### EPA Review and Analysis of the Commonwealth of Northern Mariana Islands 2016 Section 303(d) List Submitted December 2016

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#### **Purpose**

The purpose of this review document is to describe the rationale for EPA's approval of the Territory of the Commonwealth of the Northern Mariana Islands' (CNMI) (Territory) 2016 Clean Water Act (CWA) Section 303(d) list (list) of impaired water bodies. The following sections identify key elements to be included in the list submittal based on the Clean Water Act and EPA regulations. See 40 CFR §130.7. EPA reviewed the methodology used by the Territory in developing the 303(d) list and the Territory's description of the data and information it considered. EPA's review of CNMI's 303(d) list is based on EPA's analysis of whether the Territory reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

#### Statutory and Regulatory Background

#### Identification of Water Quality-Limited Segments for Inclusion on a Section 303(d) List

Section 303(d)(1) of the Act directs each State and Territory to identify those waters within its jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to achieve applicable water quality standard, and to establish a priority ranking for such waters, taking into account the severity of the pollution and the designated uses of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d). EPA's longstanding interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources. In Pronsolino v. Marcus, the District Court for the Northern District of California held that section 303(d) of the Clean Water Act (CWA) authorizes EPA to identify and establish total maximum daily loads (TMDLs) for waters impaired by nonpoint sources. See Pronsolino et al. v. Marcus et al., 91 F.Supp.2d 1337, 1347 (N.D.Ca. 2000), Pronsolino v. Nastri, 291 F.3d 1123 (9th Cir 2006). See also EPA's 2006 Guidance and National Clarifying Guidance for 1998 Section 303(d) Lists, Aug. 27, 1997. EPA regulations provide that Territories do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by Territory or local authority, and (3) other pollution control requirements required by Territory, local, or federal authority. See 40 CFR §130.7(b)(1).

#### Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing Section 303(d) lists, Territories are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the Territory's most recent Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. 40 CFR §130.7(b)(5). In addition to these minimum categories. Territories are required to consider any other data and information that is existing and readily available. EPA's 2006 Guidance describes categories of water qualityrelated data and information that may be existing and readily available. See Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act, EPA Office of Water, 2005, Section V ("EPA's 2006 Guidance"). EPA's 2006 Guidance is supplemented by EPA's informational memorandums for 2008, 2010, 2012, 2014 and 2016 which reiterate and clarify previous guidance. While Territories are required to evaluate all existing and readily available water quality-related data and information, Territories may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring Territories to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 CFR §130.7(b)(6) require Territories to include, as part of their submittals to EPA, documentation to support decisions to rely or not rely on particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by the Region.

#### Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the Act that Territories establish a priority ranking for listed waters. The regulations at 40 CFR §130.7(b)(4) require Territories to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those water quality-limited segments (WQLSs) targeted for TMDL development in the next two years. In prioritizing and targeting waters, Territories must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A). As long as these factors are taken into account, the Act provides that Territories establish priorities. Territories may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters, degree of public interest and support, and Territory or national policies and priorities. See 57 FR 33040, 33045 (July 24, 1992) and EPA's 2006 Guidance with subsequent supplements for 2008, 2010, 2012, 2014 and 2016.

#### Analysis of CNMI's Submittal

#### Identification of Waters and Consideration of Existing and Readily Available Water Quality-Related Data and Information

EPA has reviewed the Territory's submittal and has concluded that CNMI developed its Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR §130.7. EPA's review is based on its analysis of whether the Territory reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

CNMI assembled data and information from the Territory's water quality monitoring programs as well as surveys and assessment reports prepared by other researchers [CNMI 303(d), 305(b) and 314 Water Quality Assessment Integrated Report, pp. 19-25]. The Territory considered each of the data and information sources identified in 40 CFR §130.7(b)(5). The Territory applied a straightforward set of listing criteria that closely follow EPA's 1997 and 2002 assessment Integrated Report, pp. 26-37]. EPA concludes the Territory followed EPA's 2006 Integrated Report guidance, and subsequent supplements, and properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR §130.7(b)(5). EPA also finds that the listing criteria are consistent with federal listing requirements and that those criteria were applied in a consistent and reasonable manner in compiling the list.

The Territory properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance. Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point and/or nonpoint source.

#### Priority Ranking and Targeting

EPA also reviewed the Territory's priority ranking of listed waters for TMDL development, and concludes that the Territory properly took into account the severity of pollution and the uses to be made of such waters, as well as other relevant factors. In addition, EPA reviewed the Territory's identification of high priority WQLSs targeted for TMDL development and concludes that the targeted water segments are appropriate for TMDL development or submittal in the near future [CNMI 303(d), 305(b) and 314 Water Quality Assessment Integrated Report, Appendix VIII, Tables VIII-1, VIII-2, and VIII-3].

