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Subject: Request for the U.S. Environmental Protection Agency (EPA) to Review the State 401 Certification Conditions Related to National Pollutant Discharge Elimination System (NPDES) Permit No. NM0028355 for Los Alamos National Laboratory

Dear Ms. Rosborough:

The purpose of this letter is to notify the EPA of the petition and supplemental filing for review of the State 401 Certification of NPDES Permit No. NM0028355 by the U.S. Department of Energy National Nuclear Security Administration (DOE/NNSA) and Triad National Security, LLC (Triad) ("Permittees"). The petition and supplemental challenge Conditions 1 and 2 of the 401 State Certification. The Permittees requested the New Mexico Environment Department to withdraw these conditions on the basis that they are outside the scope of allowable state imposed conditions under the federal Clean Water Act and EPA's regulation of the Section 401 certification process. In addition, for the reasons stated in the Supplement and incorporated herein, the Permittees request that the EPA not include Condition 1 in the final NPDES permit. Attachment 1 and 2 provide of copy of the petition and the supplemental filed with the state of New Mexico on December 31, 2020 and February 3, 2021, respectively.

The DOE/NNSA and Triad respectfully submit the contents of Attachment 1 and 2 in accordance with the provisions identified in the Public Notice: Los Alamos National Laboratory (LANL) Limited Reopening of the Public Comment Period for NPDES Permit No. NM0028355. If you need additional information or have questions, please contact Karen Armijo, NNSA DOE, at 505-665-7314 or Jennifer Griffin, Triad, at 505-667-6741.

Sincerely,

TAUNIA VAN
VALKENBURG (Affiliate)

Digitally signed by TAUNIA VAN
VALKENBURG (Affiliate)
Date: 2021.02.24 09:41:29 -07'00'

Taunia Van Valkenburg
Group Leader

Attachment(s): Attachment 1 Petition for Review of the State Certification of Los Alamos National Laboratory Industrial Wastewater NPDES Permit No. NM0028355
Attachment 2 Supplement to Petition for Review of the State Certification of Los Alamos National Laboratory Industrial Wastewater NPDES Permit No. NM0028355

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**STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT**

IN THE MATTER OF:

**PETITION FOR REVIEW OF
THE STATE CERTIFICATION
OF LOS ALAMOS NATIONAL LABORATORY
INDUSTRIAL WASTEWATER
NPDES PERMIT NO. NM0028355**

No. 20-79

**Triad National Security, LLC and
United States Department of Energy,
National Nuclear Security Administration**

Petitioners

**TRIAD NATIONAL SECURITY, LLC AND THE UNITED STATES
DEPARTMENT OF ENERGY PETITION FOR REVIEW**

Petitioners Triad National Security, LLC and the United States Department of Energy, National Nuclear Security Administration (collectively “Triad/DOE”), pursuant to 20.6.2.2001.H NMAC, submit this petition for review of Conditions 1 and 2 of the State Certification of Los Alamos National Laboratory (“LANL”) Industrial Wastewater NPDES Permit No. NM0028355 (“401 Certification”), dated November 30, 2020. A copy of the 401 Certification is attached to this Petition as Attachment A. NPDES Permit No. NM0028355 authorizes discharges to various tributaries in segments 20.6.4.126 NMAC (perennial waters within LANL) and 20.6.4.128 NMAC (intermittent and ephemeral waters within LANL). In support of this petition for review, Triad/DOE states.

I. SUMMARY OF CHALLENGED CONDITIONS

Triad/DOE appeals Conditions 1 and 2 of the 401 Certification as follows:

1. Condition 1 requires Triad/DOE to (a) “monitor and report [18] PFAS in effluent once during the first year of coverage, or when the facility next discharges if no discharge occurs

during the first year;” (b) analyze samples “for all 18 PFAS analytes using EPA Method 537.1 (EPA 2018);” and (c) if PFOA or PFOS “are detected above the New Mexico screening level, additional monitoring and reporting shall occur annually.” Condition 1 also recommends that Triad/DOE “take corrective action and identify ways to minimize, reduce, and eliminate PFAS from the industrial activity through product substitution and/or additional best management practices and operational control.”

As explained below, none of the 18 PFAS analytes are identified as toxic pollutants in the state surface water quality standards and the requirements in Condition 1 are not necessary to ensure compliance with applicable surface water quality standards under the federal Clean Water Act and the New Mexico Water Quality Act, and therefore exceed the limited scope of the New Mexico Environment Department’s (“NMED”) authority under federal and state law. First, neither the Toxic Release Inventory’s (“TRI”) list of reportable chemicals or EPA’s Toxic Substances and Disease Registry support the imposition of surface water discharge compliance requirements. Second, NMED does not address the applicable technical criteria to support the 401 Certification’s requirements for the 18 PFAS analytes to protect surface waters standards. The process in the WQCC regulations requires NMED to undergo a process to determine whether the 18 PFAS analytes meet the criteria for toxicity for surface water protection. See 20.6.4.7 and 20.6.4.13(f) NMAC. Third, even if PFAS could be regulated as proposed, NMED first must determine the amount of PFAS in surface waters that are toxic, given the location of the discharge and other factors, and then determine whether the discharge of PFAS has a “reasonable potential” to cause or contribute to an exceedance of that amount. Finally, the analytical methods that Condition 1 mandates, Methods 537 and 537.1, are not approved by EPA

under 40 CFR Part 136, and therefore, cannot be used for 401 certifications or compliance determination.

2. Condition 2, in part, sets an effluent limit for Polychlorinated Biphenyls (“PCBs”) for Outfall 051 and mandates that monitoring and reporting of PCBs from all of the outfalls be performed in accordance with Method 1668C. As explained below, effluent limits for Polychlorinated Biphenyls (“PCBs”) for Outfall 051 are not necessary to assure compliance with applicable requirements of federal and state law because (a) EPA did not determine that there is a reasonable potential to exceed applicable water quality standards for PCBs at Outfall 051, and therefore, there is no basis for requiring an effluent limitation for the discharge; and (b) NMED’s justification for the condition does not demonstrate that discharges from Outfall 051 have a reasonable potential to cause or contribute to an exceedance of applicable water quality standards. Additionally, the analytical method mandated by Condition 2, Method 1668C, is not approved for PCBs under 40 CFR Part 136, and therefore, cannot be used for 401 certifications or compliance determinations.

II. REASONS FOR THE APPEAL

A. Statutory and Regulatory Background

EPA has not delegated authority to New Mexico to administer the national pollutant discharge elimination system (NPDES) permit program within the state, and therefore has responsibility for issuing permits under Section 402 of the Clean Water Act, 33 USC § 1342, for point source discharges to waters of the United States. Even without delegation, New Mexico is authorized under Section 401 of the Clean Water Act, 33 USC § 1341, to certify that an EPA proposed NPDES permit (as proposed or with conditions) “will comply the applicable provisions of sections 301, 302, 303, 306, and 307 of [the Clean Water Act]” and “with any other

appropriate requirement of State law set forth in such certification.” Section 401(a)(1) & (d) of the Clean Water Act, 33 USC § 1341(a)(1) & (d).

1. Federal Clean Water Act and Regulations

Section 401 of the Clean Water Act provides:

(a)(1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, ***that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this title.***

(d) Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 301 or 302 of this title, standard of performance under section 306 of this title, or prohibition, effluent standard, or pretreatment standard under section 307 of this title, and ***with any other appropriate requirement of State law set forth in such certification***, and shall become a condition on any Federal license or permit subject to the provisions of this section.

Emphasis added. Section 304(h) of the Clean Water Act, 33 USC § 1314(h), requires the EPA Administrator to “promulgate guidelines establishing test procedures for the analysis of pollutants that shall include the factors which must be provided in any certification pursuant to [Section 401 of the Clean Water Act] or permit application pursuant to [Section 402 of the Clean Water Act].”

EPA regulations implementing Sections 304(h) and 401 expressly limit the scope of a Clean Water Act section 401 certification to “assuring that a discharge from a Federally licensed or permitted activity will comply with water quality requirements” defined by the EPA as “applicable provisions of §§ 301, 302, 303, 306, and 307 of the Clean Water Act, and state or tribal regulatory requirements for point source discharges into waters of the United States.” 40

CFR § 121.3, 40 CFR § 121.1(n). New Mexico’s section 401 certification authority for NPDES permits is “whether the § 401 certification provides reasonable assurance that state water quality standards will be met.” *See In Port of Seattle v. Pollution Control Hearings Board*, 151 Wash. 2d 568, 596, 90 P.3d 659, 673 (WA 2004) (determining, with regard to a challenge to a § 401 certification, that “whether the § 401 certification provides reasonable assurance that state water quality standards will be met” is a “threshold matter” meaning the agency must first conclude that the permit is inadequate to protect water quality in a particular respect before it may impose additional conditions).

EPA regulations further provide that “[a]ny grant of certification with conditions shall be in writing and shall for each condition include, at a minimum, for certification conditions on an individual permit, “[a] statement explaining why the condition is necessary to assure that the discharge from the proposed project will comply with water quality requirements,” and “[a] citation to federal, state, or tribal law that authorizes the condition.” 40 CFR § 121.7(d). In sum,

a state receiving a Section 401 application has four options in total: it may grant a certificate without imposing any additional conditions; grant it with additional conditions; deny it; or waive its right to participate in the process. If the state grants the certificate – whether with or without conditions – the certification must contain a *statement that there is* a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards.

Sierra Club v. State Water Control Board, 898 F.3d 383, 388 (4th Cir. 2018) (internal citations and quotation marks omitted).

40 CFR § 122.44(d) specifies that when EPA determines that a discharge “causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard,” it must “use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or

pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.” 40 CFR § 122.44(d)(1)(ii). When EPA determines “that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.” 40 CFR § 122.44(d)(1)(iii).

40 CFR § 122.44(i)(1) requires that to assure compliance with effluent limitations, the permit include requirements to monitor “[a]ccording to sufficiently sensitive test procedures (i.e., methods) *approved under 40 CFR part 136* for the analysis of pollutants or pollutant parameters. A method is “sufficiently sensitive” when “[t]he method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter;” or “[t]he method has the lowest ML of the analytical methods *approved under 40 CFR part 136* or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter.” Emphasis added.

40 CFR § 136.1(a) requires that Part 136 approved methods, “be used to perform the measurements indicated whenever the waste constituent specified is required to be measured for: (1) An application submitted to [EPA] and/or reports required to be submitted under NPDES permits or other requests for quantitative or qualitative effluent data under parts 122 through 125 of this chapter; and (2) Reports required to be submitted by dischargers under the NPDES established by parts 124 and 125 of this chapter; and (3) Certifications issued by States pursuant to section 401 of the Clean Water Act (CWA), as amended.”

2. New Mexico Water Quality Act and Regulations

NMED’s certification under Section 401 of the Clean Water Act is subject to the New Mexico Water Quality Act, Section 74-6-5 and Water Quality Control Commission (“WQCC”) regulations. Section 74-6-5.B requires the WQCC to adopt regulations “establishing procedures for certifying federal water quality permits.” Section 74-6-5.D provides that NMED “has the burden of showing that each condition is reasonable and necessary to ensure compliance with the Water Quality Act and applicable regulations, considering site-specific conditions.”

Pursuant to the Water Quality Act, the WQCC adopted regulations establishing procedures for certification of federal NPDES permits. Those regulations, 20.6.2.2001.A NMAC, specify that the purpose of certifying federal NPDES permits “is to reasonably ensure that the permitted activities will be conducted in a manner that will comply with applicable water quality standards, including the antidegradation policy, and the statewide water quality management plan.” *See also* 401 Certification at 1. The regulation provides that “[a]fter review of a draft permit [issued by EPA], [NMED] will either: (1) certify that the discharge will comply with the applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the [federal] Clean Water Act¹ and with appropriate requirements of state law; (2) certify that the discharge will comply with the applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the [federal] Clean Water Act and with appropriate requirements of state law upon inclusion of specified conditions in the permit and include the justification for the conditions; or (3) deny certification and include reasons for the denial.” 20.6.2.2001.B NMAC.

¹ §208(e) precludes NPDES permits in conflict with area wide waste treatment management plans; §301 provides for the EPA adoption of effluent limitations for point sources; §302 provides for the EPA adoption water quality related effluent limitations; §303 provides for the adoption of water quality standards; §306 provides for the EPA adoption of national standards of performance, including standards of performance for new sources; and §307 provides for the EPA adoption of effluent limitations for toxic pollutants.

Thus, in New Mexico, EPA issues NPDES permits to ensure that point source discharges to waters of the United States will comply with applicable effluent limitations, as well as monitoring and reporting requirements, and NMED, under delegation from the WQCC, authorized to issue the 401 certification, which may include conditions to ensure that the discharge of pollutants will comply with State Water Quality standards, the water quality management plan and will be in compliance with the antidegradation policy. For EPA-issued NPDES permits, EPA regulations require that compliance with applicable effluent limits and conditions of a 401 certification be determined by Part 136 approved methods.

A. Challenge to Condition 1:

Condition 1 of the 401 Certification states:

Facilities at outfalls 001, 135, 027, 022, and 051 (which incorporate facilities operating under NAICS codes listed in the *Final Rule [June 22, 2020]* for TRI Reporting [noted above]) shall monitor and report PFAS in effluent once during the first year of coverage, or when the facility next discharges if no discharge occurs during the first year. Samples shall be analyzed by an accredited lab for all 18 PFAS analytes using EPA Method 537.1 (EPA 2018), and the DoD Quality Systems Manual Method 5.3 (2019) as guidance. Method and analysis shall be sufficiently sensitive to evaluate the New Mexico screening level for PFOA and PFOS.

The PFAS screening level in New Mexico is indicated below. The screening level is not a standard of quality and purity for the surface waters of New Mexico but allows detection and further evaluation of the existence of PFAS in discharges to determine if more attention is warranted.

PFAS Screening Level for New Mexico*	
PFOA + PFOS	0.070 ug/L
<ul style="list-style-type: none"> • Concentration of PFOA and PFOS are summed before being compared to the screening level. 	

If PFOA and/or PFOS are detected above the New Mexico screening level, additional monitoring and reporting shall occur annually and in accordance with the same parameters and methods as required for the first sampling event. In addition, [Triad/DOE] should take corrective action and identify ways to minimize, reduce, and eliminate PFAS from the industrial activity through product substitution and/or additional best management practices and operational

controls. Results of past monitoring and any corrective actions taken should be documented by [Triad/DOE].

The permittee shall submit monitoring results for all 18 PFAS analytes under EPA Method 537.11 as required, to NMED at the following address:

Point Source Program Manager
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502-5469

NMED justifies the requirement that Triad/DOE sample, monitor take and corrective action for 18 PFAS analytes on the narrative toxic pollutant standard, 20.6.4.13.F NMAC, which provides that “surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitations or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.” 20.6.4.7.T(2) NMAC defines “toxic pollutant” as “those pollutants . . . that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.”

NMED explains that its decision that PFAS are “toxic pollutants” under 20.6.4.7.T(2) NMAC, is based on (1) the WQCC’s listing of PHHxS, PFOS and PGOA as toxic pollutants under the ground water regulations, 20.6.2.7(T)(2)(s) NMAC; (2) EPA’s listing of “the 172 per-

and polyfluoroalkyl substances (PFAS) added by the National Defense Authorization Act” to the Emergency Planning and Community Right-to-Know Act, Section 313 list of reportable chemicals covered by the Toxic Release Inventory; and (3) information prepared by EPA and the Agency for Toxic Substances and Disease Registry. 401 Certification at 3-4.

The 401 Certification further explains that “[m]onitoring these toxic contaminants helps provide information about whether they are present in discharges to better control and mitigate PFAS in the environment.” 401 Certification at 5. NMED explained that it “Advocates taking a proactive approach and establishing PFAS sampling and reporting requirements to assure protection of New Mexico’s surface waters, public health and the environment.” *Id.*

As explained below, Condition 1 (a) is not necessary to assure compliance with applicable requirements under the federal Clean Water Act, EPA regulations, the New Mexico Water Quality Act and WQCC regulations and therefore, is beyond the NMED’s authority under federal and state law; (b) requires the use of EPA Method 537 or EPA Method 537.1, which are not methods approved by EPA under 40 CFR Part 136, and therefore, cannot be used for 401 certifications or compliance determination; and (c) purports to determine acceptable levels of PFAS without first going through the rulemaking procedures specified in the Water Quality Act and the process for establishing toxic pollutant criteria for surface water specified in the WQCC’s general surface water standard for toxic pollutants, 20.6.4.13.F NMAC.

1. The 401 Certification requirement to monitor, report, and take corrective action for PFAS are not necessary to ensure that State water quality standards are met.

As explained above, NMED’s authority to impose conditions in a 401 certification are limited to those requirements necessary to assure compliance with “the applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the [federal] Clean Water Act and with appropriate requirements of state law.” There are no provisions of federal law regulating the

discharge of PFAS to waters of the United States, including the requirements of Sections 208, 301, 302, 303, 306 and 307 of the Clean Water Act. Nor are there any applicable requirements of New Mexico law regulating the discharge of PFAS to waters of the state. Thus, the condition is not necessary to assure compliance with applicable requirements, and therefore, beyond NMED's authority under the Water Quality Act and regulations.

NMED asserts the WQCC's narrative toxic pollutant surface water standard, 20.6.4.13.F(1) NMAC ("surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations that . . . are toxic to humans"), provides the basis for controlling PFAS discharges. 401 Certification at 3. First, the 401 Certification's regulation of the discharge of 18 PFAS analytes are not supported by the Clean Water Act or the New Mexico Water Quality Act; neither the Toxic Release Inventory's ("TRI") list of reportable chemicals or EPA's Toxic Substances and Disease Registry support the imposition of surface water discharge compliance requirements. The TRI is a reporting – not compliance - requirement based on potential exposure to human health – not the environment – from direct exposure to specific concentrations of PFAS analytes in drinking water. Likewise, EPA's Toxic Substance and Disease Registry is not applicable to NPDES permit compliance or protection of surface waters. Both the methodology and studies upon which these guidance documents are based are simply not applicable to NPDES permit compliance and protection of state surface water quality standards.

Second, NMED does not even purport to address the applicable technical criteria to support the 401 Certification's requirements for the 18 PFAS analytes to protect surface waters standards. The process in the WQCC regulations requires NMED to undergo a process to determine whether the 18 PFAS analytes meet the criteria for toxicity for surface water

protection. See 20.6.4.7 and 20.6.4.13(f) NMAC. NMED's sweeping reliance on the TRI's reporting requirement and EPA's Toxic Substance and Disease Registry Reliance simply does not comply with the WQCC's defined process for NMED's decisions to protect surface waters for compounds that may present acute or chronic toxicity. NMED explains that "[i]nformation prepared by the EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) demonstrates that PFAS are toxic and can pose hazards to human health and the environment." 401 Certification at 4. However, the cited references address the possible impacts to humans from ingesting PFAS in drinking water.

Third, even if PFAS could be regulated as proposed, under the EPA regulations, NMED must determine the amount of PFAS in surface waters that are toxic and then determine whether the discharge of PFAS has a "reasonable potential" to cause or contribute to an exceedance of New Mexico water quality standards. EPA did not determine that PFAS had a "reasonable potential" and NMED avoids addressing the evaluation in the 401 Certification. Absent such a determination, NMED has no authority to regulate the discharge of PFAS in this certification.

Finally, none of the outfalls regulated by this permit discharge to receiving waters with a drinking water supply designated use. In fact, the two segments affected, 20.6.4.126 and 20.6.4.128 NMAC, only list secondary contact as a designated use. "Secondary contact" is defined as "any recreational or other water use in which human contact with the water may occur and in which the probability of ingesting appreciable quantities of water is minimal." 20.6.4.7.S(1) NMAC. Absent a use of the water for human drinking water, there is no necessity to control the discharge of PFAS from these outfalls, and thus, no basis for NMED's certification condition for PFAS.

2. EPA Method 537 and EPA Method 537.1 are not approved by EPA under 40 CFR Part 136, and cannot be used for 401 certifications or compliance determination.

