 708-09 (6th Cir. 2003). Accordingly, review should be denied.

D. GWA did not make the required demonstrations relating to pretreatment and toxic pollutants from non-industrial sources.

The Region reasonably concluded that GWA failed to make the demonstrations related to pretreatment required under CWA sections 301(h)(5), (6) and (7). To evaluate whether GWA's applications met those requirements, the Region evaluated the adequacy of the applicant's compliance with implementing regulations for Urban Area Pretreatment Programs and Toxics Control. 40 CFR 125.65 and 125.66. The Petition did not raise any issues regarding the Region's determinations relating to the Urban Area Pretreatment Program, and it therefore waives this basis for challenge before the Board. The Board may sustain the Region's uncontested decision-making to deny renewal of the modified permits on the basis of CWA section 301(h)(6) alone, which sets forth the statutory requirement for the Urban Area Pretreatment requirements at 40 CFR 125.65. [32]

Section 301(h)(5) requires that an applicant for a modified NPDES permit has demonstrated that "all applicable pretreatment requirements for sources introducing waste into such treatment works [POTWs] will be enforced." 33 U.C.S. § 1311(h)(5). "Pretreatment" is defined as "the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW." 40 CFR 125.58(q). The section 301(h) pretreatment regulations define "industrial discharger" as any source of non-domestic pollutants

[32] The regulations at 40 CFR 125.65 ("Urban area pretreatment program") implement section 301(h)(6) of the CWA, which states that for a POTW serving a population of 50,000 or more, for any toxic pollutant introduced into the POTW by an industrial discharger which does not have an applicable pretreatment requirement in effect, "sources introducing waste into such works are in compliance with all applicable pretreatment requirements, the applicant will enforce such requirements, and the applicant has in effect a pretreatment program which, in combination with the treatment of discharges from the POTW, removes the same amount of such pollutant as would be removed if such POTW were to apply secondary treatment to discharges and if such POTW did not have a pretreatment program with respect to such toxic pollutant."

regulated under CWA sections 307(b) or (c) that discharges into a POTW. 40 CFR 125.58(j).

Pursuant to section 301(h)(7), EPA may not issue a section 301(h)-modified permit unless an applicant demonstrates, to the extent practicable, that it has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works. 33 U.S.C. § 1311(h)(7). The section 301(h) regulations define "non-industrial source" as "any source of pollutants that is not an industrial source." 40 CFR 125.58(m). "Toxic pollutants" are those substances listed in 40 CFR 401.15, under 40 CFR 125.58(aa).

The implementing regulation requires that the applicant design a Toxics Control program to identify and ensure control of toxic pollutants and pesticides discharged in the effluent. 40 CFR 125.66. The Toxics Control program regulation at 40 CFR 125.66 requires (a) a chemical analysis of the proposed discharge for toxic pollutants and pesticides; (b) a toxic pollutant source identification survey; and (c) where applicable, an approved pretreatment program, and (d) a nonindustrial point source control program. Each of these components and GWA's relevant arguments are discussed below.

1. Chemical analysis

The Region concluded that GWA did not comply with the chemical analysis component of the Toxics Control Program regulation because it conducted only a single toxic pollutant analysis for each revised application and, even for that analysis, did not indicate whether the analysis was conducted on a dry or wet weather composite sample. [AGA 63; ND 65 (FDDs)] Under 40 CFR 125.66(a), at the time of application, the applicant must submit a chemical analysis of its discharge for all toxic pollutants and pesticides, as defined in 40 CFR 125.58(p) and (aa). The applicant must analyze two 24-hour composite effluent samples, one dry weather

sample and one wet weather sample. 40 CFR 125.66(a)(1). Applicants may supplement or substitute chemical analyses if the composition of the supplemental or substitute samples typifies that which occurs during wet and dry weather conditions. Id.

In both of the revised applications GWA provided results of March 9, 1998 toxic pollutant analyses but did not specify whether the samples analyzed were dry or wet weather, supplemental or substitute. [AGA 3759-3785; ND 1537-1564] The Region therefore concluded that GWA did not meet the requirements of 40 CFR 125.66(a). [Id.] GWA does not directly contest the Region's findings regarding the chemical analysis component of the Toxics Control Program.

