TECHNICAL SUPPORT DOCUMENT
FOR EPA REGION 6 REVIEW OF:

Revisions to Pueblo of Sandia Water Quality Standards

U.S. EPA REGION 6
WATER DIVISION
December 2023

I. Introduction

Background

As described in section 303(c) of the Clean Water Act (CWA) and in the water quality standards (WQS) regulation at 40 CFR 131.20, states and authorized tribes have primary responsibility to develop and adopt WQS to protect their waters. State and tribal WQS consist of three primary components: designated uses, criteria to support those uses, and antidegradation requirements. In addition, CWA section 303(c)(1) and 40 CFR 131.20 require states to hold public hearings at least once every three years to review and, as appropriate, modify and adopt standards. As specified in 40 CFR 131.21, the Environmental Protection Agency (EPA) reviews new and revised surface WQS that have been adopted by states and authorized tribes. Authority to approve or disapprove new and/or revised water quality standards submitted to the EPA for review has been delegated to the Water Division Director in Region 6. State or tribal WQS are not considered effective under the CWA unless and until approved by the EPA.

The EPA only reviews state or tribal submittals that are new or revised WQS. Not every provision within state or tribal regulations is a new or revised WQS. The EPA determines whether a provision is a new or revised WQS after considering the following:

1. Is the provision legally binding, adopted or established pursuant to state or tribal law?
2. Does the provision address designated uses, water quality criteria (narrative or numeric) to protect designated uses, and/or antidegradation requirements for waters of the United States?
3. Does the provision express or establish the desired condition (e.g., uses, criteria) or instream level of protection (e.g., antidegradation requirements) for waters of the United States immediately or mandate how it will be expressed or established for such waters in the future?
4. Does the provision establish a new WQS or revise an existing WQS?

The purpose of this Technical Support Document (TSD) is to document the review and provide the basis for the EPA's actions concerning revisions to the *Pueblo of Sandia Surface Water Quality Standards* adopted by the Pueblo of Sandia in August 2023.

Summary of Revisions to Pueblo of Sandia's Water Quality Standards

The 2022 triennial review resulted in revisions to various provisions throughout the Pueblo of Sandia's WQS. These revisions include substantive modifications as well as a significant number of non-substantive revisions. Non-substantive revisions to Pueblo of Sandia's WQS include corrections of typographical errors, incorrectly spelled words, and updated references and footnotes. While these may be considered minor changes, they are important to the clarity and readability of Pueblo of Sandia's WQS.

The Pueblo of Sandia updated provisions regarding authority and applicability as well as compliance schedules (Section I). In Section II, the Pueblo of Sandia revised language to be consistent with new federal provisions found in 40 CFR parts 131.12 (antidegradation policy and

implementation methods). The lower bound of the pH criteria for the warmwater fishery use was revised from 6.0 to 6.6 (Section IV). In Section IV and VI, the Pueblo of Sandia revised provisions for implementation of the *E. coli* criteria under the primary contact uses. The Pueblo of Sandia added, revised, and deleted definitions in Section VII. Freshwater acute and chronic ammonia tables in Appendix A were updated to match the EPA's recommendations. The Pueblo of Sandia reworked the table in Appendix B to include: a new format for presenting criteria equations for chromium, copper, nickel, silver, and zinc, new and revised aquatic life criteria for acrolein, carbaryl, tributyltin, and cadmium, adoption of human health criteria for dinitrophenols, hexachlorocyclohexane – technical, and 2,4,5-Trichlorophenol, as well as updating criteria for other pollutants.

II. New or Revised Provisions the EPA is Approving

The EPA has the CWA section 303(c)(3) authority and duty to approve or disapprove new or revised WQS submitted by a state or authorized tribe after determining if the provisions adopted constitute a new or revised WQS. The EPA considers non-substantive changes (e.g., section renumbering, style, grammatical or spelling corrections) as changes to existing WQS to constitute new or revised WQS that the EPA has the authority and duty to approve or disapprove under CWA section 303(c)(3). While such revisions do not substantively change the meaning or intent of the existing WQS, the EPA believes that it is reasonable to treat such non-substantive changes in this manner to ensure public transparency on what provisions are effective for purposes of the CWA. The EPA's action on non-substantive changes to previously approved WQS does not constitute an action on the underlying previously approved WQS. In today's action, the EPA is acting on both the non-substantive and substantive revisions to the Pueblo of Sandia's WQS adopted by the Pueblo of Sandia in August 2023, which have been identified, pursuant to CWA section 303(c).