As discussed above, Sections 304 and 401 of the Clean Water Act and EPA regulations, 40 CFR § 136.1(a)(3), require the use of EPA Part 136 approved methods in 401 certifications and to determine compliance with permit requirements. Even if NMED could impose conditions for the discharge of PFAS, it cannot require the use of Method 537 or 537.1. Neither method is approved by EPA under 40 CFR Part 136. Additionally, these methods were developed for drinking water use, not surface water discharges.

3. NMED is adopting requirements for PFOA and PFOS without first going through the Water Quality Act's rulemaking procedures and the process for establishing toxic pollutant criteria for surface water specified in the narrative toxic pollutant surface water standard.

By using the 401 certification process, NMED is attempting to avoid the rulemaking requirements of the Water Quality Act and the procedures in the WQCC's narrative toxic pollutant surface water standard. The Water Quality Act, Section 74-6-4.D, requires the WQCC to "adopt water quality standards for surface and ground waters of the state based on credible scientific data and other evidence appropriate under the Water Quality Act." The Act requires that standards "include narrative standards and, as appropriate, the designated uses of the waters and the water quality criteria necessary to protect such uses. The standards shall at a minimum protect the public health or welfare, enhance the quality of water and serve the purposes of the Water Quality Act." It further provides that the WQCC "shall give weight it deems appropriate to all facts and circumstances, including the use and value of the water for water supplies, propagation of fish and wildlife, recreational purposes and agricultural, industrial and other purposes. The Act specifies the procedures required for the adoption of standards, including public notice and a public hearing where affected parties can present witnesses, submit evidence, and examine witnesses. Section 74-6-6.

Additionally, the Water Quality Act, Section 74-6-4.E, requires the WQCC to “adopt, promulgate, and publish regulations to prevent or abate regulations to prevent or abate water pollution” including requirements for monitoring, sampling, analysis, and reporting. The Act provides that the WQCC, “[i]n making regulations . . . shall give weight it deems appropriate to all relevant facts and circumstances.”

By using the 401 certification process to establish requirements for the discharge of PFAS, NMED, not the WQCC, decides the level of PFAS that are necessary to “protect the public health [and] welfare, enhance the quality of water and serve the purposes of the Water Quality Act,” and other requirements, including monitoring, sampling, analysis, and reporting requirements. Those decisions are delegated to the WQCC alone. By utilizing the 401 certification process, NMED is bypassing the public process specified in the Water Quality Act and usurping the WQCC’s policymaking responsibility. NMED’s proposed Condition 1 is contrary to law and should be withdrawn.

Additionally, the WQCC has acknowledged that “[n]arrative criteria [like the narrative toxic pollutant criteria] are required for many constituents because accurate data on background levels are lacking. More intensive water quality monitoring may identify surface waters of the state where existing quality is considerably better than the established criteria.” The WQCC noted that “[w]hen justified by sufficient data and information, the water quality criteria will be modified to protect the attainable uses.” 20.6.4.10.B NMAC. In adopting the narrative toxic pollutant standard, the WQCC provided procedures to derive numeric criteria for human health-organism only and chronic and acute aquatic life criteria. 20.6.4.14.F.2&3 NMAC. When such numeric criteria are derived, the WQCC provided that “[w]ithin 90 days of the issuance of a final NPDES permit containing a numeric criterion selected or calculated pursuant to [20.6.4.14.F(2),

(3), or (4) NMAC], the department shall petition the commission to adopt such criterion into these standards.” NMED’s use of the 401 certification process bypasses the WQCC’s adoption of water quality criteria and avoids the WQCC’s process for reviewing and approving proposed numeric criteria implementing the narrative toxic pollutant standard.

For the reasons stated above, Condition 1 is not necessary to assure compliance with applicable requirements, including surface water quality standards, and is contrary to state law. As a result, the Secretary should withdraw the condition.

B. Challenge to Condition 2:

Condition 2 of the 401 Certification states:

USEPA must continue the requirement in the draft permit to include a monitoring and compliance maximum discharge limit for Polychlorinated Biphenyls (PCBs) of 0.00064 micograms per Liter ($\mu\text{g/L}$). The State requires that monitoring and reporting of PCBs be performed in accordance with USEPA published Method 1668C or later revisions. Pursuant to 20.6.4.14(A)(3) NMAC, Method 1668C is a State approved method for testing surface wastewater discharges. Additionally, Method 1668C has a Minimum Quantification Level (MMQL) set at or below the applicable and limiting State WQS found in 20.6.4.900(J)(1) NMAC. Further supporting this requirement is that Method 1668 is the only know and least restrictive and readily available laboratory wastewater sampling method that can reasonably assure that the proposed discharges to not exceed the WQS limits of 20.6.4.900(J)(1) NMAC.

For Outfall 03A027 add footnote: EPA published congener Method 1668 Revision and detection limits shall be used for reporting purposes. The permittee is allowed to develop effluent specific MDL in accordance with Appendix B of 40 CFR 136 (Instructions in Part II.A of this permit).

Outfall 051 has recently discharged and according to representative effluent characteristics submitted in the application there may be a reasonable potential for the effluent to exceed state WQS and EPA should add an effluent limitation for PCBs at Outfall 051.²

² Triad/DOE notes that PCBs were analyzed for two of the three discharges from Outfall 051 using Method 1668, and they came up ND. Thus, there is no reasonable potential to exceed state water quality standards for PCBs at Outfall 051, even using Method 1668.

As discussed above, Sections 304 and 401 of the Clean Water Act and EPA regulations, 40 CFR § 136.1(a)(3), require the use of EPA Part 136 approved methods in 401 certifications and to determine compliance with permit requirements. Method 1668C, which the 401 Certification requires Triad/DOE to use in monitoring and compliance for analyzing for PCBs, is not a Part 136 approved method. In fact, EPA sought approval of Method 1668, but in 2012 deferred action, 77 Fed. Reg. 29,758, 29,763 (May 18, 2012), and again in 2017, 82 Fed. Reg. 40,836, 40,876 (August 28, 2017).

Additionally, in 2006, NMED sought EPA's Tier 1 approval for Method 1668 for use in NPDES Permit No. NM0028355. Letter from Marcy Leavitt, Bureau Chief, NMED Surface Water Quality Bureau, to Richard Greene, Regional Administrator, EPA Region 6, dated May 25, 2006. The letter is attached as Attachment B. EPA did not approve the request.

Since Method 1668C is not an EPA Part 136 approved method, it cannot be required for monitoring or determining compliance with effluent limitations. As such, the Condition 2, which requires its use, is not required for compliance with applicable federal or state requirements and therefore, violates Section 401 of the Clean Water Act, 33 USC § 1341, and regulations, and the Water Quality Act. Section 74-6-5.E, and WQCC regulations. The Secretary should withdraw Condition 2.

RELIEF REQUESTED

Triad/DOE requests that (1) the Secretary review the 401 Certification; (2) in accordance with 20.6.2.2001.H NMAC, hold a public hearing on the petition; and (3) for the reasons stated above, withdraw Conditions 1 and 2.

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

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TRIAD NATIONAL SECURITY, LLC

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U.S. DEPARTMENT OF ENERGY

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Attorneys for U.S. Department of Energy

CERTIFICATE OF SERVICE

I hereby certify that on December 30, 2020, a true and correct copy of the foregoing *Petition for Review* was served via electronic mail to the following:

John Verheul
Assistant General Counsel
Office of General Counsel
New Mexico Environment Department
121 Tijeras, NE, Ste. 1000
Albuquerque, NM 87102
John.verheul@state.nm.us

Pamela Jones, Commission Administrator
Water Quality Control Commission
P.O. Box 5469
Santa Fe, NM 87502
Pamela.Jones@state.nm.us

/s/ Louis W. Rose _____

Louis W. Rose



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Harold Runnels Building
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Santa Fe, NM 87502-5469
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James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

Original via FedEx-Copy via Electronic Mail

November 30, 2020

Mr. Charles Maguire, Director
Water Quality Protection Division (6WD)
U. S. Environmental Protection Agency
1201 Elm Street, Suite 500
Dallas, Texas 75202

**Re: State Certification Los Alamos National Laboratory Industrial Wastewater
NPDES Permit No. NM0028355**

Dear Director Maguire:

Enclosed, please find the state certification for the following proposed National Pollutant Discharge Elimination System (NPDES) permit NM0028355, Los Alamos National Laboratory Industrial Wastewater Permit. Comments and conditions are enclosed on separate sheets.

The U.S. Environmental Protection Agency (EPA) proposes to regulate discharges under the above referenced NPDES Individual permit. A state Water Quality Certification is required by the federal Clean Water Act (CWA) Section 401 to ensure that the action is consistent with state law (New Mexico Water Quality Act, New Mexico Statutes Annotated [NMSA] 1978, Sections 74-6-1 to -17) and complies with the State of New Mexico Water Quality Standards at 20.6.2 and 20.6.4 New Mexico Administrative Code (NMAC), Water Quality Management Plan and Continuing Planning Process, including Total Maximum Daily Loads (TMDLs), and Antidegradation Policy.

Pursuant to State regulations for permit certification at 20.6.2.2001 NMAC, EPA jointly with the New Mexico Environment Department (NMED) issued a public notice of the draft permit and announced a public comment period posted on the NMED web site at <https://www.env.nm.gov/surface-water-quality/public-notices/> on November 27, 2019. The NMED public comment period ended on November 2, 2020. NMED received comments from the Buckman Direct Diversion Board and the Permittees, which were considered in this certification.

Sincerely,

for

Shelly Lemon, Bureau Chief
Surface Water Quality Bureau

ATTACHMENT A

cc: (w/ enclosures)

Ms. Evelyn Rosborough, USEPA (6WDPN) via e-mail

Mr. Brent Larsen, USEPA (6WDPE) via e-mail

Mr. Isaac Chen, USEPA (6WDPE) via e-mail

Mr. Michael Hazen, ESHQSS, Triad National Security, LLC by email

Mr. Enrique Torres, EPC-DO, Triad National Security, LLC by email

Mr. Michael Saladen, EPC-CP, Triad National Security, LLC by email

Ms. Taunia Van Valkenburg, EPC-CP, Triad National Security, LLC by email

Ms. Jennifer Griffin, EPC-CP, Triad National Security, LLC by email

Mr. Michael Weis, USDOE NA-LA by email

Ms. Karen Armijo, USDOE NA-LA by email

Buckman Direct Diversion Board, via luke@egolfaw.com

Mr. Ken McQueen, Regional Administrator
Environmental Protection Agency
1201 Elm Street, Suite 500
Dallas, TX 75202

November 30, 2020

STATE CERTIFICATION

RE: **NM0028355, Los Alamos National Laboratory Industrial Wastewater**

Dear Regional Administrator McQueen:

The Cabinet Secretary of the New Mexico Environment Department (NMED) has delegated signatory authority for state certifications of federal Clean Water Act permits to the Surface Water Quality Bureau Chief. NMED examined the proposed NPDES permit referenced above. The following conditions are necessary to assure compliance with the applicable provisions of the Clean Water Act Sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law. Compliance with the terms and conditions of the permit and this certification will provide reasonable assurance that the permitted activities will be conducted in a manner which will not violate applicable water quality standards or the water quality management plan and will be in compliance with the antidegradation policy.

The State of New Mexico

- certifies that the discharge will comply with the applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the Clean Water Act and with appropriate requirements of State law
- certifies that the discharge will comply with the applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the Clean Water Act and with appropriate requirements of State law upon inclusion of the following conditions in the permit (see attachments)
- denies certification for the reasons stated in the attachment
- waives its right to certify

In order to meet the requirements of State law, including water quality standards and appropriate basin plan as may be amended by the water quality management plan, each of the conditions cited in the draft permit and the State certification shall not be made less stringent, unless changes are in response to formal comments received by EPA and discussed with NMED prior to the finalization of the draft permit.

NMED reserves the right to amend or revoke this certification if such action is necessary to ensure compliance with the State's water quality standards and water quality management plan.

Please contact Sarah Holcomb at (505) 819-9734 if you have any questions concerning this certification. Comments and conditions pertaining to this draft permit are attached.

Sincerely,

Shelly Lemon, Bureau Chief
Surface Water Quality Bureau

**State of New Mexico Comments and Conditions on the Proposed NPDES Permit
Los Alamos National Laboratory Industrial Wastewater
NM0028355
November 30, 2020**

The following conditions are necessary to ensure that discharges allowed under the National Pollutant Discharge Elimination System (NPDES) permit protect State of New Mexico surface water quality standards (WQS) adopted in accordance with Section 303 of the Clean Water Act (CWA) and the New Mexico Water Quality Act (NMSA 1978, §§ 74-6-1 to -17). State of New Mexico (State) WQS are codified in Title 20, Chapter 6, Part 4 of the New Mexico Administrative Code (20.6.4 NMAC), *Standards for Interstate and Intrastate Surface Waters*, as amended by the New Mexico Water Quality Control Commission (WQCC) on May 22, 2020 and most recently approved by the U.S. Environmental Protection Agency (EPA or USEPA) as of July 24, 2020. Additional state WQS are published in Title 20, Chapter 6, Part 2 of the New Mexico Administrative Code (20.6.2 NMAC), *Ground and Surface Water Protection*, as amended by the WQCC most recently on December 21, 2018.

NPDES regulations at 40 CFR § 122.44(d)(1)(i) require that permit "...limitations must control all pollutants or pollutant parameters... which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard..."

40 CFR § 124.53(e) states that, "State certification shall be in writing and shall include: (1) Conditions which are necessary to assure compliance with the applicable provisions of CWA Sections 208(e), 301, 302, 303, 306 and 307 and with appropriate requirements of State law..."

Conditions of Certification:

Condition # 1:

Facilities at outfalls 001, 13S, 027, 022, 055, and 051 (which incorporate facilities operating under NAICS codes listed in the *Final Rule [June 22, 2020]* for TRI Reporting [noted above]) shall monitor and report PFAS in effluent once during the first year of coverage, or when the facility next discharges if no discharge occurs during the first year. Samples shall be analyzed by an accredited lab for all 18 PFAS analytes using EPA Method 537.1 (EPA 2018), and the DoD Quality Systems Manual Method 5.3 (2019) as guidance. Method and analysis shall be sufficiently sensitive to evaluate the New Mexico screening level for PFOA and PFOS.

The PFAS screening level in New Mexico is indicated below. The screening level is not a standard of quality and purity for the surface waters of New Mexico but allows detection and further evaluation of the existence of PFAS in discharges to determine if more attention is warranted.

PFAS Screening Level for New Mexico*	
PFOA + PFOS	0.070 ug/L

* Concentrations of PFOA and PFOS are summed before being compared to the screening level.

If PFOA and/or PFOS are detected above the New Mexico screening level, additional monitoring and reporting shall occur annually and in accordance with the same parameters and methods as required for the first sampling event. In addition, the permittee should take corrective action and identify ways to minimize, reduce, and eliminate PFAS from the industrial activity through product substitution and/or

additional best management practices and operational controls. Results of past monitoring and any corrective actions taken should be documented by the permittee.

The permittee shall submit monitoring results for all 18 PFAS analytes under EPA Method 537.1, as required, to NMED at the following address:

Point Source Program Manager
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502-5469

Background for Condition #1

New Mexico regulations (Standards for Interstate and Intrastate Surface Waters) under 20.6.4.13(F) NMAC state: Except as provided in 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitations or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

New Mexico regulations (Ground and Surface Water Protection) under 20.6.2.7(T)(2)(s) NMAC lists the following perfluorinated chemicals (PFCs) as toxic pollutants: perfluorohexane sulfonic acid (PHHxS), perfluorooctane sulfonate (PFOS), and perfluorooctanoic acid (PFOA).

The EPA revised the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 list of reportable chemicals covered by the Toxics Release Inventory (TRI) to include the 172 per- and polyfluoroalkyl substances (PFAS) added by the National Defense Authorization Act.¹

The following is a list of North American Industrial Classification System (NAICS) codes from EPA's Final Rule (June 22, 2020) that may be potentially affected by TRI reporting requirements:²

- Facilities included in the following NAICS manufacturing codes (corresponding to Standard Industrial Classification (SIC) codes 20 through 39): 311*, 312*, 313*, 314*, 315*, 316, 321, 322, 323*, 324, 325*, 326*, 327, 331, 332, 333, 334*, 335*, 336, 337*, 339*, 111998*, 211130*, 212324*, 212325*, 212393*, 212399*, 488390*, 511110, 511120, 511130, 511140*, 511191, 511199, 512230*, 512250*, 519130*, 541713*, 541715* or 811490*. *Exceptions and/or limitations exist for these NAICS codes.*
- Facilities included in the following NAICS codes (corresponding to SIC codes other than SIC codes 20 through 39): 212111, 212112, 212113 (corresponds to SIC code 12, Coal Mining (except 1241)); or 212221, 212222, 212230, 212299 (corresponds to SIC code 10, Metal Mining (except 1011, 1081, and 1094)); or 221111, 221112, 221113, 221118, 221121, 221122, 221330 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce) (corresponds to SIC codes 4911, 4931, and 4939, Electric Utilities); or 424690, 425110, 425120 (limited to facilities previously classified in SIC code 5169, Chemicals and Allied Products, Not Elsewhere Classified); or 424710 (corresponds to SIC code 5171, Petroleum Bulk Terminals and Plants); or 562112 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis (previously classified under SIC code 7389, Business Services, NEC)); or 562211, 562212, 562213, 562219, 562920 (limited to facilities regulated under the Resource Conservation and Recovery Act, subtitle C, 42 U.S.C. 6921 et seq.) (corresponds to SIC code 4953, Refuse Systems).*

- *Federal facilities.*

Information prepared by the EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) demonstrates that PFAS are toxic and can pose hazards to human health and the environment.^{3,4} In EPA's PFAS Action Plan⁵ program update, dated February 2020, the Agency recommends using a screening level of 40 parts per trillion (0.040 ug/L) to determine if PFOA and/or PFOS is present at a site and may warrant further attention.

PFAS has been detected in nearly all environmental media. However, there is very limited data on industrial wastewater discharges of PFAS into the environment, in part due to the fact that relatively few facilities have NPDES permit limits or monitoring requirements for PFAS. The EPA identified only 13 industrial facilities that reported PFAS discharges on discharge monitoring reports (DMRs) in 2016 even though the EPA has identified several categories of industry that are likely to discharge PFAS, such as airports, military bases, fire-fighting equipment manufacturers, organic chemical manufacturers, paper and paperboard manufacturers, tanneries and leather treaters, textiles and carpet manufacturers, semiconductor manufacturers, household cleaning product manufacturers, petroleum refining, and landfills.⁶

Other states' PFAS guidance for various surface and groundwater screening levels are indicated in the tables below.^{7,8}

Surface Water PFAS Guidelines in Other States				
	Oregon (ug/L)*	Michigan (ug/L)** DWS/not DWS	Minnesota (ug/L) Rivers	Alaska, Montana (ug/L)***
PFHpA	300	-	-	-
PFOA	24	0.420/12	2.7	0.070
PFOS	300	0.011/0.012	0.007	0.070
PFOSA	0.2	-	-	-
PFNA	1	-	-	-

* The Oregon DEQ wastewater initiation levels were adopted into rule (OAR 340-045-0100, Table A) in 2011. The PFAS are 5 chemicals on a list of 118 persistent priority pollutants for water that Oregon DEQ developed in response to state legislation. *Municipal wastewater treatment plants with effluent exceeding initiation levels are required to develop a pollution prevention plan that becomes a part of their NPDES permit.*

** Michigan's advisory levels are designed to protect human health (non-cancer values) and are based on whether the surface water is a drinking water source (DWS) or not.

*** For these states, concentrations of PFOA and PFOS are summed before being compared to the screening level.

Groundwater PFAS Guidelines in Other States						
	Maine (ug/L)*	New Jersey (ug/L)	New Hampshire (ug/L)**	Colorado, Rhode Island, Delaware (ug/L)*	Illinois (ug/L)***	Minnesota (ug/L)****
PFHpA	-	-	-	-	-	-
PFOA	0.400	0.010	0.012	0.070	0.021	0.035
PFOS	0.400	0.010	0.015	0.070	0.014	0.027
PFOSA	-	-	-	-	-	-
PFNA	-	-	0.011	-	0.021	-

* For these states, concentrations of PFOA and PFOS are summed before being compared to the screening level.