2. Toxic pollutant source identification

The Region concluded that GWA did not comply with the toxic pollutant source component of the Toxics Control program regulation because it did not identify the known or suspected sources of toxic pollutants identified in its chemical analyses of its discharges. [AGA 64; ND 66 (FDDs)] Under 40 CFR 125.66(b), the applicant must submit at the time of application an analysis of the known or suspected sources of toxic pollutants or pesticides identified in the chemical analysis required by 40 CFR 125.66(a). To the extent practicable, the applicant must categorize the sources according to industrial and nonindustrial types. Id.

As explained in Argument Section II.A.2.b., GWA conducted toxic pollutant analyses for both facilities' effluents and detected the presence of several toxic pollutants. In 2001, as part of supplementing both applications, GWA provided results of an April 1999 survey conducted via mail and telephone of all GWA commercial wastewater customers. [AGA 1752-1768; ND 1589-1595; and AGA 63; ND 66 (FDDs)] The revised applications reported that the results of the survey showed that of the 366 responses, only 20 reported the discharge of non-domestic

wastewater into the collection system. [Id.] Those respondents reported indirect non-domestic discharges to the GWA facilities from: a hotel, water park, hemodialysis center, laundromat, beverage and ice manufacturer, dental clinic, seafood retailer, restaurants/food court, daycare center, newspaper publisher, commercial building, diagnostic laboratory, optical laboratory, medical clinic, and pharmacy. [Id.] GWA did not report, however, any analysis concerning the possible sources of the toxic pollutants previously detected nor did it attempt to categorize such sources as industrial or non-industrial. [AGA 64; ND 66 (FDDs)] Without such identification or categorization, GWA would be impaired in developing and implementing toxics monitoring and source control programs. [Id.] In its comments on the Tentative Decisions, GWA attempted to explain that, based on the survey responses and its review of GWA billing records, "there are only two categorical[33] industrial users," including a U.S. Naval hospital and a landfill, that are subject to pretreatment requirements. [AGA 197 (RTC)] However, GWA's comments also noted that the Guam Memorial Hospital is also a categorical discharger subject to pretreatment requirements. [Id.] GWA did not, however, provide any additional information on these facilities nor the sources of the pollutants themselves.

Because GWA did not provide additional information to assess potential sources of toxic pollutants to the facilities, the Region concluded that GWA did not meet the requirements of 40 CFR 125.66(b) for toxic pollutant source identification. [AGA 64; ND 66 (FDDs)] The Petition does not directly contest the Region's findings regarding the toxic pollutant source identification component of the Toxics Control Program.

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[33] Categorical Pretreatment Standards are limitations on pollutant discharges to POTWs, promulgated by EPA in accordance with Section 307 of the Clean Water Act that apply to specific process wastewaters of particular industrial categories.

3. Industrial pretreatment requirements

a. EPA reasonably concluded that GWA did not meet the industrial pretreatment requirements

The Region found that GWA did not meet the industrial pretreatment program requirements because it neither administered an approved pretreatment program nor did it provide a certification that it has no known or suspected industrial sources of toxic pollutants. [AGA 64; ND 67 (FDDs)] Any applicant for a section 301(h) modified permit that has known or suspected industrial sources of toxic pollutants must have an approved industrial pretreatment program as described in 40 CFR Part 403. 40 CFR 125.66(c)(1). An applicant need not have a pretreatment program if the applicant provides a certification that there are no known or suspected sources of toxics pollutants. 40 CFR 125.66(c)(2).

GWA does not have an EPA-approved industrial pretreatment program. [AGA 64; ND 67 (FDDs)] In its applications for both POTWs, GWA indicated that the Territory of Guam has very little or no heavy industry and that there were no suspected industrial sources of toxic pollutants. [Id.] GWA did not, however, provide a certification that there were no known or suspected industrial sources of toxic pollutants. [Id.] In the March 9, 1998 toxic pollutant analyses for the two facilities, toxic pollutants were detected in each facility's effluent. [Id.] Further, GWA provided results of its telephone survey revealing several potential sources of toxic pollutants without categorization of such sources as industrial or non-industrial. [Id.] As noted above, however, GWA's comments on the Tentative Decisions identified two or three categorical industrial users. [AGA 197 (RTC)] Because GWA does not have an EPA-approved pretreatment program and has not provided a certification that there are no known or suspected sources of toxic pollutants, and by its own assertions could not do so, the Region concluded that GWA did not meet the requirements of 40 CFR 125.66(c). [AGA 64; ND 67 (FDDs)]

b. GWA's arguments regarding industrial pretreatment lack merit.