Section I. Introduction, Authority, and Applicability

The revised provisions in this section read as follows:

> "C. … Coolwater Aquatic Life/Fishery Use, ~~Coldwater Aquatic Life/Fishery Use~~, Warmwater Aquatic…are designated uses of the surface waters of the PUEBLO OF SANDIA."
>
> "D. There is hereby created the position of ~~Tribal Water Quality Officer~~ Water Quality Manager. The ~~Tribal Water Quality Officer~~ Water Quality Manager shall serve under the direction of the PUEBLO OF SANDIA Environment Department Director, who serves under the Governor of the PUEBLO. The ~~Tribal Water Quality Officer~~ Water Quality Manager shall work in cooperation with the U.S. Environmental Protection Agency (EPA) and other federal, tribal, or state agencies."
>
> "H. … For use in implementation of human health criteria, the harmonic mean flow will be used."

"K. … The TRIBAL COUNCIL also may revise the standards from time to time if deemed necessary by use-attainability analysis and as the need arises, or ~~as a result of~~ as updated scientific information becomes available."

"M. … Compliance schedules may be included in NPDES permits at the time of permit renewal issuance or modification and shall require compliance at the earliest practicable time.~~, not to exceed three years.~~ Compliance schedules also shall specify milestone dates ~~so as~~ to measure progress towards final project completion."

"N. The PUEBLO OF SANDIA TRIBAL COUNCIL may authorize s~~S~~hort-term… A short term exceedance will only be allowed for activities that are not likely to cause permanent, or long term impairment of ~~a designated use~~ designated uses…"

The Pueblo of Sandia revised language in Subsection C of this provision by removing reference to coldwater aquatic life/fishery use. The Pueblo of Sandia confirmed that none of their surface waters have a coldwater aquatic life/fishery designated use nor would support propagation of coldwater fish as water temperatures are too high. In Subsection D, the Pueblo of Sandia revised the position titles of positions in the environment department by updating the title of the tribal water quality officer to reflect the current title of the individual responsible, Water Quality Manager. Subsection M revises the time frame of compliance schedules and removes the provision that the compliance schedule is not to exceed three years. The three-year maximum time frame for compliance schedules is not specified in the federal permitting regulation (40 CFR 122.47(a)(1)). Since compliance schedules beyond the term of a permit are allowable when appropriate and necessary, this revision is consistent with 40 CFR 122.47(a)(1) and EPA guidance. The EPA approves these clarifications. Additionally, the EPA considers all other changes to this section, including those in Subjections K and N, as non-substantive and approves these changes.

Section II. Antidegradation Policy and Implementation Plan

The revised provisions in Subsection A. *Antidegradation Policy* read as follows:

"2. Where existing water quality exceeds levels necessary to support propagation of fish and wildlife and recreation in and on the water, that level of water quality shall nonetheless be maintained and protected unless it is found, after full satisfaction of governmental and public participation requirements, that a lower level of water quality is ~~required~~ necessary in order to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation of water quality, the PUEBLO OF SANDIA shall impose the highest statutory and regulatory requirements for **point sources** and shall impose **best management practices for non-point sources.** The Pueblo of Sandia will evaluate high quality waters on a parameter-by-parameter basis. When an analysis of alternatives is conducted, if **practicable** alternatives are identified, then one of those alternatives needs to be selected in order for the lowering of the high quality water to be allowed.

The new and revised provisions in Section II are consistent with the intent of the CWA and the implementing regulation. The Pueblo of Sandia's process for conducting antidegradation reviews includes consideration of other practicable alternatives for actions proposed in high quality waters, consistent with the regulation at 40 CFR 131.12(a)(2)(ii). The EPA approves this revision.