** Proposed rulemaking in New Hampshire covers 4 PFAS, and includes PFHxS = 0.018 ug/L.

*** Proposed rulemaking in Illinois covers 5 PFAS, and includes PFHxS = 0.140 ug/L and PFBS = 140 ug/L.

**** Health-based values (not maximum contaminant levels, or MCLs).

States use a variety of methods to test PFAS analytes in different media. The most widely used are EPA Method 537 (2008, applies to 14 PFAS) and EPA Method 537.1 (2018, applies to 18 PFAS). Some labs perform modifications, like using isotope dilution, to these methods for use in other matrices besides drinking water to account for lower reporting limits or greater accuracy. For example, modifications to Method 537.1 can be applied for non-drinking water media.⁷

Monitoring these toxic contaminants helps provide information about whether they are present in discharges to better control and mitigate PFAS in the environment. As stated on EPA’s PFAS website,⁹ “PFAS can be found in living organisms, including fish, animals, and humans, where PFAS have the ability to build up and persist over time.” Due to the characteristics of these contaminants (i.e., persistence in the environment and the human body, and evidence that exposure to PFAS can lead to adverse human health effects), NMED advocates taking a proactive approach and establishing PFAS sampling and reporting requirements to assure protection of New Mexico’s surface waters, public health and the environment.

- 1 <https://www.epa.gov/toxics-release-inventory-tri-program/list-pfas-added-tri-ndaa>
- 2 <https://www.federalregister.gov/documents/2019/12/04/2019-26034/addition-of-certain-per--and-polyfluoroalkyl-substances-community-right-to-know-toxic-chemical>
- 3 <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>
- 4 https://www.atsdr.cdc.gov/pfas/pfas_fact_sheet.html
- 5 https://www.epa.gov/sites/production/files/2020-01/documents/pfas_action_plan_feb2020.pdf
- 6 EPA Office of Water, Preliminary Effluent Guidelines Program Plan 14, October 2019, EPA-821-R-19-005
- 7 <https://www.ecos.org/documents/ecos-white-paper-processes-and-considerations-for-setting-state-pfas-standards/>
- 8 <http://pfas-1.itrcweb.org>
- 9 <https://www.epa.gov/pfas/basic-information-pfas#health>

Condition # 2:

USEPA must continue the requirement in the draft permit to include a monitoring and compliance maximum discharge limit for Polychlorinated Biphenyls (PCBs) of 0.00064 micrograms per Liter (µg/L). The State requires that monitoring and reporting of PCBs be performed in accordance with USEPA published Method 1668C or later revisions. Pursuant to 20.6.4.14(A)(3) NMAC, Method 1668C is a State approved method for testing surface wastewater discharges. Additionally, Method 1668C has a Minimum Quantification Level (MQL) set at or below the applicable and limiting State WQS found in 20.6.4.900(J)(1) NMAC. Further supporting this requirement is that Method 1668C is the only known and least restrictive and readily available laboratory wastewater sampling method that can reasonably assure that the proposed discharges do not exceed the WQS limits of 20.6.4.900(J)(1) NMAC.

For Outfall 03A027 add footnote: EPA published congener Method 1668 Revision and detection limits shall be used for reporting purposes. The permittee is allowed to develop an effluent specific MDL in accordance with Appendix B of 40 CFR Part 136 (instructions in Part II.A of this permit).

Outfall 051 has recently discharged and according to representative effluent characteristics submitted in the application there may be a reasonable potential for the effluent to exceed state WQS and EPA should add an effluent limitation for PCBs at Outfall 051.

Background for Condition #2

Below, NMED provides an explanation for why specific PCB monitoring conditions are necessary for State certification. The following table summarizes the applicable PCB numeric criteria from 20.6.4.900(J)(1) NMAC for the receiving waters of this permit action:

Pollutant	Wildlife Habitat	Aquatic Life			Type of Pollutant
		Acute	Chronic*	Human Health-Organism Only	

PCBs	0.014 µg/L	2 µg/L	0.014 µg/L	0.00064 µg/L	Chronic, Persistent
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Note: * Chronic Aquatic Life Criterion does not apply to Segment 20.6.4.128 with a designated use of Limited Aquatic Life

As PCBs are identified as a persistent pollutant the HH-OO criteria applies to both the coldwater aquatic life use in Segment 20.6.4.126 and the limited aquatic life use in Segment 20.6.4.128, consistent with 20.6.4.11(G) NMAC. USEPA reasonable potential analysis in the Fact Sheet determined that the PCB effluent characteristics at Outfalls 001, 13S and 027 have a reasonable potential to exceed State WQS. The point source discharge permit condition is calculated to meet numeric criteria based on a modified harmonic low flow per State WQS 20.6.4.11 NMAC and as consistent with the New Mexico Implementation Plan (2012).

The following is a summary of a portion of the monitoring and effluent limitation conditions for PCBs in Part I.A of the Draft Permit for Outfalls 001, 13S and 051:

		Concentration		Loading		Sample Type
		Monthly Average	Daily Maximum	Monthly Average and Daily Maximum	Frequency	
				lbs/day		
001	Total PCB (µg/l)	0.00064	0.00064	Report	1/Year	24-hr Composite
13S	Total PCB (µg/l)	0.00064	0.00064	Report	1/Year	24-hr Composite
027	Total PCB (µg/l)	0.00064	0.00064	Report	1/Quarter	Grab

As noted above and below, the Aroclor method is not sufficiently sensitive to assure that the Permittees will comply with the applicable effluent limit for PCBs contained within the permit and thus cannot be used for monitoring or compliance purposes under state law. The following demonstrates the MDL and MQL limits of several PCB testing methods:

Method	MDL	MQL
EPA Method 608 (Aroclor)	0.065 µg/L	0.02145 µg/L
EPA Method 625	30 µg/L	99 µg/L
SM 6410 B	30 µg/L	99 µg/L
EPA Method 1668C	7-30 pg/L	23-99 pg/L (0.000023-0.000099 µg/L)

Notes: EPA Method 1668 Revision A became Revision C in the May 18, 2012 Federal Register notice of 40 CFR Part 136.

The Aroclor method's MQL is two orders of magnitude above the effluent limitation provided in this draft permit as necessary to comply the State WQS. As documented above, the congener method, EPA Method 1668C, is the only method with a sufficiently sensitive detection limit below State WQS for Total PCBs and therefore must be used when it has been determined that PCBs "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above" State WQS. Again, this condition constitutes "monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations" consistent with the provisions of the CWA Section 401(d). 33 U.S.C. §1341 (d).

The State received comments from the Permittees. By their letter dated October 28, 2020, Los Alamos National Laboratory (LANL) provided arguments to support the use of the PCB congener method (EPA

Method 1668C) for reporting purposes but not for enforcement or compliance purposes. As detailed below, the State considered these arguments but found them insufficient to support LANL's proposition:

1. *"NMED may only include reference methods that are approved by EPA under 40 CFR Part 136 for determining compliance with effluent limitations. 40 CFR § 136.1 requires the use of EPA Methods 608 or 625 or Standard Methods 6410.B for determining compliance with effluent limits in NPDES permits."* LANL further cites the May 18, 2012 Federal Register publication of the USEPA decision to defer consideration of inclusion of EPA Method 1668C as a 40 CFR Part 136 method in support of this comment.

The State respectfully disagrees. As noted above, the State is requiring this condition in order to assure compliance with the applicable effluent and state water quality limitation which can only be achieved by use of EPA Method 1668C. This conditional action, as previously stated, is consistent with the provisions of the CWA for State Certification at 401(d) and in accordance with 20.6.2.2001 NMAC and 20.6.4.14(A)(3) NMAC.

Furthermore in reviewing USEPA's action in May 2012, to defer adoption of EPA Method 1668C, they included as part of their discussion that "EPA is still evaluating the large number of public comments and intends to make a determination on the approval of this method [1668C] at a later date...[and t]his decision does not negate the merits of this method for the determination of PCB congeners in regulatory programs or for other purposes when analyses are performed by an experienced laboratory." (FR, Vol. 77, No.97, page 29763)

2. *"LANL is the only known facility in New Mexico where use of the Congener Method 1668 is required to determine compliance with an NPDES permit limit."*

LANL is correct that it is the only facility where the use of USEPA Method 1668C is required for compliance purposes, however there is a very specific reason for this. LANL is the only facility whose discharge has been shown to have a reasonable potential to exceed State WQS for PCBs. The State also notes that LANL is not the only NPDES permittee in New Mexico subject to the specific use of USEPA Method 1668C. For example, six other NPDES permits are required to use this method for monitoring and reporting only. These discharge to waters where PCBs have been identified as a probable cause of a water quality impairment, but there was insufficient data to determine if the discharge had a reasonable potential to exceed State WQS or may contribute to a listed impairment. Therefore, based on these facts, use of Method 1668C is the least restrictive means known by the State to assure that the proposed activity will not exceed or contribute to the degradation of state water quality.

Condition #3:

EPA must revise the publicly noticed Reasonable Potential analysis to include all relevant monitoring data submitted as part of the reapplication package and supplemental information updates and comments from the Permittees per the process in the *New Mexico Implementation Guidance (2012)*. As it stands, the public noticed versions of Reasonable Potential analysis for each outfall covered under this permit are not correctly reflected in the draft permit, and according to the Permittees' comments, also are not reflective of monitoring data they submitted or contain other inaccuracies. NMED requires that once revised, EPA discuss the results of the revisions with the Department prior to finalizing the draft permit to ensure that the permit is technically sound and meets the requirements of State law, including the *Standards for Interstate and Intrastate Waters* at 20.6.4 NMAC. NMED reserves the right to revoke and reissue certification if necessary, to ensure compliance with water quality standards.

Based on NMED's review of the Reasonable Potential (RP) spreadsheets public noticed with the draft permit and data submitted to EPA by the Permittees, it appears that limitations for Thallium and PCBs are

necessary at several outfalls. Monitoring requirements shall exist in the final permit at outfalls where there is an impairment in the receiving waterbody, regardless of whether RP exists.

Outfall	Added Limits/Monitoring	Monitoring Frequency
001	Limit for thallium; monitoring for temperature – compliance schedule ok.	1/year
13S	Limit for thallium; monitoring for gross alpha	1/year
03A027	No additional limits or monitoring.	N/A
03A048	No RP for limits but monitoring for all impairments: gross alpha; cyanide; total mercury; PCBs; total selenium	1/year
03A113	EPA did not evaluate RP for PCBs at this outfall. A limit appears necessary.	1/year
03A160	EPA did not evaluate RP for PCBs at this outfall. A limit appears necessary.	1/year
03A181	It appears no RP spreadsheet was drafted for this outfall. Based on data, RP must be determined for copper and PCBs.	1/year
03A199	RP for thallium exists. EPA did not evaluate RP for PCBs.	1/year
03A022	EPA did not evaluate RP for PCBs. Monitoring requirements must stay in the permit for copper.	1/year
05A055	No additional limits or monitoring.	N/A
051	RP exists for Thallium. EPA did not evaluate RP for PCBs.	1/year

Background for Condition #3:

Below is a comparison of the effluent limitations in the administratively continued permit, water quality impairments as noted in the State of New Mexico CWA §303(d) Integrated List, notes on changes at the facility, pollutants detected in the effluent, and exceedances noted in 2015-2020 monitoring as compared to limits in the proposed permit. From this review, it appears that the following limits should either be added or modified in the final permit. Although RP exists for thallium at multiple outfalls EPA did not place limits into the draft permit.

Outfall Number	Description	Receiving Stream - WQ Segment	Impairments	Changes to Facility	Impaired pollutants detected (2C) (ug/L)	RP	2015-2020 monitoring	Metals Monitoring/Limit in 2020 Permit	Needed Limitations or Monitoring in Final Permit based on RP
001	Power Plant, SWWS, SERF, SCC, NMHFL	Sandia Canyon - 126	Aluminum, Total; Copper, Dissolved; Polychlorinated Biphenyls (PCBs); Temperature	added SCC, future add TA55	Cu 5.45, Al <19.3, PCB <0.0422, Temp, Thallium =0.442	Cu, Zn, PCB, TI	Exceed PCB	Total Aluminum-report, Total Copper, Zinc, PCB	Thallium; monitoring for temp – compliance schedule ok.
13S	SWWS	Canada del Buey - 128	Alpha Particles; Polychlorinated Biphenyls (PCBs)		α <1.16 PCB<0.0333, TI =0.6	PCB	No discharge	PCB	Thallium; monitoring for gross alpha (1/year)
03A027	SERF	Sandia Canyon - 126	Aluminum, Total; Copper, Dissolved; Polychlorinated Biphenyls (PCBs); Temperature		Cu 3.15, Al <19.3, PCB <0.0354, Temp	Cu, Zn	Exceed PCB and Cu limit	Total Aluminum, T Copper, PCB, Temperature, Zinc, Phosphorus	No additional limits or monitoring.
03A048	LANSCE	Los Alamos Canyon - 128	Alpha Particles; Cyanide; Mercury, Total; Polychlorinated Biphenyls (PCBs); Selenium, Total		α <1.85, CN<1.67, Hg <0.067, Se <2, PCB <0.0354		No exceed	Phosphorus	No RP for limits but monitoring for all impairments (1/year).
03A113	LEDA	Sandia Canyon - 128	Alpha Particles; Aluminum, Total; Mercury, Total; Polychlorinated Biphenyls (PCBs)		α =2.95, Al<19.3, Hg=0.011, PCB <0.354		Exceed WQS Cu 1x	Total Mercury, Alpha, Total Aluminum, Phosphorus	EPA did not evaluate RP for PCBs at this outfall. A limit appears necessary.
03A160	NMHFL	Ten Site Canyon - 128	Alpha Particles; Polychlorinated Biphenyls (PCBs)		α <0.96, PCB<0.0343	Cr6, Hg, Se, Cy	exceed Cy WQS, 2 exceed Cu WQS	Phosphorus, Mercury, Selenium, Cyanide, Chromium 6	EPA did not evaluate RP for PCBs at this outfall. A limit appears necessary.
03A181	TA-55	Mortandad Canyon - 128	Alpha Particles; Copper, Dissolved; Mercury, Total; Polychlorinated Biphenyls (PCBs)	future to SWWS?	α <0.772, Cu=3.24, Hg<0.067, PCB<0.0378		Cu 0.002	Phosphorus	It appears no RP spreadsheet was drafted for this outfall. Based on data, RP must be determined for copper and PCBs.
03A199	LDCC	Tributary to Sandia Canyon - 126	Aluminum, Total; Copper, Dissolved; Polychlorinated Biphenyls (PCBs); Temperature		Temp, TI 0.282, Al=<19.3, Cu=3.15, PCB<0.0354		ok	Total Aluminum, T Copper, Temperature, Zn, P	RP for Thallium exists. EPA did not evaluate RP for PCBs.

Outfall Number	Description	Receiving Stream - WQ Segment	Impairments	Changes to Facility	Impaired pollutants detected (2C) (ug/L)	RP	2015-2020 monitoring	Metals Monitoring/Limit in 2020 Permit	Needed Limitations or Monitoring in Final Permit based on RP
03A022	Sigma	Mortandad Canyon - 128	Alpha Particles; Copper, Dissolved; Mercury, Total; Polychlorinated Biphenyls (PCBs)	new heat exchanger	$\alpha < 1.14$, Cu=5.46, Hg<0.067, PCB<0.0351		above WQS for copper	Dissolved Copper-report	EPA did not evaluate RP for PCBs. Monitoring requirements must stay in the permit for copper (1/year).
05A055	HEWTF	Canon de Valle - 128	Alpha Particles		not present	Al, Cu, Pb, Se, Zn	No discharge	TNT, RDX, perchlorate, Aluminum, Copper, Lead, Selenium, Zinc	No additional limits or monitoring.
051	RLWTF	Mortandad Canyon - 128	Alpha Particles; Copper, Dissolved; Mercury, Total; Polychlorinated Biphenyls (PCBs)		$\alpha = 2.22$, Cu=11, PCB<0.0378, Hg <0.067	Cu		Dissolved Copper	RP exists for Thallium. EPA did not evaluate RP for PCBs.

Comments that are not Conditions of Certification:

Comment 1: There appears to be a typo in Footnote 5 for Outfall 001. NMED proposes revision to delete last sentence "6T3 Temperature of 20°C (68°F) shall not be exceeded for six or more consecutive hours in a 24-hour period on more than three consecutive days. ~~Daily maximum temperature shall be determined by 6T3 temperature record when 6T3 temperature .~~"

Comment 2:

Please ensure that all of the notices of change submitted by LANL since the 2019 NPDES Permit Re-Application was submitted on March 26, 2019 are incorporated.

- Revision 3 to Outfall 03A048 fact sheet to add a Chlorine monitoring system, submitted July 14, 2020 (EPC-DO: 20-222)
- Revision 3 to the Outfall 001 Flow Diagram which addresses improvements made to reduce the temperature of effluent discharged to the outfall as follows:
 - Piping modification to allow for effluent stored in the Reuse Tank to be routed (as needed) to the power plant cooling tower prior to discharge.
 - Piping modification to allow for blowdown associated with the Strategic Computing Complex (SCC) Cooling Towers to be routed to the Reuse Tank where (as needed) it can either be recycled to SERF or routed to the power plant cooling tower prior to discharge.

This change will not increase the volume or impact the effluent quality (i.e., no new chemicals) other than to reduce the temperature. This change was submitted as a notice of change on July 16, 2020 (EPC-DO: 20-221).

- Renovation of the power plant. This change was submitted as a notice of change on November 26, 2019 (EPC-DO: 19-430). This will increase the volumes at Outfall 001 as indicated below, and were incorporated into the antidegradation calculations.

Potential Future Source	Frequency		Flow Rates and Volumes				Duration (days)
	Days/Week	Months	Average (MGD)	Maximum (MGD)	Average Volume (GPD)	Maximum Volume (GPD)	
SCC Cooling Towers ^{a, b}	7.0	12	0.074	0.201	74,436	201,056	365
Power Plant Co-Generation Renovation	7.0	12	0.170	0.220	169,920	220,320	365
TA-55-006-Cooling Towers^c	7.0	12	0.009	0.032	9,365	31,986	365
Future Outfall 001 <u>Total^c</u>	7.0	12	<u>0.311</u>	<u>0.751</u>	<u>310,595</u>	<u>752,463</u>	365

a. See the permit section provided for Outfall 03A027 for a schematic showing this change.

b. Cooling tower blowdown calculated for the operation of 15 towers.

~~b.c. Total volume estimate for four source facilities: SWWS Effluent, SERF Effluent, SCC Cooling Towers, and Power Plant Co-Generation Renovation. All four facilities are hydraulically connected and eventually discharge water to Outfall 001 regardless of flow path.~~

- Startup of 5 additional Cooling Towers at the SCC. This modification was included as a future change in the 2019 NPDES Permit Application submitted March 26, 2019 (see EPC-DO: 19-106).



BILL RICHARDSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

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RON CURRY
SECRETARY

CINDY PADILLA
ACTING DEPUTY SECRETARY

May 25, 2006

VIA FIRST CLASS MAIL:

Richard Greene, Regional Administrator
U.S. Environmental Protection Agency
1445 Ross Ave., Suite 1200
Dallas, Texas 75202-2733

Re: Alternate Test Procedure for Polychlorinated Biphenyls
Tier 1 Approval Request - NPDES Permit NM0028355

Dear Mayor Greene:

Pursuant to 40 C.F.R. § 136.4 (2005), the New Mexico Environment Department ("NMED") hereby requests Tier 1 approval¹ by the Regional Administrator for Region VI of the United States Environmental Protection Agency ("EPA") of an alternate test procedure for use in conjunction with the discharges made by the Board of Regents of the University of California, operator of the Los Alamos National Laboratory ("Laboratory"), and the U.S. Department of Energy, owner of the Laboratory, under the proposed National Pollutant Discharge Elimination System ("NPDES") permit (Permit NM0028355). This request supplements NMED's original certification of the Laboratory's proposed NPDES permit on March 30, 2006.