The Petition does contest the Region's conclusions regarding the pretreatment program component of the Toxics Control Program. GWA argues that the Region has not considered information submitted after 2001 and thus has not taken into account GWA's requests for "assistance dealing with military categorical industrial discharges to Petitioner facilities," that Guam Public Health has some enforcement responsibility for grease traps, that GWA is working with enforcement agencies to ensure that discharges are monitored and violations rectified, and that it has a "robust pretreatment program." Pet. Supp. Br. p. 36.

GWA does not argue that it has an approved pretreatment program. GWA, apparently, therefore would concede non-compliance with 40 CFR 125.66(c)(1). GWA does not argue that it has provided the certification of no known or suspected industrial sources of toxic pollutants otherwise required to avoid the pretreatment program requirement under 40 CFR 125.66(c)(2). The Petition itself acknowledges two categorical industrial users. Pet. Supp. Br. p. 36.

For these reasons, the Petition does not provide a basis for the Board to conclude that the Region's findings on the pretreatment component of the Toxics Control Program were erroneous. Therefore, GWA's arguments regarding industrial pretreatment do not warrant review.

4. Nonindustrial source control program

a. EPA reasonably concluded that GWA failed to meet requirements for a nonindustrial source control program.

The Region reasonably concluded that GWA did not meet the regulatory requirement to develop and implement, for each facility, a nonindustrial source control program, the final component of the Toxics Control Program. [AGA 65; ND 67-68 (FDDs)] Each applicant for a 301(h) modified permit must submit a proposed public education program designed to minimize

the entrance of nonindustrial toxic pollutants into the wastewater treatment system, which shall be implemented no later than 18 months after issuance of the modified permit. 40 CFR 125.66(d)(1). Under its existing permits, GWA was required to implement the public education programs by November 30, 1987. [AGA 2572-75; ND 2525-27 (NPDES permits); and AGA 65; ND 67 (FDDs)] In the revised applications, GWA indicated that it had not yet implemented a formal program. [AGA 65; ND 67 (FDDs)] GWA did, however, provide an implementation schedule for a public education program. [Id.] The revised applications specified that by September 1998, GWA would have completed its program to collect industrial user surveys and to investigate and identify significant toxic pollutant contributors. [Id.] GWA proposed the use of posters, newspaper articles, and radio/TV announcements as parts of its public education program to educate the public on proper disposal of waste. [Id.] GWA did not conduct the industrial user surveys until April 1999. [Id.] GWA did not provide the Region with information on the progress of implementing the public education program as part of its revised applications or even during the comment period on the Tentative Decisions. Therefore, the Region concluded that GWA's applications did not comply with 40 CFR 125.66(d)(1). [Id.]

Similarly, the Region concluded that the revised applications did not comply with the regulations at 40 CFR 125.66(d)(2) and (3). Those regulations require the applicant to develop and implement a nonindustrial source control program, including a schedule of activities for identifying nonindustrial sources of toxics and pesticides and a schedule for developing and implementing control programs. 40 CFR 125.66(d)(2) and (3). At the time EPA issued the current 301(h)-modified permits for both facilities, GWA was not required to submit the schedule to develop and implement a non-industrial pretreatment program because the requirement applied to large applicants only and GWA was a small applicant at the time.

Questionnaire, Part III. H.2.d. As previously noted, however, the 1997 Strauss Letter notified GWA that its status had changed due to growth. [AGA 2657-28; ND 2607-08 (1997 Strauss, letter)] As a large applicant, GWA failed to provide information on the development and implementation of a nonindustrial source control program for each POTW, as required by 40 CFR 125.66(d)(2) and (3). [AGA 65; ND 67-8 (FDDs)] Therefore, the Region concluded that GWA did not demonstrate that it met the requirements of 40 CFR 125.66(d)(2) and (3).

b. GWA's arguments regarding non-industrial source control also lack merit.

The Petition challenges the Region's findings related to the nonindustrial source control component of the Toxics Control program requirements and urges the Region to assist GWA in defining the desired elements of the non-industrial program and provide an opportunity for GWA to implement that program. Pet. Supp. Br. pp. 37-38. GWA refers to the public education program it presently administers regarding proper disposal of waste and argues that it made an offer to submit a CD containing examples of education campaigns to which the Region has not responded. Pet. Supp. Br. p. 37.