#### Good Cause for Delisting

CNMI removed three waterbody impairments from the 303(d) list in 2016. These include Kagman (watershed 14), LaoLao (watershed 15), and Makpo (watershed 9). Kagman was delisted as a result of decreased enterococci exceedances after the completion of Cross Island road improvement BMPs. LaoLao was delisted as a result of decreased enterococci exceedances after the completion of LaoLao Bay Dr. and Cross Island road reconstruction and BMPs as well

as the implementation of the LaoLao Bay Conservation Action Plan (CAP). The LaoLao Bay CAP focuses on implementing remediation and restoration activities. Makpo's dissolved oxygen (DO) data meets the DO standard everywhere in the watershed except the harbor. For that reason, the watershed is delisted everywhere except the harbor.

#### TMDLs Completed Since the Previous 303(d) List

CNMI has not completed any TMDLs to date. CNMI has identified two high priority TMDLs to be developed by the next reporting cycle in the W. Takpochao and Achuago Watersheds. A TMDL for all coastal waters impaired by bacteria in Saipan is currently under development.

#### Public Comments

The Bureau of Environmental Coastal Quality (BECQ) posted a Draft 2016 CNMI Integrated Report to their website. The public participation process included a solicitation for public comments online. Six advertisements were also put in the local newspaper to solicit comments. The public comment period was 33 days from October 3, 2016 to November 4, 2016. BECQ received no comments.

#### Administrative Record Supporting This Action

In support of this decision to approve the Territory's listing decisions, EPA carefully reviewed the materials submitted by the Territory with its 303(d) listing decision. The administrative record supporting EPA's decision is comprised of the integrated assessment report and supporting documentation submitted by the Territory, associated federal regulations, EPA guidance concerning preparation of Section 303(d) lists, and the decision letter and supporting staff report. EPA determined that the materials provided by the Territory with its submittal provided sufficient documentation to support our analysis and findings that the Territory listing decisions meet the requirements of the Clean Water Act and associated federal regulations. We are aware that the Territory compiled and considered additional materials (e.g. raw data and water quality analysis reports) as part of its list development process that were not included in the materials submitted to EPA. EPA did not consider all of these additional materials as part of its review of the listing submittal. It was unnecessary for EPA to consider all of the materials considered by the Territory in order to determine that, based on the materials submitted to EPA by the Territory, the Territory complied with the applicable federal listing requirements. Moreover, federal regulations do not require the Territory to submit all data and information considered as part of the listing submittal.

303(d) listings in CNMI's Integrated Report<sup>1</sup>

### APPENDIX VIII: Ranked TMDL 303(d) List from High to Low Priority

COLOR LEGEND: Added to impaired list this reporting cycle - in Red

							Target TMDL
		Seg				First	Completion
TMDL No.	Island	ID	Segment Name	Cause Name	Water Type	Listed	Date
HIGH PRIORITY							
CN02-340	Rota	2	Sabana/Talakaya/Palie	phosphate (340)	COASTAL	2004	2020
CN02-215	Rota	2	Sabana/Talakaya/Palie	enterococci (215)	COASTAL	2008	2020
CN03-340	Rota	3	Songsong	phosphate (340)	COASTAL	2004	2020
CN03-205	Rota	3	Songsong	DO% (205)	COASTAL	2009	2020
CN03-215	Rota	3	Songsong	enterococci (215)	COASTAL	2004	2020
CN13-215	Saipan	13	Talofofo	enterococci (215)	COASTAL	2004	2018
CN13-340	Saipan	13	Talofofo	phosphate (340)	COASTAL	2004	2018
CN13-489/490	Saipan	13	Talofofo	pH (489/490)	COASTAL	2015	2018
CN14-340	Saipan	14	Kagman	phosphate (340)	COASTAL	2004	2017
CN15-340	Saipan	15	Lao Lao	phosphate (340)	COASTAL	2004	2018
CN19A-205	Saipan	19 A	W. Takpochau (North)	DO%. (205)	COASTAL	2009	2016
CN19A-489/490	Saipan	19 A	W. Takpochau (North)	pH (489/490)	COASTAL	2015	2020
CN19A-340	Saipan	19 A	W. Takpochau (North)	phosphate (340)	COASTAL	2004	2016
CN19A-215	Saipan	19 A	W. Takpochau (North)	enterococci (215)	COASTAL	1998	2016
CN19B-205	Saipan	19 B	W. Takpochau (Central)	DO%. (205)	COASTAL	2008	2016
CN19B-340	Saipan	19 B	W. Takpochau (Central)	phosphate (340)	COASTAL	2005	2016
CN19B-467	Saipan	19 B	W. Takpochau (Central)	mercury (467)	COASTAL	2010	2016
CN19B-215	Saipan	19 B	W. Takpochau (Central)	enterococci (215)	COASTAL	1998	2016
CN20B-205	Saipan	20 B	Achugao (South)	DO% (205)	COASTAL	2009	2018
CN20B-340	Saipan	20 B	Achugao (South)	phosphate (340)	COASTAL	2004	2018
CN20B-215	Saipan	20 B	Achugao (South)	enterococci (215)	COASTAL	2004	2018
CN22-340	Saipan	22	Banaderu	phosphate (340)	COASTAL	2004	2018
CN22-215	Saipan	22	Banaderu	enterococci (215)	COASTAL	2015	2018