Under 40 C.F.R. Part 136, *any person* may apply to the Regional Administrator in the Region where the discharge occurs for approval of an alternative test procedure. 40 C.F.R. § 136.4(a) (2005) (emphasis added). As such, NMED requests that EPA approve of the use of the *EPA Method 1668 Revisions A: Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS* [EPA-821-R-00-002] for use as the analytical test protocol for all PCB analysis for the purposes of NPDES Permit NM0028355. While NMED believes that its certification of that permit, dated March 30, 2006, contained all the necessary elements for a request under 40 C.F.R. § 136.4, NMED is now submitting this supplemental request to remove any question regarding compliance with the procedures in 40 C.F.R. Part 136 for approval of the alternate test procedures.

¹ Tier 1 as defined in Table 1 of EPA's *Protocol for EPA Approval of Alternate Test Procedures for Organic and Inorganic Analytes in Wastewater and Drinking Water*, March 1999. [EPA 821-B-98-002].

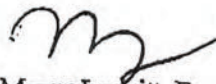
ATTACHMENT B

Pursuant to 40 C.F.R. § 136.4(c), any application for an alternate test procedure shall: (1) provide the name and address of the responsible person or firm making the discharge (if not the applicant) and the applicable ID number of the existing or pending permit, issuing agency, and type of permit for which the alternate test procedure is requested, and the discharge serial number; (2) identify the pollutant or parameter for which approval of an alternate testing procedure is being requested; (3) provide justification for using testing procedures other than those specified in Table I; (4) provide a detailed description of the proposed alternate test procedure, together with references to published studies of the applicability of the alternate test procedure to the effluents in question.

In its certification of the Laboratory's proposed NPDES permit, NMED provided the name (Board of Regents of the University of California, operator of the Laboratory, and the U.S. Department of Energy, owner of the Laboratory), the address of the responsible person making the discharge (Addresses provided for Board of Regents of the University of California and the U.S. Department of Energy), the applicable ID number of the existing or pending permit (NPDES Permit NM0028355), the issuing agency (EPA), the type of permit for which the alternate test procedure is requested (NPDES), and the discharge serial number (001, 13S, 051). NMED identified the pollutant for which approval of an alternate testing procedure is being requested (PCBs). NMED provided justification for using testing procedures other than those specified in Table I (Current methods of analysis in 40 C.F.R. Part 136 for PCBs analysis are not protective of the New Mexico Water Quality Standards). NMED provided a detailed description of the proposed alternate test procedure (*EPA Method 1668 Revisions A: Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS [EPA-821-R-00-002]*), together with references to published studies of the applicability of the alternate test procedure to the effluents in question (Studies referenced in *EPA Method 1668 Revisions A: Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS [EPA-821-R-00-002]*).

For the purposes of this supplemental request, NMED has attached three copies of the *ATP Application Form* contained in EPA's *Protocol for EPA Approval of Alternate Test Procedures for Organic and Inorganic Analytes in Wastewater and Drinking Water - March 1999 [EPA 821-B-98-002]*. NMED has not provided any of the underlying data and references which support Method 1668A, however, because EPA developed Method 1668A and already possesses this information.

Thank for your timely consideration of this supplemental request.



Marcy Leavitt, Bureau Chief
Surface water Quality Bureau
New Mexico Environment Department

CC VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED:

Mr. Edwin L. Wilmot, Manager
U.S. Department of Energy
Los Alamos Site Office, MS A316
528 35th Street
Los Alamos, NM 87544

Mr. Kenneth M. Hargis, Acting Director
University of California
Environmental Stewardship Division, MS A104
P.O. Box 1663
Los Alamos, NM 87545

CC VIA FIRST CLASS MAIL:

David Stockton, USEPA Region 6
Alternative Test Procedure Contact
U.S. Environmental Protection Agency
Region 6 Laboratory
Houston Branch (6MD-HI)
10625 Fallstone Road
Houston, Texas 77099

Willie Lane, Section Chief
U.S. Environmental Protection Agency
Region 6, NPDES Permits (6WQ-PP),
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Dallas, Texas 75202-2733

Director, Analytical Methods Staff
Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW.
Washington, DC 20460

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF:

**PETITION FOR REVIEW OF
THE STATE CERTIFICATION
OF LOS ALAMOS NATIONAL LABORATORY
INDUSTRIAL WASTEWATER
NPDES PERMIT NO. NM0028355**

No. SWQB 20-79

**Triad National Security, LLC and
United States Department of Energy,
National Nuclear Security Administration**

Petitioners

**TRIAD NATIONAL SECURITY, LLC AND THE UNITED STATES
DEPARTMENT OF ENERGY SUPPLEMENT TO PETITION FOR REVIEW**

Petitioners Triad National Security, LLC and the United States Department of Energy, National Nuclear Security Administration (collectively “Triad/DOE”), pursuant to 20.6.2.2001.H NMAC, submit this supplement to their December 30, 2020 Petition for Review of Conditions 1 and 2 of the State Certification of Los Alamos National Laboratory (“LANL”) Industrial Wastewater NPDES Permit No. NM0028355 (“State Certification”), dated November 30, 2020. A copy of the State Certification was attached to the Petition as Attachment A. In further support of their Petition for Review, Triad/DOE provide the following supplemental information and explanation of the issues raised in the Petition.

The December 30, 2020 Petition provided a thorough discussion of the reasons why Conditions 1 and 2 exceed NMED’s authority under federal and state law in the context of a State Certification. This Supplement provides further explanation as to several of those issues, and also discusses in detail the reasons why Conditions 1 and 2 are outside the scope of

allowable, state-imposed conditions under the Clean Water Act and EPA’s regulations governing the Section 401 certification process.

I. NMED’s Authority to Place Conditions on EPA-Issued NPDES Permits is Limited by Federal Law, Which Requires That Conditions Must be Based On Lawfully Issued Water Quality Requirements.

New Mexico is not authorized to issue NPDES permits, and therefore the state is limited to placing conditions on EPA-issued NPDES permits, a function that is subject to certain restrictions embodied in federal law and regulation. The legitimacy of state-imposed conditions, as well as EPA’s authority to accept and impose them on permittees, therefore depend upon whether those conditions fall within the allowable scope set forth in EPA regulations governing the implementation of Section 401 of the Clean Water Act.

EPA regulations provide that “[t]he scope of a Clean Water Act Section 401 certification *is limited to assuring* that a discharge from a Federally licensed or permitted activity *will comply* with water quality requirements.” 40 C.F.R. § 121.3 (emphasis added). Thus, the Section 401 certification can be no more than a compliance-assurance mechanism directed toward achieving conformity with an existing state requirement, not the creation of such a requirement in the course of issuing a certification.

The type of requirements that may be the subject of a section State Certification is further limited by the phrase “water quality requirements,” which EPA defines as “applicable provisions of §§ 301, 302, 303, 306, and 307 of the Clean Water Act, and state or tribal regulatory requirements for point source discharges into waters of the United States.” *Id.*, § 121.1(n). Two aspects of this definition further characterize and limit the requirements that may be imposed through the Section 401 certification process.

First, by referencing the five Clean Water Act sections in which discharge limitations are imposed on point sources, EPA signals that state or tribal requirements imposed via a Section 401 certification must be of that type. As EPA noted in the preamble to the final rule, “[t]he final rule, like the proposal, is informed by the principle *ejusdem generis*. Under this principle, where general words follow an enumeration of two or more things, they apply only to things of the same general kind or class specifically mentioned. See *Wash. State Dept. of Social and Health Services v. Keffeler*, 537 U.S. 371, 383-85 (2003).” Preamble Discussion at 85 Fed. Reg. 42254 (July 13, 2020). In other words, just as the enumerated sections of the Clean Water Act authorize and require the imposition of limitations on point source discharges, so too must the requirements to be imposed as a result of state conditions.

In addition, by explicitly limiting the scope of state certifications to state or tribal “regulatory requirements,” EPA’s definition limits states to imposing obligations that have been enacted into state law, or that have been lawfully developed and issued through the required state processes for issuing regulations. In the preamble to its regulation, EPA repeatedly emphasized that “requirements” refers to state or Tribal “law,” meaning statutes and regulations. See, e.g., Preamble Discussion at 85 Fed. Reg. 42253-54 (July 13, 2020).

When a state certifies with conditions, the EPA regulations become even more exacting by imposing obligations on the state that are designed to demonstrate that its conditions are the type of requirements EPA is authorized to impose in the permit. The regulations require, with respect to each condition, that the state provide: “(i) A statement explaining why the condition is necessary to assure that the discharge...will comply with water quality requirements; and (ii) A citation to federal, state, or tribal law that authorizes the condition.” 40 C.F.R. §121.7(d)(1). The first obligation ensures that a state-imposed condition is necessary, not merely desirable, to

assure compliance with an existing water quality requirement (i.e., a statute or regulation). In other words, it must be demonstrated that, without the condition, compliance with the requirement would not be assured. The second obligation – a citation to law – reinforces the notion that conditions must be imposed through duly enacted statutes or lawfully promulgated regulations.

Finally, the regulations limit EPA’s obligation to incorporate conditions associated with state certifications into NPDES permits to those “that satisfy the requirements of § 121.17(d).” *Id.* at § 121.10(a). This means that EPA will not incorporate conditions based upon a state certification without the requisite showing of necessity to assure compliance with a water quality requirement (i.e., a statute or regulation) and the citation to state law authorizing imposition of the condition.

II. Condition No. 1 Does Not Meet The Minimum Standard Required by Federal Law.

For numerous reasons, the mandate set forth in Condition No. 1 to monitor for a specific list of PFAS, and to consider corrective actions in certain circumstances, does not satisfy the EPA regulatory requirements, discussed above, to qualify as a mechanism to assure compliance with “water quality requirements.” NMED should withdraw Condition No. 1. If NMED does not withdraw Condition No. 1, EPA should refuse to incorporate the condition into its NPDES permit for the Laboratory.

A. PFAS Monitoring Is Not a Water Quality Requirement.

The requirement in Condition No. 1 to monitor for PFAS at various outfalls does not qualify as a “water quality requirement” because it is not designed to assure compliance with anything approaching a state law or regulation. Nothing in state statutes or regulations authorizes NMED to impose monitoring requirements untethered from any regulatory standard

or objective. Under Section 401 of the Clean Water Act, NMED cannot simply demand that EPA require a discharger to undertake a science experiment because NMED lacks the data to develop standards and “advocates...*establishing* PFAS sampling and reporting requirements.” State Certification at 5 (emphasis added). The *establishment* of sampling and reporting requirements certainly could be undertaken pursuant to required state rule making procedures authorized by the New Mexico Water Quality Control Commission (WQCC), *e.g.*, the Triennial Review Process, but not through conditioning a Section 401 certification, which is a mechanism designed exclusively to assure compliance with *already established requirements*.¹

In its November 30, 2020 State Certification, NMED provides quotations from federal and state regulations and other pronouncements touching on water quality considerations, but it does not provide any rationale as to why Condition No. 1 is necessary to assure compliance with them or why they are appropriately applied to the discharge of treated effluent. This is not surprising, since there is no such rationale.

First, NMED asserts that the conditions associated with its certification are necessary to ensure that discharges allowed under the EPA-issued NPDES permit will protect state surface water quality standards, State Certification at 2, but NMED lacks a legitimate basis to make such a determination. With respect to Condition No. 1, the only standard mentioned by NMED is a narrative standard for toxic pollutants. *Id.* at 3. That standard provides that surface waters shall be free of toxic pollutants “in amounts, concentrations or combinations” that will have various

¹ Indeed, NMED is concurrently undertaking rulemaking in the Triennial Review Process to amend the state water quality standards to include a definition for “Contaminants of Emerging Concern” and including “toxic pollutants” listed under the ground water regulations, 20.6.2.7 NMAC, in the narrative toxic pollutant standard, *e.g.*, PFAS. See NMED’s Proposed Amendments to State Water Quality Standards, 20.6.4 6.4.C.7 and 20.6.4.13.F NMAC. See <https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/25/2020/05/TR-2020-Proposed-Amendments-Public-Draft-20200819.pdf>

deleterious effects, or that can reasonably be expected to bioaccumulate in aquatic organisms “to levels that will” cause deleterious effects. 20.6.4.13(F) NMAC. By its terms, the standard requires that New Mexico make science-based decisions, backed by data, as to the amounts, concentrations and levels of specific pollutants in the ambient, aquatic environment that would cause the standard to be violated. Only then could various PFAS be considered toxic pollutants, and only then would NMED be in a position to apply the standard or to impose a condition to assure compliance with it.

Second, NMED mentions 40 C.F.R. § 122.44(d)(1)(i), which requires that NPDES permits include limitations for pollutants discharged at levels that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard. State Certification at 2. This is not germane to the content of Condition No. 1, which demands monitoring but not limitations, and in which NMED has provided no data or rationale to enable any determination of reasonable potential for excursions above a state standard. Until the WQCC or NMED issues quantitative, pollutant-specific levels to characterize its narrative standard for toxic pollutants, EPA will not be in any position to make a defensible judgment about reasonable potential.

Third, for the same reasons, NMED has not met its obligation under regulations implementing Section 74-6-5.D. That section provides that, in certifying federal NPDES permits, NMED “has the burden of showing that each condition is reasonable and necessary to ensure compliance with the Water Quality Act and applicable regulations, considering site-specific conditions.” WQCC regulations implementing that provision make clear that NMED’s purpose in issuing certifications for federal NPDES permits “is to reasonably ensure that the permitted activities will be conducted in a manner that will comply with applicable water quality

standards....” 20.6.2.2001.A NMAC. NMED has provided no explanation, let alone met its burden of showing, that Condition No. 1 is reasonable and necessary to meet the narrative standard for toxic pollutants.

Fourth, by requiring specific effluent monitoring parameters, methods and frequencies in its Condition No. 1, NMED has exceeded its authority and usurped the authority statutorily conferred on the WQCC. New Mexico law provides that the WQCC may, by regulation, impose reasonable conditions concerning effluent monitoring. Section 74-6-5.J. The WQCC has not adopted effluent monitoring requirements for PFAS, nor has it delegated authority to NMED to do so. Condition No. 1 cannot qualify as a water quality requirement pursuant to 40 C.F.R. § 121 because it is not a lawfully issued requirement under state law.

Finally, Condition No. 1 does not meet the requirements of 40 C.F.R. § 121.7(d)(1) to justify the imposition of monitoring requirements because NMED has not provided to EPA the two items of information specified in EPA’s regulation. As discussed above, NMED has not furnished any explanation as to why the condition is necessary to assure compliance with a water quality requirement, and it has provided no citation to any state law that authorizes the condition.

B. Condition No. 1 Violates Federal Requirements By Specifying the Use of Unauthorized Analytical Methods.

Condition No. 1 was improperly imposed and cannot be accepted by EPA because it requires the use of analytical methods that have not been approved for use in connection with state certifications. EPA regulations require that only methods approved pursuant to 40 C.F.R. Part 136 may be used in state certifications. 40 C.F.R. § 136.1(a)(3). Condition No. 1 requires the use of Method 537 or 537.1, neither of which has been approved pursuant to Part 136. As discussed below in section III, this flaw undermines NMED’s Condition No. 2 as well.

Moreover, these methods are not appropriate for measuring pollutants in effluent discharges, as they were developed for use with drinking water and NMED has not demonstrated that they can be properly used for any other purpose. The EPA methods that NMED proposes to require were developed based upon human health guidance only, and the methodology is inappropriate for use with the complex matrix of most waste water effluents. Despite issuing these methods, EPA has still not promulgated drinking water standards for PFAS under the Safe Drinking Water Act, nor has New Mexico proposed drinking water standards for PFAS under the Environmental Improvement Act, NMSA 1978, § 74-1-8.A(2).

C. NMED’s PFOA + PFOS Screening Level, Which Would Trigger Additional Requirements, Is Not a Water Quality Requirement.

In Condition No. 1, NMED improperly imposes a “screening level” of 0.070 µg/L for the combined concentrations of PFOA and PFOS, and NMED specifies that additional monitoring, reporting and corrective action would result from measurements exceeding this level. Neither the screening level itself nor the requirements imposed for exceeding it can qualify as a water quality requirement under EPA’s regulations. These features of Condition No. 1 are not to be found in state law or regulations. NMED cannot justify these features as necessary to implement any requirement of state law, and it cannot provide citations to any state-law requirement authorizing their use. These features therefore are not allowed as conditions under 40 C.F.R. § 121.7(d)(1). Moreover, by imposing these features without any rational explanation as to why they are appropriate for effluent discharges to surface waters, NMED has acted in an arbitrary and capricious manner.

D. NMED Has Not Justified the Required Monitoring For The PFAS Covered by Condition No. 1.

In Condition No. 1, NMED would improperly require monitoring for 18 PFAS, apparently selected because those pollutants have been deemed suitable for application of EPA's Method 537.1. State Certification at 3. That is not a rational basis for imposing an NPDES permit condition. It does not follow from EPA's publication of an analytical method for these substances that requiring monitoring for them is necessary to assure compliance with any state water quality requirement. New Mexico has made no determination that they are toxic pollutants at any particular concentration, amount or level, as required by state law. NMED has provided no evidence that they would be likely constituents of the Laboratory's discharge or that receiving waters need protection from their discharge. As noted above, Method 537.1 may not be associated with state certification requirements because it is not approved under Part 136.

Moreover, NMED has not justified its proposed requirement to monitor for a broad list of PFAS at all permitted outfalls as being "necessary," per 40 C.F.R. § 121.7(d)(1), for the development of data on PFAS sources because NMED has not provided any rational basis for believing that PFAS could be present in discharges at the Laboratory. In fact, the evidence is to the contrary for most of the Laboratory's outfalls. In this connection, the Laboratory submits the Affidavit of Jennifer K. Griffin, NPDES Program Lead for the Environmental Protection and Compliance Division's Compliance Programs Group at LANL. (Attachment A.) Ms. Griffin provides her analysis of relevant factors associated with each of the eleven (11) LANL outfalls--including a discussion of the chemicals used in the generation of waste water--that would determine whether there is a potential for PFAS to be present in the associated discharge at concentrations exceeding the NMED screening level. Her affidavit demonstrates that it is unlikely or highly unlikely that PFAS will be present in discharges from most of the outfalls.

III. CONDITION NO. 2 IS UNJUSTIFIED AND UNLAWFUL, AND IT SHOULD BE WITHDRAWN.

This supplement also elaborates on the reasons stated in the Laboratory's December 30, 2020 Petition for Review for the appeal of Condition No. 2 of the State Certification.

A. NMED Should Revise the State Certification and Delete Condition No. 2's Requirement that Compliance Monitoring for PCB Effluent Limits Be Performed Using Method 1668C.

Condition No. 2 of the State Certification requires that the Laboratory's NPDES Industrial Outfall Permit ("Permit") include a "monitoring and compliance" maximum discharge limit for PCBs of 0.00064 µg/L based on Method 1668C (commonly referred to as the "Congener Method"). Condition No. 2 applies to Permit outfalls 001, 13S, 027, and 051.

NMED states:

The State requires that monitoring and reporting of PCBs be performed in accordance with USEPA published Method 1668C or later revisions. Pursuant to 20.6.4.14(A)(3) NMAC, Method 1668C is a State approved method for testing surface wastewater discharges. Additionally, Method 1668C has a Minimum Quantification Level (MQL) set at or below the applicable and limiting State WQS found in 20.6.4.900(J)(1) NMAC. Further supporting this requirement is that Method 1668C is the only known and least restrictive and readily available laboratory wastewater sampling method that can reasonably assure that the proposed discharges do not exceed the WQS limits of 20.6.4.900(J)(1) NMAC.

State Certification at 5.