In responding to comments, the Region explained that the materials offered by GWA, such as the CD containing examples of GWA's public education campaigns directed at septage haulers, would likely have been inadequate to meet the regulatory requirement for a nonindustrial source control program even if they had been submitted. [AGA 199 (RTC)] The Region explained that GWA was required to have completed the applicable portions the section 301(h) Questionnaire that pertain to large applicants many years prior. [Id.] Moreover, the GWA offer included only a public education program that could be used to satisfy 40 CFR 125.65(d)(1), but did not include a schedule of activities for identifying nonindustrial sources of

toxic pollutants and pesticides and a control program for nonindustrial sources of toxic pollutants and pesticides to satisfy the requirements of 40 CFR 125.65(d)(2) and (3). [Id.]

Because GWA's revised applications did not comply with any of the regulations in 40 CFR 125.66, including chemical analysis, toxic pollutant source identification, industrial pretreatment, and nonindustrial source control, the Region reasonably concluded that GWA did not meet the Toxics Control Program requirements to be implemented under the regulation. Given the detection of toxic pollutants in both facilities' discharges, the Region concluded that GWA failed to make the demonstrations required under CWA sections 301(h)(5) and (7).

5. GWA raises issues in the Petition that were not raised during the comment period.

GWA makes the following new comments in its Petition: (1) GWA has submitted a "draft proposed program" and is working to implement it, and (2) the majority of requirements of the industrial pretreatment program are in fact already included in Guam's regulations. Pet. Supp. Br. p. 35.

In regards to the first issue, the Region notes that GWA submitted only part of a pretreatment program application in an email dated November 3, 2009, which GWA describes as Exhibit RR in its Petition. This submittal consists only of a draft ordinance that has not been enacted. GWA asked the Region to consider only part of a proper application for a pretreatment program[34] and did so only after the Region issued the Final Decisions challenged in its Petition. The Board should strike these post-decisional documents from its consideration of the administrative record on review.

Likewise, GWA failed to comment with specificity that the majority of requirements of

[34] The requirements for applications for municipal industrial pretreatment programs, which must be formally submitted to EPA for approval, are set forth in 40 CFR Part 403. In a letter dated January 27, 2010, the Region explained to GWA the necessary components of an application and the application and appeal processes.

the industrial pretreatment program are already included in Guam's regulations. Therefore, the Region cannot respond regarding the extent to which those regulations relate to GWA's operations, much less a pretreatment program. As stated above, GWA concedes that it has no pretreatment program. Pet. Supp. Br. p. 35. Under 40 CFR 125.66(c)(1), an applicant for a section 301(h) variance that has known or suspected industrial sources of toxic pollutants must have an approved pretreatment program as described in 40 CFR 403. Because that GWA failed to meet these regulatory requirements, the Region concluded that GWA did not make the demonstrations required by CWA sections 301 (h)(5), (6), and (7).

III. GWA's Arguments Based on Factors Beyond the Scope of Section 301(h) Should Not Be Considered by the Board as a Basis to Review the Region's Decision-making.

The Petition argues a variety of additional issues that are not germane to the CWA section 301(h) demonstration requirements, variously urging that the Region is or should be legally barred or estopped, as an exercise of the Board's policy discretion, from disapproving the revised applications to re-issue the modified permits. GWA argues that the revised applications must be approved based on the Region's actions in negotiating and entering into a stipulated judicial order on consent, which required compliance with existing permit requirements and did not forecast the need for secondary treatment upgrades to the two plants. Pet. Supp. Br. pp. 16-17. GWA also argues that it should be relieved from requirements in the application regulations related to improved and modified discharges because the outfall extensions are so new that predictive modeling related to the designs could not be effective, and GWA was deprived of "sufficient time to directly assess the impacts of the [outfall] extensions." Pet. Supp. Br. p. 21. The Petition claims that the Region erred in failing to factor affordability into its decisions under CWA section 301(h) decisions, which otherwise allows for less stringent technology-based limits provided that certain water quality-based demonstrations are made. Pet. Supp. Br. p. 25. The

Petition also argues that an anticipated military building on Guam prompted the Region's denial decisions and that, based on uncertainties introduced by the build-up, the Department of Defense should be responsible for secondary treatment plant upgrades. Pet. Supp. Br. p. 38. GWA urges that denial of the revised applications for re-issuance is arbitrary because the denial would derail its efforts to address other water quality concerns. Pet. Supp. Br. p. 24. None of these arguments, assertions, or suggestions warrant review of the Region's decision-making in this matter.