#### Table VIII-1 Category 5 Impaired Waters 303(d) High Priority List

<sup>&</sup>lt;sup>1</sup> 2016 Commonwealth of the Northern Mariana Islands 303(d), 305(b) and 314 Water Quality Assessment Report, December 2016, Appendix VIII: Ranked TMDL 303(d) List from High to Low Priority, Table VIII-1, Table VIII-2, Table VIII-3, p. 167-169.

### 303(d) listings in CNMI's Integrated Report (continued)

							Target TMDL		
		Seg				First	Completion		
TMDL No.	Island	ID	Segment Name	Cause Name	Water Type	Listed	Date		
MEDIUM PRIORITY									
CN04-340	Rota	4	Uyulanhulo/Teteto	phosphate (340)	COASTAL	2004	2020		
CN04-215	Tinian	7	Masalok	enterococci (215)	COASTAL	2005	2020		
CN 09-448	Tinian	9	Makpo	biocriteria (448)	COASTAL	2006	2018		
CN 09-340	Tinian	9	Makpo	phosphate (340)	COASTAL	2004	2018		
CN 09-205	Tinian	9	Makpo (Harbor)	D.O. (205)	COASTAL	2010	2018		
CN09-215	Tinian	9	Makpo	enterococci (215)	COASTAL	2005	2018		
CN17A-448	Saipan	17 A	lsley (West)	biocriteria (448)	COASTAL	2010	2020		
CN17A-340	Saipan	17 A	lsley (West)	phosphate (340)	COASTAL	2004	2020		
CN17A-215	Saipan	17 A	lsley (West)	enterococci (215)	COASTAL	2004	2020		
CN17B-340	Saipan	17 B	Isley (East)	phosphate (340)	COASTAL	2004	2020		
CN17B-215	Saipan	17 B	Isley (East)	enterococci (215)	COASTAL	2004	2020		
CN18A-340	Saipan	18 A	Susupe (North)	phosphate (340)	COASTAL	2004	2018		
CN18A-205	Saipan	18 A	Susupe (North)	D.O. (205)	COASTAL	2009	2018		
CN18A-215	Saipan	18 A	Susupe (North)	enterococci (215)	COASTAL	2007	2018		
CN18B-205	Saipan	18 B	Susupe (South)	D.O. (205)	COASTAL	2009	2018		
CN18B-340	Saipan	18 B	Susupe (South)	phosphate (340)	COASTAL	2005	2018		
CN18B-215	Saipan	18 B	Susupe (South)	enterococci (215)	COASTAL	2004	2018		
CN19C-205	Saipan	19 C	W. Takpochau (South)	D.O. (205)	COASTAL	2008	2020		
CN19C-490	Saipan	19 C	W. Takpochau (South)	pH, Low	COASTAL	2015	2020		
CN19C-340	Saipan	19 C	W. Takpochau (South)	phosphate (340)	COASTAL	2004	2020		
CN19C-215	Saipan	19 C	W. Takpochau (South)	enterococci (215)	COASTAL	2004	2020		
CN20A-340	Saipan	20 A	Achugao (North)	phosphate (340)	COASTAL	2004	2018		
CN20-215	Saipan	20 A	Achugao (North)	enterococci (215)	COASTAL	2004	<b>2018</b>		
CN19STR-448	Saipan	19STR	West Takpochau	biocriteria (448)	STREAM	2014	<b>2018</b>		
CN19STR-467	Saipan	19STR	West Takpochau	mercury (467)	STREAM	2014	<b>2018</b>		
CN19STR-504	Saipan	19STR	West Takpochau	Direct Habitat Alterations (504)	STREAM	<b>2014</b>	2018		