NMED explains that requiring Method 1668C is necessary to assure compliance with PCB effluent limits in the Permit because it is "the only method with a sufficiently sensitive detection limit below State WQS for Total PCBs and . . . must be used when it has been determined that PCBs *'are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above'* State WQS," and the condition constitutes "*monitoring requirements necessary to assure that [the Permittees] will*

comply with any applicable effluent limitations” under CWA Section 401(d). *Id.* at 6. NMED also states that “PCB effluent characteristics at Outfalls 001, 13S and 027 have a reasonable potential to exceed State WQS” and requests that EPA add an effluent limitation for PCBs at Outfall 051 because there “may be” a reasonable potential for the effluent at 051 to exceed state WQS. *Id.* at 5 and 6. Finally, NMED explains that it requires Method 1668C at other facilities for “monitoring and reporting” only where PCBs have been identified as a probable cause of water quality impairment, but there was insufficient data to determine if the discharge had a reasonable potential to exceed a State WQS. *Id.* at 7. According to NMED, LANL is different because it is the “only facility whose discharge has been shown to have a reasonable potential to exceed State WQS for PCBs.” *Id.*

1. NMED’s Condition Requiring Compliance Monitoring Should Be Deleted For Those Outfalls For Which There is No Showing of a Reasonable Potential to Exceed Water Quality Standards.

Under EPA rules, water quality effluent limits for a pollutant such as PCBs must be included in the NPDES permit if the discharge will cause, has the reasonable potential to cause, or contributes to a violation of a water quality standard. 40 CFR § 122.44(d)(1)(iii). This is referred to as a “reasonable potential analysis (RPA)” and it is included in the NPDES permit record by the permitting agency or the applicant or permittee. In its 2019 Permit Re-Application and supplements², the Laboratory submitted its RPA along with its supporting documentation consisting of substantial data and analysis to address the reasonable potential and the applicability of a PCB effluent limitation at its NPDES permitted industrial outfalls.

² Triad/DOE submitted its 2019 NPDES Permit Re-Application and supplemental information packages on August 20, 2019 and October 28, 2020. *See* EPC-DO-19-302, NPDES Permit No. NNM0028355, 2019 NPDES Permit Re-Application. The Application and the Supplemental Information packages were submitted to NMED and are part of the Record in this matter.

The Laboratory agrees that if its 2019 Permit Re-Application and RPA supports the determination that no reasonable potential exists to exceed the State WQS for PCBs, Method 1668C may be appropriate for monitoring and reporting only – and not for compliance monitoring. However, as discussed below, the 2019 Permit Re-Application and RPA demonstrate that Outfall 051 has no “reasonable potential” to exceed State WQSs for PCBs, and therefore, there is no basis for EPA to include a PCB effluent limitation for this outfall as NMED suggests. For this reason, the Laboratory requests that NMED not include the requirement to use Method 1668C for PCB compliance monitoring at Outfall 051.

The following addresses each Outfall and clarifies several factual points presented in the State Certification:

- Outfall 027 – The Laboratory agrees with the State Certification condition to remove Method 1668C for PCB compliance monitoring at Outfall 027, and to require monitoring and reporting only.
- Outfall 051 – The 2019 NPDES Permit Re-Application and supplements include analytical data from samples collected during discharges to Outfall 051 on June 18, 2019 and March 10, 2020. These samples were analyzed for PCBs using Method 1668C (as required by the existing permit) and the results indicated no detections of PCBs above the currently accepted method detection limits for Method 1668. Since both samples resulted in a Total PCB concentration of 0 µg/L, the Permittees demonstrated that there is no reasonable potential for exceedance of a PCB WQS in connection with the effluent

discharged to Outfall 051³. As a result, EPA should not include a PCB effluent limit in the renewed permit for this outfall.

- Outfall 001 – The Laboratory requests that NMED remove Method 1668C as a requirement for PCB compliance monitoring, and that Method 608 (commonly known as the “Arochlor” Method) be included (see *infra*, at III.A.2).
- Outfall 13S – The Laboratory requests that NMED remove Method 1668C as a requirement for PCB compliance monitoring, and that Method 608 be included (see *infra*, at III.A.2).

2. NMED Should Revise the State Certification to Remove PCB Compliance Monitoring for Outfalls 001 and 13S Because Requiring the Use of Method 1668C Is Unlawful And Not Technically Supported.

In its Petition and NPDES permit comments, The Laboratory objected to the inclusion of Method 1668C for PCB NPDES compliance monitoring on the basis that federal law precludes its use because it is not an EPA-approved method under 40 CFR Part 136 (Part 136). Further, The Laboratory requested that Method 608 be required because it is the only EPA-approved method under Part 136 for NPDES compliance monitoring.⁴ In the State Certification, NMED responded to The Laboratory’s NPDES permit comments:

The State respectfully disagrees. As noted above, the State is requiring this condition in order to assure compliance with the applicable effluent and state water quality limitation which can only be achieved by use of EPA Method 1668C. This conditional action, as previously stated, is consistent with the provisions of the CWA for State Certification at 401(d) and in accordance with 20.6.2.2001 NMAC and 20.6.4.14(A)(3) NMAC.

³ *Id.* NPDES Supplemental Information Package 2 (RLW Effluent Data from June 2019) and EPC-DO-20-095, Triad, LLC NPDES Permit Comments on the Draft Industrial and Sanitary Wastewater NPDES Permit No. NM0028355 (Nov. 30, 2019) (“Triad Comments”), submitted to NMED and part of the Record in this matter.

⁴ Triad Comments, at Enclosure 1, page 2.

See State Certification at 7.

As set out in the Petition and below, NMED's requirement to use Method 1668C for compliance determinations is contrary to the Clean Water Act and not supported by the New Mexico Water Quality Act and WQCC regulations. EPA-approved Method 608 is the only legally recognized, appropriate, and reliable method to detect PCBs for inclusion in the Permit for compliance monitoring purposes. 40 CFR § 136.3, Table I.C.

B. Federal Law Requires that Only 40 CFR Part 136 Approved Methods be used for Compliance Determinations.

It is well established under Sections 304 and 401 of the Clean Water Act and EPA's implementing regulations that NMED's authority to issue a State 401 Certification with conditions for NPDES permits requires inclusion of only Part 136 approved methods if required for compliance determinations.

As stated in the Petition, in New Mexico, EPA has the responsibility for issuing NPDES permits under Section 402 of the Clean Water Act, 33 USC § 1342, for point source discharges to waters of the United States. New Mexico is authorized under Section 401 of the Clean Water Act, 33 USC § 1341, to certify that an EPA proposed NPDES permit (as proposed or with conditions) "will comply the applicable provisions of sections 301, 302, 303, 306, and 307 of [the Clean Water Act]" and "with any other appropriate requirement of State law set forth in such certification." Section 401(a)(1) & (d) of the Clean Water Act, 33 USC § 1341(a)(1) & (d). As discussed above, EPA has interpreted the language "other appropriate requirement of State law" to include only "water quality requirements" embodied in state law.

Section 304(h) of the Clean Water Act, 33 USC § 1314(h), requires the EPA Administrator to "promulgate guidelines establishing test procedures for the analysis of

pollutants that shall include the factors which must be provided in any certification pursuant to [Section 401 of the Clean Water Act] or permit application pursuant to [Section 402 of the Clean Water Act].”

EPA’s regulations implementing Sections 401 and 304(h) of the CWA provide in 40 C.F.R. § 122.44, that each NPDES permit “shall” include requirements to monitor compliance with effluent limitations “[a]ccording to *test procedures approved under Part 136* for the analyses of pollutants having approved methods under that part, and according to a test procedure specified in the permit for pollutants with no approved methods.” *Id.* at § 122.44(i)(1)(iv) (emphasis added). 40 CFR § 122.44(i)(1)(iv) further requires that to assure compliance with effluent limitations, the permit must include requirements to monitor “[a]ccording to sufficiently sensitive test procedures (i.e., methods) *approved under 40 CFR part 136* for the analysis of pollutants or pollutant parameters” (emphasis added). Significantly, 40 CFR § 136.1(a) requires that Part 136 approved methods, “be used to perform the measurements indicated whenever the waste constituent specified is required to be measured for: (3) *Certifications issued by States pursuant to section 401 of the Clean Water Act (CWA), as amended*” (emphasis added).

Thus, the State Certification must be in accordance with the CWA and EPA’s implementing regulations for an NPDES permit issued by EPA, which require that compliance with applicable effluent limits be determined by Part 136 approved methods. In this case, it is undisputed that Method 1668C is not a Part 136 approved EPA method, and is therefore, not appropriate for NPDES compliance determinations and certifications. Instead, EPA Method 608 is the only approved Part 136 method for PCBs, and it is the required method for compliance monitoring purposes. 40 CFR § 136.3, Table I.C.

For these reasons, NMED's requirement to use Method 1668C for compliance determinations in Condition No. 2 is beyond NMED's State Certification authority and must be withdrawn.

C. Method 1668C is Not Appropriate for Determining Compliance for PCB Effluent Discharges.

Even if a non-Part 136 approved method could be used for compliance determinations, Method 1668C is not an appropriate method for evaluating PCB compliance monitoring from regulated outfalls. The method is unreliable and does not appropriately account for background contamination.

In 2018, the Washington Supreme Court upheld Washington Department of Ecology's position that Method 608, not Method 1668C, is the appropriate test method for NPDES permit compliance monitoring. *Puget Soundkeeper Alliance v. Department of Ecology*, 191 Wash.2d 631, 424 P.3d 1173 (2018). In this case, the Court stated:

As Ecology points out, Method 1668C is unreliable because that test does not allow Ecology to determine whether any of the PCBs detected come from the discharger, the test container itself, or the ambient air. This means that the test would detect the presence of PCBs but would not identify the source. Any polluter subject to an enforcement action stemming from Ecology's use of such method of detection would predictably be able to challenge the validity the agency's actions because of the inability to identify the source of the pollution. Method 608, in contrast, can accurately identify the source.

Ecology's decision to use Method 608 in this context is not only reasonable but perhaps the most sensible and viable decision.

Id. at 642-43.

There is substantial support for the conclusion that Method 1668C is unreliable, as found by the Court in *Puget Soundkeeper Alliance*. Since 2010, EPA has considered amending Part 136 to add Method 1668C as an approved method for PCB monitoring, and has twice deferred

action, first in 2012 and most recently in 2017. 77 Fed. Reg. 29758, 29763 (May 18, 2012), and 82 Fed. Reg. 40836, 40876 (Aug. 28, 2017). As explained below, studies by federal agencies and private laboratories determined that Method 1668C does not consistently produce accurate data or obtain consistent results for variety of reasons.

In 2010, EPA proposed adding Method 1668 as an approved method under 40 CFR Part 136. 75 Fed. Reg. 58024 (Sept. 23, 2010). In response to this proposed rule, EPA received a significant number of comments opposing inclusion of Method 1668 in Part 136. The opposition to approval of Method 1668C was appropriately summarized in comments submitted by Utility Water Act Group (“UWAG”), as follows: “There are already three interlaboratory studies of Method 1668, one by EPA, one by EPRI, and one by the General Electric Company. Taken together these studies show that Method 1668C should not be approved without further study.”

The UWAG comments described in detail the numerous problems demonstrated by each interlaboratory study, including:

- The Method 1668C MDL/MLs do not adequately account for lab-to-lab and temporal variation over time in background contamination.
- The Method 1668C MDL and ML values cannot be achieved with an acceptable level of interlaboratory precision for many PCB congeners and groups.
- Results from the three laboratories were different by 2-10 times. The variability may have been due to QA/QC criteria exceedances, method deviations, and the lack of specificity in the method and could also reflect variability inherent in the method.
- The method, though “performance-based,” does not contain clear performance criteria.
- In EPA’s study, only six laboratories of 11 submitted usable data for wastewater.
- In determining MDLs and MLs, EPA ignored one of the most critical issues: intermittent or systematic background contamination. EPA summarized congener detection rates and concentration statistics (mean, median, and maximum) in the blanks associated with usable study data but did little more.

UWAG referred EPA to the detailed comments contained in the tables and attachments in the Environmental Standards report, *Environmental Standards, Review and Evaluation of EPA Method 1668* (December 21, 2010), and concluded that Method 1668 is highly variable and affected by background contamination in the laboratory and the world at large. *Comments of the Utility Water Act Group (UWAG) on EPA's Proposed Changes to Analysis and Sampling Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, Docket ID No. EPA-HQ-OW-2010-0192, 75 Fed. Reg. 58024 (Sept. 23, 2010).

<https://beta.regulations.gov/comment/EPA-HQ-OW-2010-0192-0176>

As a result of these adverse comments and significant concerns, in 2012, EPA decided to defer action on Method 1668C and to further evaluate the method. 77 Fed Reg. 29763 (May 18, 2012). EPA noted that “commenters raised questions about possible adverse effects of this new method on compliance monitoring as well as concerns about data reporting and costs.” *Id.* EPA explained that it “is still evaluating the large number of public comments and intends to make a determination on the approval of the method at a later date.” *Id.*

In 2015, EPA again proposed an update to Part 136 approved methods, 80 Fed. Reg. 8956 (Feb. 19, 2015), and again in 2017 deferred action on adding Method 1668 as a Part 136 approved method. 82 Fed. Reg. 40876. To date, EPA has not made a determination on whether to approve Method 1668 as a Part 136 method.

NMED in its Certification refers to EPA’s May 2012 action to defer adoption of Method 1668, quoting that EPA’s decision to defer “. . . does not negate the merits of this method for the determination of PCB congeners in regulatory programs or for other purposes when analyses are performed by an experienced laboratory.” 77 Fed. Reg. 29763. EPA’s general statement about

Method 1668 – in a rule where EPA did not approve it as a Part 136 method – does not provide support for ignoring EPA’s rulemaking process for adding a test method to Part 136. Such an interpretation is contrary to the CWA and regulations for test methods used for State certification and compliance monitoring purposes under Part 136. It is important to note again that EPA has not approved Method 1668C due to the numerous problems described above. Until a more accurate, consistent method is developed and approved by EPA, there is no basis for requiring its use in NPDES Permits for compliance monitoring. Method 608 continues to be the only testing method for PCBs approved by EPA, while EPA continues to study the reliability of Method 1668 for NPDES purposes.

For the reasons stated above, “Method 1668C is unreliable” and not appropriate for determining compliance with PCB effluent limitations. Method 608 is the only EPA Part 136 approved method for PCBs, passing the requisite criteria for reliability and consistency to be approved.

D. WQCC Regulations Do Not Require the Use of Method 1668C.

Contrary to NMED’s assertion at page 5 of the State Certification, New Mexico law does not require that “monitoring and reporting of PCBs be performed in accordance with” Method 1668C – which NMED seeks to impose through a condition on EPA’s issuance of an NPDES permit. NMED’s Certification erroneously cites to 20.6.4.14.A(3) NMAC as support for requiring Method 1668C “as a State-approved method.” On the contrary, the regulation simply provides that “[s]ampling and analytical techniques *shall conform with* methods described in the following references unless otherwise specified by the commission pursuant to a petition to amend these standards.” 20.6.4.14.A NMAC (emphasis added). This provision falls far short of *requiring* a specific test method; particularly one that is contrary

to the requirements of federal law. Rather, this provision only requires that *sampling and analytical techniques* must conform to one of a number of published manuals, methods and guidance documents. In fact, Method 608 satisfies 20.6.4.14.A NMAC; it is included in the first reference in ““*Guidelines Establishing Test Procedures For The Analysis Of Pollutants Under The Clean Water Act,*’ 40 CFR Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5.”

20.6.4.14.A(1) NMAC. NMED mistakenly relies on 20.6.4.14.A(3) NMAC to support requiring Method 1668C as the test method for PCBs in an NPDES permit. Subsection A(3) includes “methods for chemical analysis of water and waste, and other methods published by the EPA office of research and development or office of water” as one of the many methods referenced that sampling and analysis techniques are required to conform with for a variety of water sampling purposes. Unlike Subsection A(1), the Subsection A(3) methods – though published by EPA – are not methods **approved** by EPA as a Part 136 method required for inclusion in an NPDES permit or state certification condition.

In addition, NMED’s reference to a State numeric water quality criterion for PCBs at 20.6.4.900 NMAC (Certification, at 5) cannot buttress its proposed requirement to use Method 1668C, since NMED’s Certification attempts to impose a different *test method* and corresponding minimum quantification level - not a different *water quality criterion* or *standard* in LANL’s NPDES permit.

Further, nothing in the WQCC’s regulations authorizes NMED to choose a test method that is contrary to federal requirements. As discussed above, NMED’s proposed test method for PCBs is not one of the test methods approved by EPA pursuant to Part 136 and therefore, its use in this context is contrary to federal requirements.

Lastly, NMED’s assertion that Method 1668C is the “only known and least restrictive and readily available laboratory wastewater sampling method that can reasonably assure that the proposed discharges do not exceed the water quality limits (WQS) of 20.6.4.900(J)(1.)” is inaccurate and not supported by federal or state law. As previously discussed, Method 1668C has not been approved by EPA, is not reliable and is not appropriate or reasonable for compliance monitoring purposes. Moreover, the WQCC regulations address this situation. 20.6.4.12.E NMAC, concerning compliance with water quality standards, provides that “The commission may establish a numeric water quality criterion at a concentration that is below the minimum quantification level. In such cases, the water quality standard is enforceable at the minimum quantification level.”⁵

Condition No. 2 of the State Certification is therefore invalid because it fails to identify any applicable State law requirement pursuant to which Method 1668C is required.

Respectfully submitted,

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⁵ The WQCC regulations, 20.6.4.7.M(4) NMAC, define “Minimum quantification level” as “the minimum quantification level for a constituent determined by official published documents of the United States environmental protection agency.”

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CERTIFICATE OF SERVICE

I hereby certify that on February 3, 2021, a true and correct copy of the foregoing *Triad National Security LLC and the United States Department of Energy Supplement to Petition for Review* was served via electronic mail to the following:

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AFFIDAVIT OF JENNIFER K. GRIFFIN

- I. I, Jennifer K Griffin, am an employee of Triad National Security, LLC (Triad) at Los Alamos National Laboratory (LANL or Laboratory). I am currently employed as the National Pollutant Discharge Elimination System (NPDES) Program Lead for the Environmental Protection and Compliance Division's Compliance Programs (EPC-CP) Group at LANL. I have served in this capacity since April 2019. Before taking this position, I was the NPDES Permit Engineer (May 2018 to April 2019) responsible for preparing the 2019 NPDES Permit Re-Application submitted to the U.S. Environmental Protection (EPA) Agency on March 26, 2019. I have a Bachelor of Science (BS) degree in Chemical Engineering and have worked as a project based subcontractor to LANL since 1997 as an employee of Navarro Research and Engineering (2011-2018), URS-WSMS (2008 – 2011), Shaw Environmental (2002-2008), and IT Corporation (1997 – 2002), respectively. My experience includes 1) regulatory compliance oversight, permitting, monitoring, and closure under various federal and state requirements; 2) engineering design/construction of water treatment facilities; 3) quality assurance/control; 4) nuclear facility operations and readiness; 5) pollution prevention; 6) hazardous and radioactive waste management; and 7) environmental remediation/restoration. It also includes 9 years of experience with the Laboratory's NPDES Permit Program dating back to 2011 when (as a subcontractor) I served as the NPDES Permit Engineer for the 2012 NPDES Permit Re-Application.
- II. As the NPDES Program Lead, I am responsible for implementing and overseeing the NPDES Self-Monitoring Program at LANL to ensure compliance with NPDES Permit No. NM0028355. This includes but is not limited to implementation of the NPDES permit; oversight of outfall monitoring activities; oversight, quality control, and submittal of monthly, quarterly, yearly, and term Discharge Monitoring Reports (DMRs); technical and regulatory compliance support to the outfall operators; permit maintenance, and input on the development and implementation of corrective actions for outfall issues and/or effluent exceedances. I routinely, 1) communicate/interact with laboratory organizations, customers, stakeholders, and regulatory agencies; 2) participate in internal and stakeholder meetings, stakeholder and permit negotiations, assessments, and inspections conducted by the U.S. Department of Energy (DOE), EPA, and the New Mexico Environment Department (NMED); 3) participate in the rule making processes of the New Mexico Water Quality Control Commission (NMWQCC); and 4) support EPC-CP's mission to ensure that the NPDES Self-Monitoring Program is protective of human health and the environment.
- III. I am very familiar with all eleven (11) outfalls currently permitted under NPDES Permit No. NM0028355. My expertise is based on my current position as the NPDES Program Lead and my previous position as the NPDES Permit Engineer responsible for the preparation and submittal of the 2019 NPDES Permit Re-Application and the 2012 NPDES Permit Re-Application.
- IV. The purpose of this affidavit is to evaluate the potential of Per-and Polyfluoroalkyl Substances (PFAS) in the effluents discharged from the eleven (11) outfalls described in the 2019 NPDES Permit Re-Application and subsequent supplemental information packages submitted to the EPA between March 2019 and November 2020. This evaluation was performed to address the applicability of Condition 1 of the State Certification (State of New Mexico Comments and Conditions on the Proposed NPDES Permit Los Alamos National Laboratory Industrial Waste NM0028355, November 30, 2020). Condition 1 of the State Certification requires that samples from Outfalls 001, 13S, 03A027,

3A022, 05A055, and 051 be analyzed for 18 PFAS using EPA Method 537.1 such that the results can be evaluated against the EPA drinking water health advisory screening level of 0.070 ug/L for two PFAS chemicals (Perfluorooctanesulfonic acid [PFOS] and Perfluorooctanoic acid [PFOA]).