The revised provisions in Subsection B, *Implementation Plan* read as follows:

> "Acting under authority delegated by the PUEBLO OF SANDIA TRIBAL COUNCIL, the Water Quality Manager ~~Tribal Water Quality Officer~~ shall implement the PUEBLO OF SANDIA Water Quality Standards, including the antidegradation policy, by establishing and maintaining controls on the introduction of pollutants into surface waters. More particularly, the ~~Tribal Water Quality Officer~~ Water Quality Manager shall do the following:"

The EPA approves the above revisions and considers them non-substantive.

> "7. require that these **effluent** limitations be included in any such permit as a condition for Tribal certification pursuant to Section 401 of the Clean Water Act, (33 U.S.C. Section 1341), provided that a reasonable time~~, not to exceed three years,~~ for compliance may be considered as part of the certification process."

The three-year maximum time frame for compliance schedules is not specified in the federal permitting regulation (40 CFR 122.47(a)(1)). Since compliance schedules beyond the term of a permit are allowable when appropriate and necessary, this revision is more consistent with 40 CFR 122.47(a)(1) and EPA guidance. The EPA approves this revision.

> "12. provide technical oversight and planning support to other departments within the Sandia Pueblo administration ~~in order~~ to accomplish the objectives of the Water Quality Standards…"

The EPA approves the above revision and considers it non-substantive.

Section III. General Standards

The Pueblo of Sandia modified the general standard descriptions for radioactive material, toxic substances, and biocriteria, as follows:

> I. Radioactive Materials – "Concentrations of gross alpha particle activity shall not exceed the concentration caused by naturally occurring ~~naturally-occurring~~ materials…"

> O. Toxic Substances – "Should numeric criteria need to be derived without actually conducting toxicity tests, the ~~AQUIRE (AQUatic toxicity Information Retrieval~~ Ecotoxicology Knowledgebase (ECOTOX) database… ~~In the event that~~ If sufficient data is not available to derive a numeric criterion following the above protocol… Sources of

information may include final or draft MCLs and current Health Advisories[3] (HA) for organic and inorganic chemicals, radionuclides and microorganisms."

P. Biocriteria – "…Wetland integrity shall not significantly differ from reference wetlands, taking into account variability…"

Footnote 3 (associated with Subsection O) – "~~*Drinking Water Regulations and Health Advisories*~~2018 Edition of the Drinking Water Standards and Health Advisories Tables,~~EPA-822-R-06-013~~EPA 822-F-18-001; ~~August 2006~~March 2018, or the most current revision thereof.

The EPA approves the above revisions with updated references to implement the narrative criterion for toxic substances, and the non-substantive revisions in Subsections I and P.

Section IV. Water Body Uses and Standards Specific to the Uses

The Pueblo of Sandia removed all language under the coldwater aquatic life/fishery use (previously Subsection B in the 2010 *Pueblo of Sandia Water Quality Standards*). The Pueblo of Sandia does not have any water that meets all the temperature criteria for the coldwater aquatic life/fishery use. In addition, this use was not designated for any waters in Section V of the 2010 *Pueblo of Sandia Water Quality Standards* and is not designated in the downstream New Mexico WQS. The EPA approves this revision because no waters are classified under coldwater criteria.

Subsection B: The Pueblo of Sandia revised the lower end of the pH criteria for warmwater aquatic life/fishery use to read as follows:

"**pH** range: 6.6~~0~~-9.0 SU"

The pH criterion under the Warmwater Aquatic Life/Fishery Use is consistent with the EPA's current criteria published under CWA section 304(a) and with the downstream New Mexico state WQS. The EPA approves the pH criteria in Subsection B as protective of the fishery uses in the Pueblo of Sandia's waters.

Subsection C Primary Contact Ceremonial Use and Subsection D Primary Contact Recreation Use: The Pueblo of Sandia removed the fecal coliform language previously within Subsections D.1 and E.1. Additionally, the Pueblo of Sandia revised language in C.1 and D.1. regarding *Escherichia coli* criteria. The revised criteria are as follows:

"Escherichia coli

a. **geometric mean maximum**: 47 cfu~~colonies~~/100 ml*

b. single sample maximum of 88 ~~colonies~~cfu/100 ml*, in accordance with an illness rate of 4 per 1,000 exposures.