A. The Stipulated Order does not displace the requirements of CWA section 301(h).

The United States' negotiation of and entry into a stipulated judicial order on consent designed to bring GWA into compliance with Clean Water Act and Safe Drinking Water Act requirements does not bar the Region from denying the revised applications for renewal of the modified permits. In December 2002, EPA brought a judicial action against GWA in the United States District Court of Guam, seeking injunctive relief and civil penalties under sections 309(b) and (d) of the Clean Water Act for violations of the terms and conditions of the NPDES permits for the Agana and Northern District POTWs, among other claims. The action also involved Safe Drinking Water Act (42 U.S.C. §300f *et seq.*) claims. In 2003, the court entered a Stipulated Order ("SO") in this matter, which requires GWA to take specific actions to come into compliance with the Clean Water Act and the Safe Drinking Water Act. One of the requirements involves preparation of a Water Resources Master Plan ("Master Plan"), which is subject to EPA's comment and approval.

GWA complains that when the Region consented to amending the SO, the Region failed to include a requirement for planning for secondary treatment upgrades at the Agana and Northern District POTWs. Pet. Supp. Br. p. 5. GWA argues that Regional personnel, who

commented on the draft Master Plan required under the SO, should have urged planning for secondary treatment during review. Pet. Supp. Br. p. 8. GWA contends that EPA is legally bound by the SO's *lack* of requirements pertaining to secondary treatment because the SO "constituted a judgment in the case and contained explicit directives on how the EPA believed that Petitioner should approach NPDES compliance at" the Agana and Northern District POTWs, and thus EPA waived its ability to deny GWA's 301(h) applications." Pet. Supp. Br. pp. 16-17. Because the enforcement action and its resolution were based on and designed to remediate GWA's non-compliance with then applicable requirements, the Board should reject this argument.

The Region addressed this issue in its response to comments, pointing out the difference between the SO/Master Plan and the 301(h) process; the SO was designed to remedy GWA's non-compliance with the NPDES permits in effect at the time the SO was drafted. [AGA 176 (RTC)] The Region rejected the contention that it either explicitly or implicitly made any commitment "to reissue Guam's 301(h) permit through the positions it took in negotiations leading to the execution of the Stipulated Order" and explained that it lacked the legal authority to prejudge the CWA 301(h) decision-making in that earlier proceeding. [Id.] The SO was amended in 2006. The Region did not propose its tentative denial decision for public comment until January 2009. [Id.] Accordingly, the Region did not have a basis to require GWA to design for, much less upgrade to, secondary treatment until completing action under CWA section 301(h), including the conclusion of proceedings before this Board.

The Region also explained the separation of functions among Regional enforcement and permitting staff, noting that it kept the permitting process separate from enforcement action, and that it could not "negotiate the terms of a permit while negotiating resolution of an enforcement

action; each process has its own independent legal requirements." [AGA 177 (RTC)] At no time during the negotiation and implementation of the SO did the Region commit to GWA that the Region would renew the 301(h) modified permits. [Id.]

The Petition does not address the Region's responses to GWA's comments relating to the SO and Master Plan. GWA does, however, add a new legal argument that EPA is barred from denying GWA's 301(h) applications, citing a decision of the Supreme Court for the proposition that the SO "constituted a judgment in the case." Pet. Supp. Br. pp. 16-17. This legal argument was not raised during the comment period,[35] at least not with the specificity implied by the case citation. A petition for review must demonstrate that any issues raised in the petition were raised during the public comment period on the permit decision. 40 C.F.R. 124.19(a).

GWA's argument may be purely legal, but it appears that GWA may have incorrectly reasoned that the Region denied its permit application in exercise of the Agency's enforcement authority under CWA section 309. To the contrary, the decisions on review in this Petition represent an exercise of the Region's delegated permitting authority pursuant to CWA section 301(h) and 402(a). 33 U.S.C. §§ 1311(h), 1342(a). Regardless, the suggestion that "the case" includes both past compliance with the existing, expired but administratively continued permits and the new permits, which the CWA indicates must be for a fixed term not to exceed five years, 33 U.S.C. § 1342(b)(1)(B), is misplaced. Decision-making under the NPDES permitting program is dynamic and changes over time as scientific understanding and legal requirements evolve.