V. The following discussion provides a description of each outfall and summarize the potential for PFAS to be present in the effluent based upon my operational knowledge of each outfall and/or analytical data (if available) from operational samples collected in 2020 from the outfall sources.

A. **Outfall 001 [Power Plant Outfall]:** This outfall continuously discharges an average volume of 197,942 gallons per day (GPD) of effluent that is comprised of the following four (4) sources:

1. Power Plant Once Through Cooling Water – This source is comprised of potable water circulated through pump and fan bearings; routed to the cooling tower basin for passive cooling; overflowed to Manhole A; mixed with a de-chlorination chemical (bisulfite); and discharged to Outfall 001. This source is unlikely to include PFAS detected at concentrations that exceed the screening level of 0.070 ug/L. This conclusion is based on its composition described above. There is currently no operational analytical data for PFAS from this source.
2. Sanitary Wastewater System (SWWS) Facility Effluent – This source is comprised of industrial and sanitary wastewater treated using mechanical (e.g., screening), chemical (e.g., pH, chlorination), and biological processes to remove solids and disinfect. The effluent may discharge to the TA-3 Reuse Tank, Outfall 001, or Outfall 13S (see Section V.B) based upon demand, volume, operational priorities, and equipment availability. Treated effluent may include residual components from the original wastewater, treatment chemicals (i.e., polymers, soda ash, sodium chloride, sulfur dioxide, and sodium bisulfate), and amendments used to maintain the biomass (i.e., glycerin). All industrial wastewater discharged to the SWWS for treatment must comply with the facility's Waste Acceptance Criteria and must have a completed and approved Waste Stream Profile (WSP) Form. This source may include PFAS detected at concentrations that exceed the screening level of 0.070 ug/L. This conclusion is based on 1) the composition described above; 2) analytical data from operational samples collected at SWWS that indicate detections of PFOS, PFOA, or PFHxS above the Laboratory Method Detection Limits (MDLs) (<0.00075 ug/L).
3. Sanitary Effluent Reclamation Facility (SERF) Effluent - This source is comprised of SWWS effluent treated at the SERF using mechanical (e.g., reverse osmosis [RO]) and chemical (precipitation, pH adjustment) processes. These processes remove naturally occurring silica and other dissolved solids prior to discharge to the Strategic Computing Center (SCC) Cooling Towers for use as makeup water or Outfall 001 based upon demand, volume, operational priorities, and equipment availability. Treated effluent may contain residual components of the original wastewater and treatment chemicals (i.e., ferric chloride, magnesium chloride, sodium hypochlorite, hydrochloric acid, sodium hydroxide, sodium bisulfate, and polymers). All wastewater discharged to the RLWTF for treatment must comply with the facility's Waste Acceptance Criteria and must have a completed and approved Waste Stream Profile (WSP) Form. This source is unlikely in include PFAS at concentrations that exceed the screening level of 0.070 ug/L. This conclusion is based on 1) the composition described above; 2) the use of

RO at the SERF, which is known to remove PFAS from wastewater; and 3) analytical data from operational samples collected at the SCC Cooling Towers that indicate no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L).

4. SCC Cooling Tower Blowdown - This source is comprised of potable water and/or treated sanitary effluent from SERF circulated through the cooling system; treated with chemicals (i.e., biocide, corrosion inhibitors, de-chlorination) to maintain pH, ensure efficiency and dechlorinate; and discharged to the TA-3 Reuse Tank, Outfall 001, or Outfall 03A027 (see Section V.C). The effluent may contain trace amounts of bromo-chloro-5, 5-dimethyl hydantoin, sodium bisulfite, and HACH Chlorine and pH monitoring chemicals used to maintain the cooling tower chemistry and blowdown frequency. This source is unlikely to include PFAS at concentrations that exceed the screening level of 0.070 ug/L. This conclusion is based on 1) the composition described above; and 2) analytical data from operational samples collected at the SCC Cooling Towers that indicate no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L).

The composition of the total combined effluent discharged to Outfall 001 varies daily based upon the demand of recycled makeup water from the SERF. **The combined effluent discharged to the outfall may include PFAS detected at concentrations that exceed the screening level of 0.070 ug/L.** This conclusion is based on 1) the composition described above; and 2) analytical data from operational samples (at SWWS) that indicate detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (<0.00075 ug/L).

- B. **Outfall 13S [SWWS Effluent Outfall]:** This outfall may intermittently discharge an average volume of 228,808 GPD of effluent from the SWWS Facility. The outfall is permitted under the NPDES permit but has never discharged through the outfall into Canada del Buey. This is because treated effluent is routed to the TA-3 Reuse Tank and either 1) treated at SERF for reuse as makeup water at the SCC Cooling Towers; or 2) discharged to Outfall 001 based upon demand, volume, operational priorities, and equipment availability. The effluent is comprised of industrial and sanitary wastewater treated using mechanical (e.g., screening), chemical (e.g., pH, chlorination), and biological processes to remove solids and disinfect. Treated effluent may include residual components from the original wastewater, treatment chemicals (i.e., polymers, soda ash, sodium chloride, sulfur dioxide, and sodium bisulfate), and amendments used to maintain the biomass (i.e., glycerin). All industrial wastewater discharged to the SWWS for treatment must comply with the facility's WAC and must have a completed and approved WSP Form. **The effluent discharged to the outfall may include PFAS detected at concentrations that exceed the screening level of 0.070 ug/L.** This conclusion is based on 1) the composition described above; 2) analytical data from operational samples collected at SWWS that indicate detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (<0.00075 ug/L).
- C. **Outfall 03A027 [SCC Outfall]:** This outfall intermittently discharges an average volume of 74,436 GPD of blowdown from the TA-3-2327 SCC Cooling Towers. The outfall is permitted under the NPDES Permit but rarely discharges through the outfall into Sandia Canyon. This is because the blowdown is routed directly to the TA-3 Reuse Tank and either treated at SERF for reuse in the SCC Cooling Towers, or discharge to Outfall 001 based upon demand, volume, operational priorities, and equipment availability. The SCC blowdown is comprised of potable water and/or treated sanitary effluent from SERF circulated through the cooling system; treated with chemicals

(i.e., biocide, corrosion inhibitors, de-chlorination) to maintain pH, ensure efficiency and dechlorinate; and discharged to the TA-3 Reuse Tank or Outfall 001. The effluent may contain trace amounts of bromo-chloro-5, 5-dimethyl hydantoin, sodium bisulfite, and HACH Chlorine and pH monitoring chemicals used to maintain the cooling tower chemistry and blowdown frequency. **It is unlikely that SCC Cooling Tower blowdown discharged to the outfall will include PFAS at concentrations that exceed the screening level of 0.070 ug/L.** This conclusion is based on 1) the composition described above; and 2) analytical data from operational samples collected at the SCC Cooling Towers that indicate no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L).

- D. **Outfall 04A022/03A022 [SIGMA Outfall]:** This outfall intermittently discharges an average volume of 1,020 GPD of cooling water from the TA-3-66 Cooling System. The cooling water consists of potable water and corrosion inhibitors (Formula 2011, 314-T) that are circulated through the cooling system and discharged over Vita-D Chlor tablets at the outfall. ***It is unlikely that the cooling water discharged to this outfall will include PFAS at concentrations that exceed the screening limit of 0.070 ug/L.*** This conclusion is based on 1) the effluent composition described above; 2) analytical data from operational samples collected from the cooling system that indicate de-minimus (<0.005 ug/L) concentrations of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L).
- E. **Outfall 051 [Radioactive Liquid Waste Treatment Facility (RLWTF) Outfall]:** This outfall batch discharges an average volume of 15,936 GPD of treated effluent from the TA-50 RLWTF. The effluent is comprised of wastewater treated by chemical (precipitation, pH adjustment) and mechanical (i.e., filtration, RO) processes to remove radioactive and chemical contaminants (i.e., metals, perchlorate, nitrate) prior to being discharged to a mechanical evaporator, solar evaporator, or Outfall 051 based upon the volume, operational priorities, and availability of equipment. Treated effluent may contain residual components of the original wastewater, treatment chemicals (i.e., ferric chloride, magnesium chloride, sodium hypochlorite, hydrochloric acid, sodium hydroxide, and sodium bisulfate), and polymers. All wastewater treated by the RLWTF must comply with the facility's WAC and must have a completed and approved WSP Form. ***It is unlikely that the effluent discharged to this outfall will include PFAS at concentrations that exceed the screening limit of 0.070 ug/L.*** This conclusion is based on 1) the composition described above; and 2) analytical data from compliance samples collected in accordance with the provisions of the temporary permission of Groundwater Discharge Permit (DP) 1132 that indicate no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L).
- F. **Outfall 05A055 [High Explosives Waste Treatment Facility (HEWTF) Outfall]:** This outfall batch discharges an average volume of 270 GPD from the TA-16-1508 HEWTF. The outfall is permitted under the NPDES Permit but rarely discharges through the outfall into Canyon de Valle. The effluent is comprised of high explosives (HE) contaminated process water and storm water that is treated by mechanical processes (i.e., activated carbon, ion exchange) to remove low concentrations of HE prior to being discharged to a mechanical evaporator or to Outfall 05A055 based upon the influent volume, operational priorities, and the availability of equipment. All wastewater treated by the HEWTF must comply with the facility's WAC and must have a completed and approved WSP Form. ***The effluent discharged to this outfall may include PFAS at concentrations that exceed the screening limit of 0.070 ug/L.*** This conclusion is based on 1) low concentrations of HE in the wastewater treated by the HEWTF; 2) process knowledge that has

identified PFAS as a component associated with HE processing operations (i.e., fire protection systems, HE components); and 3) undetermined capability of the activated carbon and ion exchange processes at the HEWTF to remove PFAS. NOTE: There have not been any operational samples collected for PFAS at the HEWTF.

- G. **Outfall 03A199 [LDCC Outfall]:** This outfall intermittently discharges an average volume of 36,024 GPD of blowdown from the TA-3-1837 Laboratory Data Communications Center (LDCC) cooling towers. The blowdown is comprised of potable water that is circulated through the cooling system and treated with chemicals (i.e., biocide, corrosion inhibitors, de-chlorination) to maintain the pH and efficiency of the cooling towers. It may contain trace amounts of bromo-chloro-5, 5-dimethyl hydantoin, sodium bisulfite, and HACH Chlorine and pH monitoring chemicals used to maintain the cooling tower chemistry and blowdown frequency. ***It is unlikely that the effluent discharged to this outfall will include PFAS at concentrations that exceed the screening limit of 0.070 ug/L.*** This conclusion is based on 1) the effluent composition described above; and 2) analytical data from operational samples that indicate no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L).
- H. **Outfall 03A048 [LANSCE Outfall]:** This outfall intermittently discharges and average volume of 87,606 GPD of blowdown from the TA-53-963/964 and TA-53-978/979 LANSCE Cooling Towers. The blowdown is comprised of potable water that is circulated through the cooling system and treated with chemicals (i.e., biocide, corrosion inhibitors, de-chlorination) to maintain the pH and efficiency of the cooling towers. It may contain trace amounts of bromo-chloro-5, 5-dimethyl hydantoin, sodium bisulfite, and HACH Chlorine and pH monitoring chemicals used to maintain the cooling tower chemistry and blowdown frequency. ***It is unlikely that the effluent discharged to this outfall will include PFAS at concentrations that exceed the screening limit of 0.070 ug/L.*** This conclusion is based on 1) the effluent composition described above; and 2) the effluent's similarity to the composition of blowdown discharged to Outfall 03A199 where operational samples indicated no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L). NOTE: There have not been any operational samples collected for PFAS at the LANSCE Cooling Towers.
- I. **Outfall 03A113 [LEDA Outfall]:** This outfall intermittently discharges an average volume of 1,576 GPD of blowdown from the TA-53-952 LEDA Cooling Towers and 16,736 GPD of storm water. The blowdown is comprised of potable water that is circulated through the cooling system and treated with chemicals (i.e., biocide, corrosion inhibitors, de-chlorination) to maintain the pH and efficiency of the cooling towers. It may contain trace amounts of bromo-chloro-5, 5-dimethyl hydantoin, sodium bisulfite, and HACH Chlorine and pH monitoring chemicals used to maintain the cooling tower chemistry and blowdown frequency. ***It is unlikely that the effluent discharged to this outfall will include PFAS at concentrations that exceed the screening limit of 0.070 ug/L.*** This conclusion is based on 1) the effluent composition described above; and 2) the effluent's similarity to the composition of blowdown discharged to Outfall 03A199 where operational samples indicated no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L). NOTE: There have not been any operational samples collected for PFAS at the LEDA Cooling Towers.
- J. **Outfall 03A160 [National High Magnetic Field Laboratory (NMHFL) Outfall]:** This outfall intermittently discharges an average volume of 2,567 GPD of blowdown from the TA-35-124

NMHFL Cooling Towers. Currently, the outfall is permitted but rarely used so that blowdown has been routed to SWWS to support the recycle of industrial and sanitary treated effluent through SERF based upon demand, volume, operational priorities, and equipment availability. The blowdown is comprised of potable water that is circulated through the cooling system and treated with chemicals (i.e., biocide, corrosion inhibitors, de-chlorination) to maintain the pH and efficiency of the cooling towers. It may contain trace amounts of bromo-chloro-5, 5-dimethyl hydantoin, sodium bisulfite, and HACH Chlorine and pH monitoring chemicals used to maintain the cooling tower chemistry and blowdown frequency. ***It is unlikely that the effluent discharged to this outfall will include PFAS at concentrations that exceed the screening limit of 0.070 ug/L.*** This conclusion is based on 1) the effluent composition described above; and 2) the effluent's similarity to the composition of blowdown discharged to Outfall 03A199 where operational samples indicated no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L). NOTE: There have not been any operational samples collected for PFAS at the NMHFL Cooling Towers.

- K. **Outfall 03A181 [TA55 Outfall]:** This outfall intermittently discharges an average volume of 9,365 GPD of blowdown from the TA-55-006 Cooling Towers. The blowdown is comprised of potable water that is circulated through the cooling system and treated with chemicals (i.e., biocide, corrosion/scale inhibitors, de-chlorination) to maintain the pH and efficiency of the cooling towers. It may contain trace amounts of benzotriazol, sodium bisulfate, dimethyl-dioactyl-ammonium chloride, and glycerol. ***It is unlikely that the effluent discharged to this outfall will include PFAS at concentrations that exceed the screening limit of 0.070 ug/L.*** This conclusion is based on 1) the effluent composition described above; 2) chemical composition of the biocide, corrosion inhibitor, de-chlorination chemical, and HACH monitoring chemicals used to maintain the cooling towers; and 3) analytical data from operational samples that indicate no detections of PFOS, PFOA, or PFHxS above the Laboratory MDLs (i.e., <0.00075 ug/L). NOTE: There have not been any operational samples collected for PFAS at the TA-55 Cooling Towers.

VI. Due to COVID-19 concerns, I am unable to meet a notary in person to have this Affidavit notarized. I hereby certify by my signature that all of the above information is true, accurate, and complete.

FURTHER AFFIANT SAYETH NAUGHT.

Date: **February 2, 2021**

Jennifer K. Griffin
NPDES Program Lead
Triad National Security LLC.
Los Alamos National Laboratory

Supplemental Legal Citations

85 Fed. Reg. 42210, 42253-54 (July 13, 2020)

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 121

[EPA-HQ-OW-2019-0405; FRL-10009-80-OW]

RIN 2040-AF86

Clean Water Act Section 401 Certification Rule

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is publishing this final rule to update and clarify the substantive and procedural requirements for water quality certification under Clean Water Act (CWA or the Act) section 401. CWA section 401 is a direct grant of authority to States (and Tribes that have been approved for “treatment as a State” status) to review for compliance with appropriate federal, State, and Tribal water quality requirements any discharge into a water of the United States that may result from a proposed activity that requires a federal license or permit. This final rule is intended to increase the predictability and timeliness of CWA section 401 certification actions by clarifying timeframes for certification, the scope of certification review and conditions, and related certification requirements and procedures.

DATES: This rule is effective on September 11, 2020.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OW-2019-0405, at <https://www.regulations.gov>. All documents in the docket are listed and available at <https://www.regulations.gov>. Although listed in the index, some information is not publicly available, e.g. Confidential Business Information or other information whose disclosure is restricted by statute. Certain other materials, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through <https://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Lauren Kasparek, Oceans, Wetlands, and Communities Division, Office of Water (4504-T), Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: (202) 564-5700; email address: cwa401@epa.gov.

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I. General Information

A. How can I get copies of this document and related information?

1. *Docket.* An official public docket for this action has been established under Docket ID No. EPA-HQ-OW-2019-0405. The official public docket consists of the documents specifically referenced in this action, and other information related to this action. The official public docket is the collection of materials that is available for public viewing at the OW Docket, EPA West, Room 3334, 1301 Constitution Ave. NW, Washington, DC 20004. This Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The OW Docket telephone number is 202-566-2426. A reasonable fee will be charged for copies.

2. *Electronic Access.* You may access this **Federal Register** document electronically under the “**Federal Register**” listings at <https://www.regulations.gov>. An electronic version of the public docket is available through the EPA’s electronic public docket and comment system, the EPA Dockets. You may access the EPA Dockets at <https://www.regulations.gov> to view submitted public comments, access the index listing of the contents of the official public docket, and access those documents in the public docket that are available electronically. For additional information about the EPA’s public docket, visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the Docket Facility.

B. What action is the Agency taking?

In this notice, the Agency is publishing a final rule updating the water quality certification regulations in 40 CFR 121.

C. Under what legal authority is this final rule issued?

The authority for this action is the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.*, including sections 304(h), 401, and 501(a).

II. Background

A. Executive Summary

Congress enacted section 401 of the CWA to provide States and authorized Tribes with an important tool to help

National Environmental Policy Act, the Endangered Species Act, and the National Historic Preservation Act, all of which are intended to provide a comprehensive environmental evaluation of potential impacts from a proposed project. In addition, where applicable, the CWA's longstanding regulatory permitting programs, like those under sections 402 and 404, will continue to address water quality issues related to the discharge of pollutants into waters of the United States, and the CWA's non-regulatory measures, like protection of water quality from nonpoint sources of pollution under section 319, will continue to address pollution of water generally to achieve the objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. Section 401, on the other hand, provides specific and defined authority for States and Tribes to protect their water quality in the context of a federal licensing and permitting process, including those processes in which State or Tribal authority may otherwise be entirely preempted by federal law. The language of section 401 makes it clear that this authority is limited and does not broadly encompass all potential environmental impacts from a project.