* The results for E. coli may be reported as either colony forming units (cfu) or the most probable number (MPN), depending on the analytical method used."

The fecal coliform criteria were based on recommendations published in the EPA's Blue Book to protect waters used for primary contact. In recent years, most water quality programs have transitioned from monitoring fecal coliform bacteria to using *E. coli* or enterococci, as the indicator for protection of recreational uses of surface waters. As mentioned above, the Pueblo of Sandia no longer utilizes fecal coliform criteria for assessment of surface water quality. The addition of the option to use analytical methods which report results as most probable number is consistent with EPA guidance and with practices commonly implemented in CWA programs. The EPA approves the new and revised provisions under the primary contact ceremonial and recreational uses.

Subsection C.3 and D.3.: The Pueblo of Sandia revised language in this subsection to the following:

> "3. All waters ~~The open water~~ shall be free from algae in concentrations causing a **nuisance condition** or causing gastrointestinal or skin disorders."

The narrative criteria established for algae are consistent with the EPA's guidance for criteria to protect aesthetics and general water quality. The EPA approves the revised provisions under primary contact ceremonial and recreational uses.

Subsections C.6, C.7, D.6 and D.7: The Pueblo of Sandia adopted numeric criteria for *Microcystins* and *Cylindrospermopsin*, as follows:

> "6. ***Microcystins:*** Single sample of total microcystins of 8 µg/L with no more than 3 exceedances in a 12 month period.
>
> 7. ***Cylindrospermopsin:*** Single sample of total cylindrospermopsin of 15 µg/L with no more than 3 exceedances in a 12 month period."

The cyanobacteria criteria above is consistent with the EPA's current criteria published under CWA section 304(a). The EPA approves the cyanobacteria criteria in Subsections C and D as protective of the primary contact ceremonial use and the primary contact recreational use in the Pueblo of Sandia's waters.

Subsection F Secondary Contact Recreation Use: The Pueblo of Sandia removed the fecal coliform language previously within Subsection F.1. Additionally, the Pueblo of Sandia revised language in F.1 regarding *Escherichia coli* criteria. The revised criteria are as follows:

> "1. *Escherichia coli*
>
> a. **geometric mean maximum**: 126 ~~colonies~~cfu/100ml
>
> b. single sample maximum of 235 ~~colonies~~cfu/100ml*, in accordance with an illness rate of 8 per 1,000 exposures.
>
> * The results for E.coli may be reported as either colony forming units (cfu) or the most probable number (MPN), depending on the analytical method used."

The fecal coliform criteria were based on recommendations published in the EPA's Blue Book to protect waters used for primary contact. In recent years, most water quality programs have transitioned from monitoring fecal coliform bacteria to using *E. coli* or enterococci, as the indicator for protection of recreational uses of surface waters. As mentioned above, the Pueblo of Sandia no longer utilizes fecal coliform criteria for assessment of surface water quality. The addition of the option to use analytical methods which report results as most probable number is consistent with EPA guidance and with practices commonly implemented in CWA programs. The EPA approves the new and revised provisions under the secondary contact recreation use.

Subsection F.2: The Pueblo of Sandia revised language in this subsection to the following:

> "~~The open water~~ All waters shall be free from **algae** in concentrations causing a **nuisance condition** or causing gastrointestinal or skin disorders."

The narrative criteria established for algae are consistent with the EPA's guidance for criteria to protect aesthetics and general water quality. The EPA approves the revised provision under the secondary contact recreation use.

Subsection G Agricultural Water Supply Use: The Pueblo of Sandia removed the fecal coliform language within Subsection G.1. The fecal coliform criteria were based on recommendations published in EPA's Blue Book to protect waters used for irrigation/agriculture. In recent years, most water quality programs have transitioned from monitoring fecal coliform bacteria to using E. coli or enterococci, as the indicator for protection of recreational uses of surface waters. As mentioned above, the Pueblo of Sandia no longer utilizes fecal coliform criteria for assessment of surface water quality. Additionally, there is no need to develop *E. coli* criteria for the Irrigation use since the Primary Contact uses are applicable to all waters within Pueblo of Sandia and includes *E. coli* criteria that are more stringent than the level of protection provided by the fecal coliform criteria. The EPA approves the new and revised provisions under the Agricultural Water Supply use.