## Table VIII-2 Category 5 Impaired Waters 303(d) Medium Priority List

### <u>303(d) listings in CNMI's Integrated Report (continued)</u>

							Target TMDL	
		Seg				First	Completion	
TMDL No.	Island	ID	Segment Name	Cause Name	Water Type	Listed	Date	
LOW PRIORITY								
CN05-340	Rota	5	Chaliat/Talo	phosphate (340)	COASTAL	2004	2020	
CN05-215	Rota	5	Chaliat/Talo	enterococci (215)	COASTAL	2004	2020	
CN07-340	Tinian	7	Masalok	phosphate (340)	COASTAL	2004	2020	
CN 10-340	Tinian	10	Puntan Diaplolamanibot	phosphate (340)	COASTAL	2004	2019	
CN 10-215	Tinian	10	Puntan Diaplolamanibot	enterococci (215)	COASTAL	2005	2019	
CN11-448	Tinian	11	Puntan Tahgong	biocriteria (448)	COASTAL	2008	2020	
CN11-340	Tinian	11	Puntan Tahgong	phosphate (340)	COASTAL	2004	2020	
CN11-215	Tinian	11	Puntan Tahgong	enterococci (215)	COASTAL	2005	2020	
CN12-215	Saipan	12	Kalabera	enterococci (215)	COASTAL	2004	2020	
CN12-340	Saipan	12	Kalabera	phosphate (340)	COASTAL	2004	2020	
CN21-340	Saipan	21	As Matuis	phosphate (340)	COASTAL	2004	2020	
CN21-340	Saipan	21	As Matuis	D.O. (205)	COASTAL	2009	2020	
CN21-215	Saipan	21	As Matuis	enterococci (215)	COASTAL	2004	2020	
CN23-340	Saipan	23	Managaha	phosphate (340)	COASTAL	2004	2020	
CN18LAK-205	Saipan	18LAK	Susupe	D.O. (205)	LAKE	2014	2020	
CN18LAK-491	Saipan	18LAK	Susupe	pH, High (491)	LAKE	2014	2020	
CN18LAK-476	Saipan	18LAK	Susupe	Other (476)	LAKE	2014	2020	
CN18LAK-215	Saipan	18LAK	Susupe	enterococci (215)	LAKE	2010	2020	

# Table VIII-3 Category 5 Impaired Waters 303(d) Low Priority List

#### **References**

The following documents were used directly or indirectly as a basis for EPA's review of the Territory's 303(d) water body list. This list is not meant to be an exhaustive list of all records reviewed, but the primary documents the Region relied upon in making its decisions to approve the Territory's list.

#### Submittal

Final Submittal of CNMI 2016 Integrated Report (IR), which includes CNMI's 305(b) assessment, Clean Water Act 303(d) List of impaired waterbodies, Letter and Enclosures from Frank M. Rabauliman to Janet Hashimoto, December 27, 2016.

Submittal of CNMI 2016 Integrated Report (IR), which includes CNMI's 305(b) assessment, Clean Water Act 303(d) List of impaired waterbodies, Letter and Enclosures from Frank M. Rabauliman to Janet Hashimoto, November 14, 2016.

Submission of additional data, Email from Kathy Yuknavage to Dave Guiliano and Nicole Tachiki, December 6, 2016.

#### Other Documents

December 28, 1978 Federal Register Notice, Total Maximum Daily Loads Under Clean Water Act, finalizing EPA's identification of pollutants suitable for TMDL calculations. 43 Fed. Reg. 60662.

January 11, 1985 Federal Register Notice, 40 CFR Parts 35 and 130, Water Quality Planning and Management: Final Rule, 50 Fed. Reg. 1774.

April 1991, "Guidance for Water Quality-Based Decisions: The TMDL Process," EPA 440/4-91-001.

July 24, 1992 Federal Register Notice, 40 CFR Parts 122, 123, 130, revision of regulation, 57 Fed. Reg. 33040.

40 CFR Part 130 Water Quality Planning and Management.

September, 1997 guidance from Office of Water, Headquarters, US EPA regarding Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement, EPA-841-B-97-002B.

Consolidated Assessment and Listing Methodology, EPA Office of Water, July 2002.

Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act, Diane Regas, EPA Office of Wetlands, Oceans, and Watersheds. July 21, 2003.

Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, Diane Regas, EPA Office of Wetlands, Oceans, and Watersheds, July 29. 2005.

Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions, Diane Regas. EPA Office of Wetlands, Oceans, and Watersheds, October 12, 2006.

Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions, Suzanne Schwartz, Office of Wetlands, Oceans, and Watersheds, May 5, 2009.

Information Concerning 2012 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions, Denise Keehner, Office of Wetlands, Oceans, and Watersheds, March 21, 2011.

Information Concerning 2014 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions, Denise Keehner, Office of Wetlands, Oceans, and Watersheds, September 3, 2013.

Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions, Benita Best-Wong, Office of Wetlands, Oceans, and Watersheds, August 13, 2015.