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[35] Likewise, GWA did not submit the documents labeled Exhibits H, O, J, and W in its Petition during the comment period. For this reason, and because these documents concerning the SO and Master Plan are not relevant to the Region's analysis under section 301(h), these exhibits should not be considered part of the Administrative Record. *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 516-528 (EAB 2006); *Dominion Energy Brayton Point*, 13 E.A.D. ____, slip. op. at 15 (EAB 2007), *see also In re Marine Shale Processors, Inc.*, 5 E.A.D. 751, 797 n.65 (EAB 1995)(pre-decisional documents); *In re Three Mountain Power, L.L.C.*, PSD Appeal No. 01-05, at 2-3 (EAB Apr. 25, 2001)(post-decisional analysis).

B. Anticipated but incomplete extension of the outfalls does not obviate the need for full compliance with the requirements of CWA section 301(h).

GWA argues incorrectly that the Region should not have denied GWA's applications for renewals of its 301(h)-modified permits prior to completion of the outfall extensions for the Agana and Northern District POTWs. First, GWA argues that the Region had made a commitment to renew GWA's 301(h)-modified permits if GWA completed the extensions, and by not allowing GWA to compete the extensions before it made its Final Decisions, the Region failed to live up to its commitment. Pet. Supp. Br. pp 6-9. Second, GWA argues that the Region wrongfully deprived GWA of "necessary" time to directly measure water quality impacts of the completed outfalls. Both arguments must fail.

1. There was no commitment or policy on the part of the Region to renew the waivers if GWA constructed the outfall extensions.

The Region did not commit to re-issuance of the modified permits and GWA points to no supporting evidence for that proposition. GWA argues that the Region established a clear commitment and policy to allow Petitioner to maintain the waivers and that "EPA indicated to GWA that it intended to renew the 301(h) waivers if Petitioner built the new outfalls." Pet. Supp. Br. pp. 6-7. To support these assertions, GWA refers to the 1997 Marcus Letter and the 1998 Strauss Letter, both of which described the need for extending the outfalls at both facilities in order to comply with section 301(h). [AGA 2646-52; ND 2597-2602 (1997 Marcus Letter); AGA 2664-65; ND 2614-15 (1998 Strauss Letter)]

These documents do not purport to establish any such commitment or policy. [AGA 181-82 (RTC)] GWA "was on notice at the time that EPA was in the process of evaluating data regarding the waiver applications and possibly denying GWA's applications." [AGA 181 (RTC)] Indeed, the 1997 Marcus Letter identified itself as a tentative decision to *deny* the applications. [AGA 177 (RTC); and AGA 2647-52; ND 2597-2602 (1997 Marcus Letter)] The

Region explained, citing the 1997 Marcus Letter, that greater diffusion of effluent that may result from an outfall extension can improve the chances of obtaining a favorable section 301(h) decision, "provided an applicant meets the remaining decision criteria." [AGA 181-82 (RTC)] The Region explained why "GWA incorrectly asserts that the outfall extensions should be sufficient by themselves to result in renewals of the waivers. At no time did EPA state or imply that extending the outfalls would guarantee renewal of the waivers." [Id.] The Board should not reward GWA with a legal or equitable shield from the section 301(h) requirements based on the Region's suggestion that GWA attempt to comply more seriously with those requirements.

2. GWA mistakenly argues that the Region wrongfully deprived GWA of time to directly assess the impacts of the proposed discharges from the extended outfalls.

The Region disagrees that it should have delayed its decisions on the CWA 301(h) applications in order to allow GWA additional time collect data from the completed outfall extensions. [AGA 182 (RTC)] Although EPA's regulations do allow for applications to be based on improved discharges, and extending outfalls is specifically mentioned as an example of an improved discharge, EPA's regulations in no way suggest that the Region should delay decision making until the improvements have been made and data is collected for the improved discharge. [Id.] Implementing regulations specifically contemplate modified, improved, or otherwise altered discharges that applicants may propose in applications under CWA section 301(h). Regarding altered discharges, the applicant needs to show that the improvements "have been thoroughly planned and studied and can be completed or implemented expeditiously" [not that they "have been implemented"] and "detailed analysis projecting ... composition of the applicant's discharge . . . expected to result from the proposed improvements." 40 CFR 125.62(e).