Subsection H Fish Culture Use: The Pueblo of Sandia revised pH criteria for H.3 to read as follows:

> "**pH** range: 6.~~0~~6-9.0 SU"

The pH criterion under the Fish Culture Use is consistent with the EPA's current criteria published under CWA section 304(a) and with the downstream New Mexico state WQS. The EPA approves the pH criteria in Subsection H as protective of fishery uses in the Pueblo of Sandia's waters.

Section V. Uses and Standards for Designated Water Bodies

Subsection A.2.b: The Pueblo of Sandia removed fecal coliform language previously within Subsection A.2.b. The fecal coliform criteria were based on recommendations published in the EPA's Blue Book to protect waters used for recreation and agriculture. In recent years, most water quality programs have transitioned from monitoring fecal coliform bacteria to using *E. coli* or enterococci, as the indicator for protection of recreational uses of surface waters. As

mentioned above, the Pueblo of Sandia no longer utilizes fecal coliform criteria for assessment of surface water quality. The EPA approves this revision.

Subsection A.2.d: The Pueblo of Sandia revised pH criteria for the waterbodies designated in Section V Subsection A.2.d:

"~~e.~~d. **pH** range: 6.6~~0~~-9.0 SU"

The waterbodies described in Subsection A utilize the pH criterion under the Warmwater Aquatic Life/Fishery Use. This update is consistent with the EPA's current criteria published under CWA section 304(a) and with the downstream New Mexico state WQS. The EPA approves the pH criteria in Subsection A as protective of uses in the Pueblo of Sandia's waters.

Subsection B.2.b: The Pueblo of Sandia removed the fecal coliform language previously within Subsection B.2.b. The fecal coliform criteria were based on recommendations published in the EPA's Blue Book to protect waters used for recreation and agriculture. In recent years, most water quality programs have transitioned from monitoring fecal coliform bacteria to using *E. coli* or enterococci, as the indicator for protection of recreational uses of surface waters. As mentioned above, the Pueblo of Sandia no longer utilizes fecal coliform criteria for assessment of surface water quality. The EPA approves this revision.

Subsection B.2.d: The Pueblo of Sandia revised the pH criteria for the following water bodies Albuquerque Riverside Drain and Extension, Bernalillo Interior Drain (Atrisco Feeder), No Name Drain, Charlie Teas Lateral, Alameda Lateral, Sandia Lakes:

"~~e.~~d. **pH** range: 6.~~5~~6 - 8.5 SU"

This update is consistent with the EPA's current criteria published under CWA section 304(a) and with the downstream New Mexico state WQS. The EPA approves the pH criteria in Subsection B as protective of the fishery uses in the Pueblo of Sandia's waters.

Subsection C.2.a: The Pueblo of Sandia removed the fecal coliform language previously within Subsection C.2.a. The fecal coliform criteria were based on recommendations published in the EPA's Blue Book to protect waters used for recreation and agriculture. In recent years, most water quality programs have transitioned from monitoring fecal coliform bacteria to using *E. coli* or enterococci, as the indicator for protection of recreational uses of surface waters. As mentioned above, the Pueblo of Sandia no longer utilizes fecal coliform criteria for assessment of surface water quality. The EPA approves this revision.

Subsection C.2.b: The Pueblo of Sandia revised the pH criteria for the springs and run-off ponds at the base of Sandia Mountain:

"~~e.~~d. **pH** range: 6.~~5~~6 - 8.5 SU"

This update is consistent with the EPA's current criteria published under CWA section 304(a) and with the downstream New Mexico state WQS. The EPA approves the pH criteria in Subsection C as protective of uses in springs and run-off ponds at the base of Sandia Mountain.