Some commenters requested examples of what considerations would be outside the scope of certification, based on the Agency's limiting the scope of certification to discharges, rather than to the entire activity or project. Commenters mentioned specific considerations that they believed should be excluded from the scope of certification in the regulatory text, such as effects caused by the presence of pollutants in a discharge that are not attributable to the discharge from a federally licensed activity, effects attributable to features of the permitted activity besides the discharge, and effects caused by the absence or reduction of discharge. The Agency generally agrees that such considerations would be beyond the scope of certification as articulated in this final rule; however, the Agency is not modifying the regulatory text to reflect these specific considerations, as there may be unique project-specific facts or circumstances that must inform whether a particular impact is caused by the discharge, as defined in this final rule.

b. Water Quality Requirements

Under the final rule, the term "water quality requirements" means applicable effluent limitations for new and existing sources (CWA sections 301, 302, and

306), water quality standards (section 303), toxic pretreatment effluent standards (section 307), and State or Tribal regulatory requirements for point source discharges into waters of the United States, including those more stringent than federal standards. The definition in the final rule has been modified from the proposal to provide additional clarity.

The term "water quality requirements" is used throughout section 401, and the term "other appropriate requirements of State law" is used in section 401(d), but neither of these terms is defined in the CWA.⁵⁶ Because the EPA interprets "other appropriate requirements of state law" to be a subset of "water quality requirements," the final rule uses the term "water quality requirements" to define the universe of provisions that certifying authorities may consider when evaluating a certification request pursuant to CWA sections 401(a) and 401(d). The EPA's interpretation of these terms and the final definition are intended to closely align the scope and application of section 401 regulations with the text of the statute.

An interpretation of section 401 that most closely aligns with the text of the statute would limit "water quality requirements" to sections 301, 302, 303, 306 and 307 of the CWA and State and Tribal laws and regulations that are either counterparts to or that implement these enumerated sections of the Act. The EPA considered adopting this interpretation in the final rule, but recognizes that, in some cases, it may be difficult to determine whether a State or Tribal statute or regulation was adopted "to implement" sections 301, 302, 303, 306 and 307 of the CWA. In many cases, State or Tribal statutes may have been enacted prior to the 1972 CWA amendments, but updated or modified over the decades to implement or

⁵⁶ In 1971, EPA Administrator Ruckelshaus provided a written statement to the Chairman of the House Committee on Public Works concerning H.R. 11896. H.R. Rep. No. 92-911, at 147-171 (1972). The Administrator described 401(d) as it was drafted at the time as requiring certifications to "assure compliance with Sections 301 and 302 and 'any other applicable water quality requirement in such State.'" *Id.* at 166. The Administrator noted that "[t]he scope of the catchall phrase is not defined in Section 401, and the question arises as to whether certification by the State is to include certification with respect to discharges from point sources to meet the provisions of Sections 306 or 307." *Id.* The Administrator stated that 401(d) could be "more clearly expressed if the term 'applicable water quality requirement' was defined. . . ." and then offered an interpretation and a definition of the term. *Id.* The Administrator's recommendation was not adopted in the enacted bill, and this rulemaking is the first formal step the EPA has taken to clarify the meaning of the terms in section 401(d).

incorporate portions of the enumerated CWA provisions.

To avoid placing a potentially burdensome factual inquiry on States and Tribes, the final rule definition of "water quality requirements" is drafted more broadly to include those enumerated provisions of the CWA and State and Tribal regulatory requirements that pertain specifically to point source discharges into waters of the United States. This is consistent with the plain language of the statute because, with one exception, each of the enumerated CWA provisions in section 401 describes discharge-related limitations. The only exception is section 303, which addresses water quality standards, but these are primarily used to establish numeric limits in point source discharge permits. Further, and as described in section III.A of this notice, section 401 applies only to actual or potential discharges into waters of the United States. The final definition of "water quality requirements" therefore closely aligns with the text of the statute, while providing an objective test for whether a particular provision is within the scope of section 401. The Agency anticipates that this approach will increase clarity and efficiency in the certification process. Under this final rule, a State or Tribal regulatory requirement that applies to point source discharges into waters of the United States is a "water quality requirement" and is therefore within the scope of certification.

The phrase "state or tribal regulatory requirements for point source discharges into waters of the United States" in the final rule's definition includes those provisions of State or Tribal law that are more stringent than federal law, as authorized in CWA section 510. 33 U.S.C. 1370. The legislative history supports the EPA's interpretation in this final rule. *See S. Rep. No. 92-414*, at 69 (1971) ("In addition, the provision makes clear that any water quality requirements established under State law, more stringent than those requirements established under this Act, also shall through certification become conditions on any Federal license or permit."). It is important to note, however, that these more stringent provisions may not alter the scope of certification as provided in this final rule. For example, nonpoint source discharges and discharges to other non-federal waters are not within the scope of certification and are not included in the definition of "water quality requirements." Accordingly, they are not factors to be considered

when making decisions on certification requests.

Some commenters agreed that the proposed definition limiting “any other appropriate requirement of state law” to “EPA-approved state or tribal Clean Water Act regulatory program provisions” is the correct interpretation of the Act because section 401 cannot apply beyond the authority of the CWA. These commenters agreed that the principle *ejusdem generis* and the logic of Justice Thomas’s dissent in *PUD No. 1* show that the appropriate interpretation of “any other appropriate requirement of state law” extends “only to provisions that, like other provisions in the statutory list, impose discharge-related restrictions,” which are the “regulatory provisions of the CWA.” Other commenters expressed confusion regarding the meaning and scope of the phrase “EPA-approved state or tribal Clean Water Act regulatory program provisions” in the proposed rule and asked for clarification on which regulatory programs would be included in that term. Some commenters stated that this lack of clarity made the scope of the proposed rule ambiguous such that States and Tribes would not be able to implement the regulations.

The EPA has made some enhancements to the final rule definition of “water quality requirements” to provide better clarity and regulatory certainty. The final rule does not require these State and Tribal provisions to be EPA-approved. In making this change, the Agency considered that there may be State or Tribal regulatory provisions that address point source discharges into waters of the United States that only partially implement certain CWA programs or that were not submitted to the EPA for approval. The EPA also considered, as noted by some commenters, that States and Tribes may submit to the EPA CWA regulatory program provisions, including water quality standards and applications for “treatment as States” (TAS), and wait months or sometimes years for the EPA to act on those submittals. The final rule language addresses this concern by broadening the universe of State and Tribal laws that may be considered “water quality requirements” compared to the proposal.

A few commenters expressed concern that the proposed rule failed to recognize that most Tribes do not have EPA-approved water quality regulations. These commenters asserted that in areas where the EPA is the certifying authority, the Administrator would not be able to consider water quality protective ordinances or water quality

standards adopted by Tribes, leaving no protection for most Tribal waters. The EPA appreciates these comments, and under the final rule, State and Tribal regulatory provisions for point source discharges into waters of the United States are “water quality requirements” regardless of whether they have been approved by the EPA. Therefore, if a Tribe has adopted water quality standards under Tribal law that serve as a basis for effluent limitations or other requirements for point source discharges into waters of the United States, the certifying authority must consider those provisions when evaluating a certification request.

Some commenters asserted that the proposed rule would limit the ability of a Tribe to adopt water quality regulations or to obtain TAS for section 401 certifications. Neither the proposal nor the final rule affect in any way the ability of a Tribe to adopt CWA water quality standards or obtain TAS. The EPA understands there may be unique challenges with Tribal implementation of CWA statutory authorities, but reiterates that pursuant to section 401(b), the EPA is available and obligated to provide technical expertise on any matter related to section 401. In addition, the EPA actively and routinely provides financial and technical assistance to Tribes for the development of aquatic resource protection programs. Such assistance includes Tribal capacity building for new or enhanced regulatory programs, as well as development of laboratory, field, and quantitative methods, tools, and trainings for monitoring and assessing aquatic resources. With this final rule, the Agency is reaffirming its responsibilities under section 401 to serve as a resource and consultant to Tribes requesting technical assistance.

Some commenters, citing the broad interpretation of “any other appropriate requirement of State law” in EPA’s Interim Handbook, stated that the EPA has not provided an adequate explanation or rationale for departing from its prior interpretation of the CWA. The EPA disagrees with the suggestion that it has not provided sufficient or adequate explanation for the interpretation presented in the proposed rule. In any event, the final rule is based in part on the plain language of section 401, which provides that the enumerated sections of the CWA and “any other appropriate requirement of State law” must be considered in a water quality certification. The CWA does not define what is an “appropriate requirement of State law,” and the EPA reasonably interprets this term to refer to a subset of “water quality

requirements,” a term that is also used throughout section 401. The final rule, like the proposal, is informed by the principle *ejusdem generis*. Under this principle, where general words follow an enumeration of two or more things, they apply only to things of the same general kind or class specifically mentioned. See *Wash. State Dept. of Social and Health Services v. Keffeler*, 537 U.S. 371, 383–85 (2003). Given the breadth of potential interpretations of “water quality requirements” and “other appropriate requirement of State law” described throughout this notice, the Agency concludes that the most appropriate interpretation is one that remains loyal to the text of the statute. Accordingly, the final definition of “water quality requirements” includes sections 301, 302, 303, 306, and 307 of the CWA and State or Tribal statutes and regulations governing point source discharges into waters of the United States.

A few commenters stated that the EPA’s reliance on the canon of statutory interpretation *ejusdem generis* is unfounded because, if the context of a statute dictates an alternative interpretation, *ejusdem generis* should not apply, citing *N. & W. Ry. v. Train Dispatchers*, 499 U.S. 117 (1991). The EPA disagrees with these commenters who assert that the context of section 401(d) dictates a different result. The use of the word “appropriate” in section 401(d) indicates that Congress intended to limit the phrase “requirement of state law” in some meaningful manner. It is reasonable to conclude that Congress intended that limitation to be informed by the enumerated provisions of the CWA that appear in section 401, as well as other key statutory touchstones like the terms “discharge” and “navigable waters,” *i.e.*, “waters of the United States.” See *Harrison v. PPG Industries, Inc.*, 446 U.S. 578, 578–79 (1980) (rejecting application of *ejusdem generis* where—unlike the word “appropriate” in section 401(d)—the relevant statutory phrase “any other final action” did not contain limiting language that rendered its meaning uncertain and in need of further interpretation). The phrase “any other appropriate requirement of State law” in section 401(d) is not unlimited or expansive, but rather it contains limiting language (“appropriate”) that must not be read out of the statute. In short, the canon of statutory interpretation of *ejusdem generis* is a tool that the EPA reasonably and properly used to inform the interpretation of the ambiguous statutory text in section 401.

Many commenters agreed with the analysis in the proposed rule preamble

Puget Soundkeeper Alliance v. Department of Ecology,
191 Wash.2d 631, 424 P.3d 1173 (2018)

191 Wash.2d 631
Supreme Court of Washington.

PUGET SOUNDKEEPER ALLIANCE, Petitioner,
v.
STATE of Washington, DEPARTMENT OF
ECOLOGY; and State of Washington Pollution
Control Hearings Board, Respondents.

No. 94293-5

Oral Argument Date: October 19, 2017

Filed AUGUST 30, 2018

Synopsis

Background: Objector sought petitioned for judicial review of Department of Ecology's issuance of waste discharge permit to applicant, and the Court of Appeals, after granting direct review, affirmed, [2017 WL 702504](#). Objector petitioned for review.

[Holding:] After grant of review, the Supreme Court, en banc, Johnson, J., held that newly-developed testing method for wastewater toxicants was not a “superseding method” and thus did not void previously-adopted, less sensitive testing method as permissible means of monitoring compliance with waste discharge permit conditions.

Affirmed.

González, J., filed dissenting opinion in which Yu, J., joined.

Procedural Posture(s): Petition for Discretionary Review; Review of Administrative Decision.

West Headnotes (10)

[1] Administrative Law and Procedure 🔑 Conclusions of law in general

Supreme Court reviews an agency's legal determinations under the “error of law” standard and may substitute Court's interpretation of the law for that of the agency's.

[2] Administrative Law and Procedure 🔑 Construction, interpretation, or application of law in general

Under the “error of law” standard applicable to review of an agency's legal determinations, Supreme Court reviews questions of law, including statutory construction, and an agency's application of the law de novo.

1 Cases that cite this headnote

[3] Administrative Law and Procedure 🔑 Plain, literal, or clear meaning; ambiguity or silence

Supreme Court accords an agency's interpretation of the law great weight where the statute is ambiguous and is within the agency's special expertise.

[4] Environmental Law 🔑 Discharge of pollutants

Blanket prohibition of state law regarding waste discharge permitting process on “the discharge of toxicants...that would violate any water quality standard” does not mean that court, and not the agency charged with enforcement and employing its expertise, will command a specific way of ensuring compliance by a permittee. [Wash. Rev. Code Ann. § 90.48.520](#).

[5] Environmental Law 🔑 Discharge of pollutants

Waste discharge permitting statute, requiring that permit conditions require “all known, available, and reasonable methods to control toxicants,” does not require a perfectly sensitive test for toxicants but rather requires that the test, in addition to being known and available, also be reasonable. [Wash. Rev. Code Ann. § 90.48.520](#).

[6] Environmental Law 🔑 Discharge of pollutants

New testing method for wastewater toxicants was not a “superseding method” and thus did not void previously-adopted, less sensitive testing method as permissible means of monitoring compliance with waste discharge permit conditions, under statutory monitoring scheme and water quality standard regulation requiring use of reasonable testing methods, where Environmental Protection Agency (EPA) developed and published new method for use in addition to other tests, and EPA had not recognized new method as reliable for permit compliance purposes. [Wash. Rev. Code Ann. § 90.48.520](#); Wash. Admin. Code 173.201(3)(h).

[7] **Administrative Law and Procedure** 🔑 Construction

When interpreting agency regulations, court applies the same principles used to construe statutes.

[8] **Statutes** 🔑 Plain Language; Plain, Ordinary, or Common Meaning

When court interprets a statute, it looks first to the plain language.

[9] **Statutes** 🔑 Statute as a Whole; Relation of Parts to Whole and to One Another
Statutes 🔑 Similar or Related Statutes

Court derives the plain meaning of a statute from all that the legislature has said in the statute and related statutes which disclose legislative intent about the provision in question.

[10] **Statutes** 🔑 What constitutes ambiguity; how determined

Statutory language is unambiguous if it has only one reasonable interpretation.

1 Cases that cite this headnote

****1174** Appeal from Superior Court, Hon. [Gary R. Tabor](#), Judge, Thurston County Superior Court (No. 15-2-01575-1 [No. 15-2-01575-1](#))

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Opinion

JOHNSON, J.

*634 ¶ 1 In this case, we are asked to decide whether Department of Ecology's current waste discharge permitting process complies with RCW 90.48.520's requirement for "permit conditions [to] require *all known, available, and reasonable* methods to control toxicants in the applicant's wastewater." (Emphasis added.) No disagreement exists that Ecology uses the most sensitive testing method federally approved to monitor permit compliance. The issue in this case is whether RCW 90.48.520 requires Ecology to use a more sensitive testing method not recognized by Ecology or the United States Environmental Protection Agency (EPA) as reliable for permit compliance purposes. We hold that it does not and affirm the Court of Appeals.¹

Facts and Procedural Background

¶ 2 This case was brought by Puget Soundkeeper Alliance (Soundkeeper), who challenged Ecology's issuance of a discharge permit to Seattle Iron and Metals (SIM). Although *635 Soundkeeper challenged the permit issuance on several theories, the issue before us centers on the testing methodology required as a permit condition to monitor compliance.

¶ 3 Ecology is a state water pollution control agency responsible for administering the National Pollutant Discharge Elimination System (NPDES) permit program in compliance with the Clean Water Act (CWA) (also known as the Federal Water Pollution Control Act), 33 U.S.C. §§ 1251-1388. The permits allow for the discharge of certain pollutants into navigable waters, so long as those discharges are in compliance with the permit **1175 terms and consistent with state and federal law.

¶ 4 The permit in question² was issued in 2013 to SIM, an auto shredding and metal recycling facility, which extracts and sells recoverable metals from auto shredder residue. SIM is located along the Lower Duwamish Waterway (Waterway), the 5.5 mile section of the Duwamish River flowing into Elliott Bay. The EPA has designated the Waterway a cleanup site.

¶ 5 SIM's operations generate wastewater and stormwater, which are prohibited without an NPDES permit. Among other requirements, NPDES permits must impose effluent limitations to ensure against violations of water quality standards. 33 U.S.C. §§ 1311(b)(1)(C), 1342(a)-(b); WAC 173-226-070. Of particular concern is the presence and concentration of polychlorinated biphenyls (PCBs).

¶ 6 Banned since the 1970s, PCBs are manufactured toxic chemicals that persist in the environment and are capable of bioaccumulation and biomagnification: they increase in concentration in individual organisms and with each successive level of the food chain. This means that even though PCBs are no longer manufactured in the United States, they remain present in our air, water, and *636 soil. The SIM permit requires monitoring of discharged treated wastewater and untreated stormwater for PCBs using Method 608 to conduct the monitoring. Soundkeeper sought administrative review of SIM's permit, challenging, among other things, the PCB limits imposed and the use of Method 608 instead of a different, more sensitive test, Method 1668C.

¶ 7 The Pollution Control Hearings Board (Board) conducted an evidentiary hearing and concluded that to protect human health, the PCB limit in the discharged water is 0.00017 µg/L (micrograms per liter). See WAC 173-201A-240(5). The Board also concluded that under existing state and federal regulations, Ecology was required to use Method 608 in NPDES permits and could seek EPA's approval to use Method 1668C, but was not required to do so because Method 608 was the only EPA-approved test available.

¶ 8 Soundkeeper appealed, renewing its objections to the 2013 SIM permit. The Court of Appeals affirmed the Board's determination regarding Ecology's use of Method 608 in the SIM permit and Method 1668C's unavailability.

Analysis

¶ 9 In its argument to us, Soundkeeper essentially contends that compliance with a regulation, WAC 173-201A-260(3)(h),³ conflicts with a statute, RCW 90.48.520. Specifically, it argues that because the testing procedure required under the regulation cannot detect water quality violations that the statute prohibits, the permit conditions violate state law. Soundkeeper contends that Ecology could have selected the

more sensitive Method 1668C because it is a “superseding method” under [WAC 173-201A-260\(3\)\(h\)](#).

***637** A. Standards of Review

¶ 10 This court reviews orders from the Board under the Washington Administrative Procedure Act, chapter 34.05 RCW. [RCW 90.48.230](#); [RCW 34.05.518](#); [Pub. Util. Dist. No. 1 of Pend Oreille County v. Dep’t of Ecology](#), 146 Wash.2d 778, 789-90, 51 P.3d 744 (2002). Judicial review is limited to the record before the board, [RCW 34.05.558](#), and the burden of demonstrating the invalidity of an agency action rests with the party asserting invalidity. [RCW 34.05.570\(1\)\(a\)](#).

¶ 11 Under the Washington Administrative Procedure Act, we may grant relief if we find the order from the Board is unconstitutional, exceeds its statutory authority or jurisdiction, is inconsistent with an agency’s rule, or is arbitrary and capricious, or the agency erroneously interpreted or applied the law. [RCW 34.05.570\(3\)](#).

****1176** [1] [2] [3] ¶ 12 We review an agency’s legal determinations under the “error of law” standard and may substitute our interpretation of the law for that of the agency’s.

[Postema v. Pollution Control Hr’gs Bd.](#), 142 Wash.2d 68, 77, 11 P.3d 726 (2000) (citing [RCW 34.05.570\(3\)\(d\)](#)). Under this standard, we review questions of law, including statutory construction, and an agency’s application of the law de novo. [Snohomish County v. Pollution Control Hr’gs Bd.](#), 187 Wash.2d 346, 357, 386 P.3d 1064 (2016); [Port of Seattle v. Pollution Control Hr’gs Bd.](#), 151 Wash.2d 568, 587, 90 P.3d 659 (2004). “[W]e accord an agency’s interpretation of the law great weight where the statute is ambiguous and is within the agency’s special expertise.” [Snohomish County](#), 187 Wash.2d at 357, 386 P.3d 1064.

B. Statutory and Regulatory Requirements for Water Pollution

¶ 13 State and federal law govern water pollution control. In 1972, Congress enacted the CWA to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” [33 U.S.C. § 1251\(a\)](#). To achieve that ***638** purpose, the CWA prohibits the discharge of pollutants from a point source absent an NPDES permit.