Decisions on 301(h) applications for improved discharges that have not been implemented may be based on predictive assessments. Beyond the "Basis of Design" documents, however, GWA could have but did not attempt to predict the impacts of the proposed discharges from the extended outfalls. GWA criticizes the Region's use of predictive modeling to assess the impacts of the extended outfalls, because "the outfalls are so new that no model could conceivably be effective." Pet. Supp. Br. p. 21. GWA cites no specific basis for this criticism other than the "Administrative Record." Id. GWA adds that "by depriving Petitioner [of] sufficient time to directly assess the impacts of the EPA-required extensions, Petitioner has been deprived of the necessary time to assess any potential impacts on water quality from these outfalls." Id. The Region notes that GWA designed the extended outfalls based on models and predictions about effluent quality – and did so nearly nine years ago. [AGA 2733; ND 1889 (Basis of Design)]

To the extent GWA is criticizing the modeling performed by the Region, GWA did not raise this issue in the comments. Environmental modeling, including environmental engineering, has been an accepted practice for several decades. GWA itself performed dilution modeling regarding the proposed outfalls, and the Region used those results, plus additional modeling, using equations from the 301(h) ATSD. [See, e.g., AGA 20-24 and 27-38; ND 29-44 (FDDs); AGA 2335 (ATSD Appendix B ("Water Quality Assessment")] GWA has not raised any specific issues regarding the models used by the Region, nor did GWA include such issues in its comments during the comment period. The Board therefore should reject GWA's arguments regarding incapacity to monitor the impact of the outfall extensions.

C. CWA section 301(h) does not require consideration of the comparatively higher cost of secondary treatment associated with denial of a modified permit.

GWA estimates that the cost of secondary treatment will be approximately $300 million and describes other substantial costs that are required for compliance with the Clean Water and Safe Drinking Water Acts. Pet. Supp. Br. p. 13. GWA further argues that the Region "acted in an arbitrary and capricious manner by concluding that the EPA's own standards and policies governing affordability of secondary treatment are irrelevant." Pet. Supp. Br. p. 25, citing Exhibit HH.[36] However, because the CWA directs the consideration of costs in the development of technology-based standards, and CWA section 301(h) offers relief from those technology-based limits in the form of less stringent limits based on water quality-based demonstrations, the Board should reject GWA's arguments that the Region was obliged to consider the costs of secondary treatment in its decisions in this matter.

The Region does not deny that GWA, like many government entities, faces considerable financial challenges in meeting societal needs. In responding to comments, the Region made clear that cost considerations are appropriately considered in determining any schedules for compliance with applicable requirements that may result from subsequent enforcement proceedings. [AGA 179 (RTC)] The Region recognizes that utilities like GWA face many competing wastewater and drinking water infrastructure priorities. [Id.] The decision-making under CWA section 301(h) does not, however, require consideration of costs, either as a statutory or regulatory factor.

[36] The Region notes that the argument that its decisions were arbitrary and capricious in this regard was not made, nor was Exhibit HH submitted to the Region, during the comment period. Similarly, the argument that the Region's Final Decisions will make water and wastewater services unaffordable as early as 2017 (Pet. Supp. Br. p. 40), was not raised with specificity during the comment period.

In an analogous situation, the Board recognized the difference in NPDES decision-making relating to technology-based versus water quality-based CWA discharge control requirements. In *City of Attleboro, MA*, NPDES Appeal No. 08-08 (Sept. 15, 2009), the Board rejected a petitioner's argument concerning the cost of compliance with a water quality-based effluent limitation; "[c]laims of cost or technological feasibility have consistently been rejected by this Board as a basis for review ... [S]ection 301(b)(1)(C) of the CWA requires unequivocal compliance with applicable water quality standards, and does not recognize an exception for cost or technological infeasibility." Slip op. at 46-47. While the *Attleboro* decision addressed the consideration of costs associated with water quality-based effluent limitations rather than the statutory factors under CWA section 301(h), the same considerations apply. Neither the CWA in general, nor section 301(h) in particular, contemplate variance from the technology-based requirements for effluent limits based on secondary treatment based on cost considerations. The demonstrations required under CWA section 301(h) are designed to assure protection of water quality when modifying the technology-based secondary treatment requirements, which are statutory analogues to the technology-based effluent limitations that do require consideration of costs. Such cost considerations should be rejected by the Board as a basis for review in this matter.

D. The Region did not issue the final decisions as a result of the military buildup in Guam.

The remedy requested from the Board by GWA as it relates to the anticipated military buildup is unclear. GWA suggests that the Region improperly took the impending military buildup into consideration in its Final Decisions, stating that "the military buildup will dramatically increase the population of the island of Guam and may drive the [Northern District] plant capacity over its current design capacity of 12 MGD. Once the plant has to be upgraded to

increase its capacity, there is clearly no longer an opportunity for a waiver to apply." Pet. Supp. Br. p. 38. In its comments on the Tentative Decisions, GWA urged that the need for secondary treatment is driven by the Department of Defense (DoD)'s military buildup impacts and therefore "DoD should be fully responsible for any necessary upgrades to secondary treatment." Pet. Supp. Br. p. 38. The Region responds that GWA's eligibility for relief from the requirement to meet effluent limits based on secondary treatment is separate and discrete from how GWA (or its domestic and industrial users) should manage the costs that would be associated with compliance with that requirement.