Subsection D.2.a: The Pueblo of Sandia removed the fecal coliform language previously within Subsection D.2.a. The fecal coliform criteria were based on recommendations published in the EPA's Blue Book to protect waters used for recreation and agriculture. In recent years, most water quality programs have transitioned from monitoring fecal coliform bacteria to using *E. coli* or enterococci, as the indicator for protection of recreational uses of surface waters. As mentioned above, the Pueblo of Sandia no longer utilizes fecal coliform criteria for assessment of surface water quality. The EPA approves this revision.

Subsection D.2.d: The Pueblo of Sandia revised the pH criteria for the waterbodies designated in Subsection D:

> "~~e.~~d. **pH** range: 6.6~~0~~-9.0 SU"

This update is consistent with the EPA's current criteria published under CWA section 304(a) and with the downstream New Mexico state WQS. The EPA approves the pH criteria in Subsection D as protective of uses in the waters designated in Subsection D.

Subsection E.2.a: The Pueblo of Sandia removed the fecal coliform language previously within Subsection E.2.a. The fecal coliform criteria were based on recommendations published in the EPA's Blue Book to protect waters used for recreation and agriculture. In recent years, most water quality programs have transitioned from monitoring fecal coliform bacteria to using *E. coli* or enterococci, as the indicator for protection of recreational uses of surface waters. As mentioned above, the Pueblo of Sandia no longer utilizes fecal coliform criteria for assessment of surface water quality. The EPA approves this revision.

Subsection E.2.d: The Pueblo of Sandia revised the pH criteria for the surface waters existing or created because of the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) North Diversion Channel (the outlet or waters west of the equipment crossing, officially called the pilot channel) within the exterior boundaries of the PUEBLO of SANDIA:

> "~~e.~~d. **pH** range: 6.6~~0~~-9.0 SU"

The waterbodies described in this subsection utilize pH criterion under the Warmwater Aquatic Life/Fishery Use. This update is consistent with the EPA's current criteria published under CWA section 304(a) and with the downstream New Mexico state WQS. The EPA approves the pH criteria in Subsection E as protective of uses in the waters designated in Subsection E.

Section VI. Sampling and Analysis

The Pueblo of Sandia revised language found in Subsection B with respect to bacteriological surveys. The paragraph was revised as follows:

> "B. The monthly geometric mean is used in assessing attainment of standards over a rolling 90-day period. No more than 10% of samples shall exceed the applicable upper limit (single sample maximum) for bacterial density set forth in SECTION IV. ~~Bacteriological Surveys: The monthly **geometric mean** is used in assessing attainment of standards when a minimum of five samples is collected in a 30-day period. When less than 5 samples are collected in a 30-day period, no single sample shall exceed the applicable upper limit for bacterial density set forth in SECTION IV.~~"

The EPA approves the revision in Subsection A, which is consistent with agency guidance for the EPA's 2012 recreational criteria document.

Subsection B.2: The revisions made to this subsection read as follows:

> "Sampling stations in reservoirs shall be located at least 250 feet from a waste discharge, and, otherwise, where the attainment of a water quality standard is to be assessed. Water quality measurements may ~~shall~~ be taken at intervals in the water column at a sampling station. For toxic substances and **nutrients**, the entire water column ~~shall~~ may be monitored. For **dissolved oxygen** in stratified lakes, measurements ~~shall~~ may be made in the **epilimnion**. In non-stratified lakes measurements ~~will~~ may be made at intervals throughout the entire water column."

The EPA approves all revisions made in the above provision.

Section VII. Definitions

The Pueblo of Sandia provided a definition for the newly added term *practicable* in Section II. This definition is essentially identical to language in 40 CFR 131.3. The EPA approves this new definition.

The Pueblo of Sandia modified the definition for the term *attainable use* as follows:

> **Attainable use -** ~~A use of a surface water body which has the level of water quality and other characteristics that are needed to support the use, or which would have the level of water quality and other characteristics needed to support the use upon implementation of and compliance with the pertinent narrative and numeric standards in the PUEBLO OF SANDIA Water Quality Standards.~~ Attainable uses are, at a minimum, the uses that can be achieved 1) when effluent limits under Sections 301(b)(1)(A) and (B) and 306 of the Clean Water Act are imposed on point source dischargers and 2) when cost-effective and reasonable best management practices are imposed on nonpoint source dischargers.

This new definition more succinctly details the term attainable use and is consistent with the definition of the term as provided in 40 CFR 131.10(d). The EPA approves this new definition.

Additionally, the Pueblo of Sandia removed the definitions for *coldwater aquatic life/fishery* and *fecal coliform* because they are no longer referenced in the Pueblo of Sandia's standards.

The EPA's review found that new and revised definitions support the implementation of the *Pueblo of Sandia Water Quality Standards* and are consistent with the goals of CWA section 101(a)(2) and section 303(c), the federal regulation at 40 CFR part 131, and EPA guidance. The EPA approves the new and revised provisions and the non-substantive revisions in Section VII.

Appendix A

The Pueblo of Sandia revised the freshwater aquatic life ammonia criteria tables in Appendix A based on the EPA's updated recommendations published under CWA section 304(a) for the protection of aquatic life. The revised standards include an acute criterion for waters with fish of the genus Oncorhynchus, and acute criterion for waters without fish of the genus Oncorhynchus, and a chronic criterion.

The revised aquatic life criteria in Appendix A are consistent with the EPA's current criteria recommendations published under CWA section 304(a). The EPA approves the new and revised aquatic life criteria in Appendix A, as protective of the aquatic life uses in Pueblo of Sandia's surface waters.

Appendix B

Freshwater Aquatic Criteria

The Pueblo of Sandia adopted aquatic life criteria for acrolein, carbaryl, tributyltin and revised the acute aquatic life criterion for cadmium. These criteria are based on EPA's recommendations published under CWA section 304(a). The Pueblo of Sandia also revised the format of the criteria equations for chromium (III), copper, nickel, silver, and zinc.

The EPA approves the new and revised aquatic life criteria in Appendix B, as protective of the aquatic life uses in Pueblo of Sandia's surface waters. In addition, the EPA approves the revised format for the hardness-dependent equations for metals, which are the same criteria values previously approved by the EPA.

Human Health Criteria

The Pueblo of Sandia revised criteria for the following substances to protect human health:

Acrolein
Acrylonitrile
Aldrin
Alpha-BHC
Endosulfan, alpha
Anthracene
Benzidine
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
beta-BHC
Endosulfan, beta
Bis(2-Chloroethyl) Ether
Bis(2-Chloroisopropyl)Ether
Bis 2-Ethylhexylphthalate
Bis(Chloromethyl) Ether
Bromoform
Carbon Tetrachloride
Chlordane
Chlorodibromomethane
Chloroform
Chrysene
Cyanide
Dibenzo(a,h)anthracene
Dichlorobromomethane
Dieldrin
Diethyl Phthalate
Dimethyl Phthalate
Di-n-Butyl Phthalate
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Ethylbenzene
Fluoranthene
Fluorene
gamma-BHC (Lindane)
Heptachlor
Heptachlor Epoxide
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Methoxychlor
Methyl Bromide
Methylene Chloride
Pentachlorobenzene
Pentachlorophenol
Pyrene
Tetrachloroethylene
Thallium
Toluene
Toxaphene

Vinyl Chloride	2,4,5-Trichlorophenol	3-Methyl-4-Chlorophenol
1,1,2,2-Tetrachloroethane	2,4-Dinitrophenol	4,4'-DDT
1,2,4,5-Tetrachlorobenzene	2,4-Dinitrotoluene	4,4'-DDE
1,2,4-Trichlorobenzene	2-Chloronaphthalene	4,4'-DDD
1,3-Dichlorobenzene	2-Methyl-4,6-Dinitrophenol	
1,3-Dichloropropene	3,3'-Dichlorobenzidine	

The Pueblo of Sandia also adopted criteria for Butylbenzyl phthalate, Dinitrophenols, Hexachlorocyclohexane (HCH)-Technical, and 2,4,5-Trichlorophenol.