GWA further argues that it should have an opportunity to address the military buildup before there is a final decision regarding the permit renewal application for each POTW. Pet. Supp. Br. p. 14. "Petitioner cannot yet define future planning related to that build-up nor can the EPA." Pet. Supp. Br. p. 15. GWA did not make this comment during the comment period and thus the Region did not have an opportunity to specifically address it. While the Region believes that this argument should not be considered as a proper basis for review, the Region notes that it appears the request urges delay for an indeterminate period that could span years, if not a decade or more. Nothing about the anticipated military build-up supports an indeterminate delay in CWA section 301(h) decision-making on GWA's revised applications.

E. Section 301(h) does not require consideration of an applicant's projects and priorities, such as aquifer protection and capital investment in water and wastewater systems, which are unrelated to the modified permit application.

As it should for GWA's arguments relating to the costs of secondary, the Board should reject GWA's equitable pleas for legal relief from applicable statutory standards based on GWA's ongoing efforts to address other matters of environmental concern. GWA makes two arguments concerning other projects and priorities that require expenditure of GWA's resources

and would be impaired by denial of its 301(h) renewal applications due to the need to upgrade the Agana and Northern District POTWs to secondary treatment. GWA states that Guam relies on the Northern Lens Aquifer for its drinking water supply and there are numerous septic systems over the lens that threaten drinking water quality. Pet. Supp. Br. p. 24. GWA argues that the Region's decisions to deny the revised applications for renewal place the aquifer at risk "by diverting Petitioner's scarce financial and administrative resources from aquifer protection to [the costs of] secondary treatment." Pet. Supp. Br. p. 24. Likewise, GWA argues that it has made significant strides towards reducing pump station failures and performing system maintenance designed to reduce sanitary sewer overflows, and that any requirement that the treatment plants meet limits based on secondary treatment would "derail" its pump station and overflow efforts. Pet. Supp. Br. p. 24.

The Region responds first that both the protection of the sole source aquifer and the protection of the marine surface waters are environmental priorities, but the former is not among the statutory factors identified under CWA section 301(h). The Region agrees that protection of the drinking water source aquifer from domestic sewage must be a high priority. [AGA 166 (RTC)] The Region believes, however, that protection of the receiving waters for the discharges at Agana and Northern District also represents an environmental priority and that the two environmental priorities are not mutually exclusive. [Id.] As noted above regarding the costs of compliance with limits based on secondary treatment and associated infrastructure investments, the appropriate context in which to consider such priorities would be resolution of enforcement remedies for non-compliance.

CONCLUSION

GWA has not demonstrated that the Region's section 301(h) decisions were based on clear error of law or fact or raise important policy considerations meriting review. GWA's challenges misinterpret portions of the CWA and EPA's implementing regulations. By correctly implementing the applicable statutory and regulatory requirements, the Region reasonably determined that GWA's applications for renewal should be denied.

As stated above, the mere repetition of objections made during the comment period or the "mere allegation of error" without specific supporting information is insufficient to warrant review. *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 496, 520 (EAB 2002); *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000). GWA's Petition repeats its earlier comments and alleges error in the Region's reasoning but it does not provide supporting information (legal, factual or technical) that warrants review by the Board. Accordingly, the Board may defer to the Region's judgment. *See In re Inter-Power of New York,* 5 E.A.D. 130, 144 (EAB 1994).

Throughout, GWA's Petition improperly raises new issues that it had not identified during the comment period. The EPA's rules controlling the appeal of a NPDES permit decision require a petition for review to demonstrate that any issues raised in the petition had been raised in comment during the public comment period on the permit decision. 40 C.F.R. § 124.19(a), *In re Dominion Energy Brayton Point*, 12 E.A.D. 490, 510 (EAB 2006). Thus, the Board need not consider these issues,

The Region's decisions to deny the applications for the modifications to secondary treatment requirements were made in the sound exercise of its discretion and in accordance with the statutory and regulatory requirements governing such decisions. Therefore, GWA's petition for review should be denied.

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Respectfully submitted,

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