The criteria for consumption of fish are based on the following parameters:

- risk for carcinogens: 10^{-6} (1 per 1,000,000)
- body weight: 80 kg
- water consumption rate: 2.4 liters/day
- fish consumption rate: 0.022 kilograms/day
- cancer potency factors (q1*) and reference doses (RfD): values in EPA's IRIS database or from EPA's criteria recommendations
- bioaccumulation factors: values used in EPA's criteria calculations
- relative source contributions: values used in EPA's criteria calculations

The Pueblo of Sandia also retained human health criteria for organoleptic effects based on EPA's recommended criteria, where these values were more stringent than the criterion to protect for consumption of organisms.

The EPA approves the human health criteria and the associated footnotes in Appendix B. The new and revised human health criteria in Appendix B are consistent with EPA's CWA section 304(a) criteria recommendations.

III. Endangered Species Act Consultation

The approval of new and revised water quality standards is subject to the result of consultation under section 7(a)(2) of the Endangered Species Act (ESA). Section 7(a)(2) of the ESA requires that federal agencies consult with the U.S. Fish and Wildlife Service (USFWS), as appropriate, to ensure that actions they take, fund, or authorize are not likely to jeopardize the continued existence of listed species or result in the adverse modification or destruction of habitat. The EPA determined that the only new or revised water quality standards subject to consultation in Pueblo of Sandia's triennial revision included the state's promulgation of new aquatic life criteria for ammonia, acrolein, cadmium, carbaryl, and tributyltin in all freshwaters of the Pueblo. A species list provided through the USFWS's Environmental Conservation Online System/Information for Planning and Consultation (ECOS/IPaC) site for the above affected waters identified eight federally threatened, endangered, or candidate species. Of those listed species, two are aquatic, or aquatic dependent, and have the potential to be affected by the above action. There is no designated critical habitat within tribal lands for the two species. The Pueblo of Sandia has developed and adopted the Pueblo of Sandia Bosque Management Plan. Within this plan are specific objectives to provide for special management considerations or protections of the silvery minnow. The USFWS previously reviewed the plan, finding it complete and able to provide significant conservation benefit to the silvery minnow.

The EPA coordinated with and sought the advice of the USFWS New Mexico Ecological Services Field Office in Albuquerque, New Mexico, on the proposed criteria and their potential effects on listed species. In a letter dated November 15, 2023, the USFWS concurred with the EPA's determination that the Pueblo of Sandia's adoption of aquatic life criteria for ammonia, acrolein, cadmium, carbaryl, and tributyltin is not likely to adversely affect any listed species or critical habitat in the Pueblo of Sandia's surface waters.

IV. Revisions in the Pueblo of Sandia Water Quality Standards for which EPA is taking no action under CWA section 303(c)

Section IV subsection K.2: The Pueblo of Sandia removed the following numeric standards from wildlife habitat use:

"~~a.~~	~~Total Mercury~~	~~0.77 ug/L~~
~~b.~~a.	Total Recoverable Selenium	2.0 ug/L
~~c.~~b.	Cyanide, Weak Acid Dissociable	5.2 ug/L
~~d.~~c.	Total Chlorine Residual	11.0 ug/L
~~e.~~	~~Total DDT and Metabolites~~	~~0.001 ug/L~~
~~f.~~	~~Total PCB's~~	~~0.014 ug/L~~…"

These revisions address portions of the 2010 *Pueblo of Sandia Water Quality Standards,* which were not approved by EPA for purposes of the CWA. The Pueblo of Sandia removed the numeric criteria for total DDT and metabolites, mercury and total PCBs from the wildlife habitat use. The same criteria for total DDT and metabolites and total PCBs, and a more protective chronic criterion for total mercury are already applicable to the Pueblo of Sandia's surface waters under Appendix B of the standards.

Appendix B Toxic Substances Table. The Pueblo of Sandia revised its chronic cadmium criterion protecting aquatic life by adopting EPA's 2016 CWA section 304(a) criteria recommendation for this pollutant. The EPA is evaluating a recent court order that vacated EPA's 2016 CWA section 304(a) freshwater aquatic life chronic cadmium criterion recommendation. Accordingly, the EPA is taking no action at this time on the Tribe's adopted chronic cadmium criterion for aquatic life uses. Absent an EPA approval action, the existing chronic criterion will remain in effect for CWA purposes.