[33 U.S.C. §§ 1251\(a\)](#), [1311\(a\)](#), [1342\(a\)](#). Congress “authorized the [EPA] to delegate the NPDES permitting program to the states. [[33 U.S.C.\] § 1342\(b\)](#).” [Snohomish County](#), 187 Wash.2d at 352, 386 P.3d 1064. The EPA delegated this authority to Ecology in Washington. [RCW 90.48.260\(1\)](#). “The legislature has recognized that Ecology has ‘[c]omplete authority to establish and administer’ the program.” [Snohomish County](#), 187 Wash.2d at 352, 386 P.3d 1064 (alteration in original) (quoting [RCW 90.48.260\(1\)\(a\)](#)).

¶ 14 An entity such as SIM may obtain an NPDES permit that allows some pollutant discharge, [33 U.S.C. §§ 1311\(a\)](#), [1342\(a\)\(1\)](#), and must comply with the applicable state water quality standards, which may be more stringent than required by federal law. [33 U.S.C. § 1370](#); [40 C.F.R. § 122.4\(d\)](#).

¶ 15 Washington’s water quality standards include both narrative and numeric criteria for toxicants. [WAC 173-201A-010\(1\)](#). The administrative code identifies the numeric water quality standards for toxic substances and limits the concentration of PCBs to 0.00017 µg/L. [WAC 173-201A-240\(5\)](#) tbl. 240.

C. Method 608 satisfies state and federal statutory and regulatory requirements as the only known, available, and reasonable method for compliance monitoring

¶ 16 Soundkeeper contends that requiring use of Method 608 to monitor PCB levels in accordance with state regulations violates the state statute because the test cannot ensure a permit holder complies with statutory water quality standards. However, Soundkeeper mistakes monitoring for ensuring compliance.

¶ 17 As mentioned earlier, an NPDES permit specifies water quality criteria and the required methods to apply it. [WAC 173-201A-260\(3\)](#). Method 608 has a practical quantitation limit of 0.5 µg/L, which means that it can reliably ***639** quantify PCB concentrations only at that level. ⁴[WAC 173-201A-240\(5\)](#) tbl. 240; Admin. Record (AR) at 3305. Using Method 608 does not test for effluent concentrations to the 0.00017 µg/L level, nor does it reliably quantify anywhere between that level and the 0.5 µg/L level. Soundkeeper’s position is that this, in turn, violates [RCW 90.48.520](#).

¶ 18 The question here is whether the permitting scheme violates the statutory mandate and the corresponding federal

duty to refrain from issuing discharge permits “[w]hen the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States.” 40 C.F.R. § 122.4(d). Soundkeeper bears the burden of proving an agency action conflicts with state or federal laws.

¶ 19 The Board upheld Ecology's use of Method 608 as the only method currently approved by the EPA for compliance monitoring in NPDES permits and suggested that Ecology may petition the EPA for approval of an alternative test procedure. It rejected Soundkeeper's contention that Ecology's failure ****1177** to seek EPA approval of Method 1668 violated our water pollution control act (WPCA), chapter 90.48 RCW. It noted that “[t]he policy declarations in the WPCA do not ‘control over the more specific statutory provisions adopted to implement those general declarations’ and those declarations ‘have no operative force in and of themselves.’ ” Clerk's Papers (CP) at 48 (quoting *Puget Soundkeeper All. v. State*, 102 Wash.App. 783, 790, 9 P.3d 892 (2000)). The Board concluded that the permit was consistent with the requirement of the state “Surface Water Quality Standards.”

¶ 20 Division Two affirmed the Board's conclusion in an unpublished opinion. It found Soundkeeper's argument to ***640** be inconsistent with federal and state laws regarding testing methods. In reconciling state and federal statutes and regulations, it noted that the EPA has not yet approved Method 1668C, that 40 C.F.R. § 122.44(i)(1)(iv) calls for monitoring to be done using only “sufficiently sensitive”⁵ test methods, and that Ecology's interpretation of WAC 173-201A-260(3)(h) correctly determined Method 1668C not to be available, necessarily making Method 608 sufficiently sensitive. We agree.

¶ 21 The federal aspect of that legal question is answered by 40 C.F.R. § 122.44(i). The EPA has anticipated that there may be instances—like the one at issue here—where its approved testing methods are not sensitive enough to detect the state or federal effluent limits. Federal regulation states that the testing method used for monitoring effluent limits need only be “sufficiently sensitive.” 40 C.F.R. § 122.44(i)(1)(iv). It further specifies that a testing method is considered “sufficiently sensitive” if it “has the lowest [minimum level] of the analytical methods approved under 40 [C.F.R.] part 136 or required under 40 [C.F.R.] chapter I, subchapter N or O for the measured pollutant or pollutant parameter.” 40 C.F.R. § 122.44(i)(1)(iv)(A)(2). Soundkeeper agrees that Ecology is using the only testing method approved by the EPA for

monitoring PCBs under the circumstances of this case. Puget Soundkeeper All's Suppl. Br. at 12. No conflict therefore exists with the federal regulation.

¶ 22 The state monitoring scheme is read in conjunction with the statutory mandate. RCW 90.48.520, the statute in question, in relevant part, reads as follows:

In order to improve water quality by controlling toxicants in wastewater, the department of ecology shall in issuing and renewing state and federal wastewater discharge permits review the applicant's operations and incorporate permit conditions ***641** which require *all known, available, and reasonable* methods to control toxicants in the applicant's wastewater. Such conditions may include, but are not limited to: (1) Limits on the discharge of specific chemicals, and (2) limits on the overall toxicity of the effluent. ... *In no event shall the discharge of toxicants be allowed that would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria.*

(Emphasis added.)

[4] ¶ 23 From the outset we note that the blanket prohibition on “the discharge of toxicants ... that would violate any water quality standard” in RCW 90.48.520 does not mean that this court, and not the agency charged with enforcement and employing its expertise, will command a specific way of ensuring compliance by a permittee. As Ecology and various amici point out, monitoring is just one of the ways in which discharge permits ensure compliance with RCW 90.48.520 and other applicable state and federal laws.⁶ Requiring the permittee to implement specific water treatment practices that are designed to reach the required PCB cap is, as logic would dictate, a more effective method of preventing unlawful discharges *before* they can occur than simply to monitor a release of harmful chemicals that has already ****1178** occurred. Thus, while 40 C.F.R. § 122.44(i) requires monitoring of effluent from each outfall to assure compliant

performance, the selection of the monitoring method is not at the center of compliance.

[5] ¶ 24 More importantly, the statute's plain language does not require a perfectly sensitive test. It requires that the test, in addition to being known and available, also be reasonable. Methods 608 and 1668C are both “known” and *642 both appear to be available.⁷ The question we have to answer here is whether Ecology's decision to use Method 608 in the 2013 SIM permit was also “reasonable.” We conclude that it was.

¶ 25 We first note that when the EPA considered approving Method 1668C for compliance monitoring, it deferred action after receiving mixed comments from public agencies and industry stakeholders about feasibility and cost. [Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; Analysis and Sampling Procedures](#), 77 Fed. Reg. 29,758, 29,763 (May 18, 2012). It has withheld approval as recently as 2017. [Clean Water Act Methods Update Rule for the Analysis of Effluent](#), 82 Fed. Reg. 40,836, 40,876 (Aug. 28, 2017). It was not unreasonable for Ecology in these circumstances to select Method 608 as the only federally approved test method for testing the federally established human health limit that Washington was using in 2013.⁸ As Ecology has made clear to this court, the use of Method 1668C would strip it of its power and ability to enforce the law. Wash. Supreme Court oral argument, *Puget Soundkeeper All. v. Dep't of Ecology*, No. 94293-5 (Oct. 19, 2017), at 21 min., 31 sec., *video recording by TVW*, Washington State's Public Affairs Network, <http://www.tvw.org>. As Ecology points out, Method 1668C is unreliable because that test does not allow Ecology to determine whether any of the PCBs detected come from the discharger, the test container itself, or the ambient air. This means that the test would detect the presence of PCBs but would not identify the source. Any polluter *643 subject to an enforcement action stemming from Ecology's use of such method of detection would predictably be able to challenge the validity the agency's actions because of the inability to identify the source of the pollution. Method 608, in contrast, can accurately identify the source.⁹

¶ 26 Ecology's decision to use Method 608 in this context is not only reasonable but perhaps the most sensible and viable decision. Ecology sets maximum effluent limits for certain pollutants at numbers presently undetectable and unquantifiable in order to encourage scientific progress toward the goal of cleaner and safer water.¹⁰ Given

these considerations, Soundkeeper has not established that Method 1668C is a “reasonable” method for Ecology to use or that Ecology's use of Method 608 is “unreasonable.” Soundkeeper's argument might result in Ecology losing the ability to enforce and monitor discharge of pollutants into our streams and waters.

¶ 27 The Board held that Method 1668C was not available to use in SIM's permit because [WAC 173-201A-260\(3\)\(h\)](#) requires federal approval of effluent testing methods. CP at 47. Method 608 is EPA approved, and **1179 Ecology was required to use that test. Soundkeeper contends that Ecology could have selected the more sensitive but less reliable Method 1668C because it is a “superseding method” under [WAC 173-201A-260\(3\)\(h\)](#). We disagree.

¶ 28 Ecology applies state water quality criteria according to [WAC 173-201A-260\(3\)](#). This regulation provides that Ecology may select a testing method that (1) is listed in 40 C.F.R. § 136, (2) qualifies as a published “superseding *644 method[],” or (3) is sought by Ecology and approved by EPA. Soundkeeper agrees that Method 1668C does not meet option (1) or (3).

¶ 29 EPA approves testing methods through a process of formal notice and comment rulemaking. [33 U.S.C. §§ 1311\(a\), 1314\(h\), 1361\(a\)](#). [Section 1314\(h\)](#) requires the EPA to “promulgate guidelines establishing test procedures for the analysis of pollutants.” Currently, federal regulation recognizes only Method 608. [40 C.F.R. § 136.3](#) tbl. IC; 82 Fed. Reg. at 40,836-40,941 (Aug. 28, 2017) (“[A]t the time of writing of this revision, Method[] 1668C ... had not been approved for use at 40 [C.F.R.] part 136.”). Moreover, Soundkeeper has not alleged and the record does not reflect that Soundkeeper or any other entity has sought Ecology's approval for Method 1668C, following consultation with adjacent states and EPA approval.

[6] ¶ 30 Thus, for Method 1668C to qualify under [WAC 173-201 A-260\(3\)\(h\)](#) it must be a “superseding method[] published.” The parties do not disagree that Method 1668C is a “published” method by EPA. Instead, Ecology disputes whether the method is “superseding,” Resp't's Suppl. Br. at 12-14, which requires us to interpret [WAC 173-201A-260\(3\)\(h\)](#).

[7] [8] [9] [10] ¶ 31 When interpreting agency regulations, we apply the same principles used to construe

statutes. [Lopez Demetrio v. Sakuma Bros. Farms](#), 183 Wash.2d 649, 655, 355 P.3d 258 (2015); [Dep't of Ecology v. Campbell & Gwinn, LLC](#), 146 Wash.2d 1, 9-10, 43 P.3d 4 (2002). When we interpret a statute, we look first to the plain language. [Campbell & Gwinn](#), 146 Wash.2d at 11, 43 P.3d 4. We derive the plain meaning “from all that the Legislature has said in the statute and related statutes which disclose legislative intent about the provision in question.” [Campbell & Gwinn](#), 146 Wash.2d at 11, 43 P.3d 4. Language is unambiguous if it has only one reasonable interpretation. [Campbell & Gwinn](#), 146 Wash.2d at 12, 43 P.3d 4.

¶ 32 State regulations do not define the term “superseding,” so we determine the meaning of this term by [*645](#) looking at its ordinary definition. [HomeStreet, Inc. v. Dep't of Revenue](#), 166 Wash.2d 444, 451, 210 P.3d 297 (2009) (citing [Garrison v. Wash. State Nursing Bd.](#), 87 Wash.2d 195, 196, 550 P.2d 7 (1976)). *Webster's* explains that “supersede” means (a) “to make obsolete, inferior, or outmoded,” (b) “to make void,” or (c) “to make superfluous or unnecessary.” *Webster's Third New International Dictionary* 2295 (2002). *Webster's* further defines “supersede” as “to cause to be supplanted in a position or function.” *Webster's*, supra, at 2295. Similarly, *Black's* defines “supersede” as “[t]o annul, make void, or repeal by taking the place of <the 1996 statute supersedes the 1989 act>.” *Black's Law Dictionary* 1667 (10th ed. 2014).

¶ 33 These definitions demonstrate that “supersede” means to take the place of something, to supplant it. Here, Method 1668C has not taken the place of Method 608. The EPA developed Method 1668C intending it to be used in CWA programs. AR at 2751. Importantly, the EPA has stated that it expects the method to be “add[ed]” to other CWA testing processes published at 40 C.F.R. § 136. AR at 2751. The EPA developed and published Method 1668C for use *in addition* to other tests. A supplemental testing method does not supplant, void, or make obsolete a previously adopted testing procedure. Therefore, Method 1668C does not constitute a “superseding method” under [WAC 173-201A-260\(3\)\(h\)](#) and we affirm the Court of Appeals and the Board's ruling.

Conclusion

¶ 34 Ecology's use of Method 608 in the SIM permit is consistent with the plain meaning of the statutory language

in question, [RCW 90.48.520](#). Nothing in the language of the statute requires Ecology to use unreliable and unapproved testing methods [**1180](#) to ensure compliance with the law. Neither federal nor state law require that the monitoring method reach the PCB limit of 0.00017 µg/L. [*646 WAC 173-201A-260\(3\)\(h\)](#) does not conflict with [RCW 90.48.520](#). Ecology followed WAC 173-201 A-260(3)(h)'s directive that “analytical testing methods for these numeric criteria must be in accordance with ... (40 C.F.R. Part 136) or superseding methods published,” and that “[t]he department may also approve other methods following consultation with adjacent states and with the approval of the [EPA].” Method 608 is the only reliable test currently available, and Ecology, in applying its expertise, determined that it should be used as one of several ways the agency ensures compliance with permit limitations. The record before the Board supports this decision.

¶ 35 Use of an unapproved and unreliable test, such as Method 1668C, would not provide a basis for enforcement of the PCB permit limits. Both Ecology and the Board agree on this issue, and we have established that “we are loath to override the judgment of both agencies, whose combined expertise merits substantial deference.” [Port of Seattle](#), 151 Wash.2d at 600, 90 P.3d 659. We affirm.

WE CONCUR:

[Fairhurst, C.J.](#)

[Madsen, J.](#)

[Owens, J.](#)

[Stephens, J.](#)

[Wiggins, J.](#)

Gordon McCloud, J.

González, J. (dissenting)

¶ 36 In Washington, there is no right to discharge pollutants. Accordingly, an entity is not permitted to discharge unless it can prove that there will be no resulting pollution of our waterways. [RCW 90.48.520](#); [WAC 173-201A-240\(1\)](#) (toxic substances “shall not be introduced above natural background levels in waters of the state which have the potential ... to adversely affect” water use, toxicity, or public health), -510(1) (“The primary means to be used for controlling ... waste

discharges shall be through the issuance of waste discharge permits ... [which] must be conditioned so the discharges authorized will meet the water quality standards.”). Here, the majority is turning the protective nature of Washington’s water quality standards on its head by reducing *647 entities’ responsibility to establish they will not pollute through their discharge. As a result, I respectfully dissent.

¶ 37 Washington law highly regulates the discharge of pollutants into the waters of our state. Ch. 90.48 RCW. It is “unlawful for any person to ... discharge into any of the waters of this state ... matter that shall cause or tend to cause pollution of such waters.”RCW 90.48.080. As a concession, perhaps, to the perceived necessities of the time, pollution may be permitted, subject to stringent controls, under discharge permits issued by the Department of Ecology. RCW 90.48.520. Even when done under a permit, however, “[i]n no event shall the discharge of toxicants be allowed that would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria.” *Id.* And “[w]hile an end to the discharge of pollutants has not been achieved, it remains the legally cognizable end point of water pollution regulation” and informs the interpretation in both federal and state cases. 23 Timothy Butler & Matthew King, *Washington Practice: Environmental Law and Practice* § 7.21, at 165 (2d ed. 2007).

¶ 38 Seattle Iron and Metal (SIM) operates an auto shredding and metal recycling business that discharges polluted wastewater and storm water into the Lower Duwamish Waterway (Waterway), the 5.5 mile section of the Duwamish River flowing into Elliott Bay.

¶ 39 For many years, the Waterway has been utilized as a resource. Native American peoples, such as the Squaxin Island Tribe, have caught and consumed fish and shellfish from its waters. *Amicus Curiae Squaxin Island Tribe Br. at 1.* Seattle industries have used the Waterway since the 1900s, resulting in heavy pollution of the area. *Pollution Control Hr’gs Bd. Findings of Fact, Conclusions of Law & Order (PCHB Order) at 3.* As a result, the sediment and tissues of resident sea life now exhibit elevated levels of substances hazardous to human health. Of particular concern are polychlorinated biphenyls (PCBs). Banned since the 1970s, PCBs are manufactured chemicals once widely *648 used in **1181 products like electric transformers, paint additives, and fire retardants. These chemicals are highly toxic, persist in the environment for decades, and possess bioaccumulative properties.

¶ 40 The heightened level of PCBs in the Waterway’s organic and inorganic material has attracted the attention of multiple state and federal agencies. The Washington Department of Health cautions against human consumption of seafood caught on the Waterway, classifying it as a “public health hazard.” *Id.* at 4 (emphasis omitted). The United States Environmental Protection Agency (EPA) has designated the Waterway a cleanup site with federal and state governments cooperating to remediate and prevent further contamination.

¶ 41 In September 2013, Ecology issued a waste discharge permit to SIM. The permit allowed wastewater discharges from the facility and required use of Method 608 to measure toxicants in its wastewater and storm water discharges. The permit further required SIM to collect and submit discharge samples to a registered laboratory for testing and to report this monitoring data to Ecology. Any water quality violations were to be immediately reported. Between December 2007 and June 2008, SIM failed to meet permit effluent limitations and conducted an unauthorized discharge. In response, Ecology issued a violation and noncompliance notice.¹¹

¶ 42 The permit established toxicant limitations and required testing methods to monitor these toxicants. Puget Soundkeeper Alliance (Soundkeeper) challenged the permit before the Pollution Control Hearings Board (Board), which largely upheld it. Soundkeeper asks this court to reverse the Board’s ruling and hold that state regulations allow use of a more sensitive testing method than required by SIM’s permit or, alternatively, that the permit was contrary to *649 state law because it could not ensure compliance with water quality standards.

¶ 43 At the outset, I agree with the majority that Method 1668C does not constitute, a “superseding method[]” under WAC 173-201 A-260(3)(h). Majority at 644-45. Under WAC 173-201A-260(3), Ecology must use EPA-approved testing methods, and Method 1668C is not an approved method.¹²

¶ 44 I diverge from the majority because requiring use of Method 608 to monitor PCB levels fails to ensure a permit holder’s compliance with statutory water quality standards. Accordingly, a permit that relies on Method 608 violates state law. Such a permit should be denied. I cannot join the majority’s conclusion that we should set aside state law standards in favor of less protective federal water quality standards. This deference is to the detriment of our state

law and our State's environment. Accordingly, I respectfully dissent.

¶ 45 The National Pollutant Discharge Elimination System (NPDES) permits must ensure compliance with *both* state and federal water quality standards. 33 U.S.C. § 1311(b)(1) (C); *Snohomish County v. Pollution Control Hr'gs Bd.*, 187 Wash.2d 346, 352, 386 P.3d 1064 (2016). NPDES permits specify water quality criteria and the required testing methods to apply. WAC 173-201A-260(3). State law dictates that Ecology shall “incorporate permit conditions which require all known, available, and reasonable methods to control toxicants in the applicant's wastewater.” RCW 90.48.520. It also forbids release of toxicants that would violate any water quality standard, including toxicant standards. RCW 90.48.520 (“In no event shall the discharge of toxicants be allowed that would violate any water quality standard[].”). Thus, Ecology must modify an NPDES permit “when it is determined that the discharge *650 causes or contributes to a violation of water quality standards” in our state. WAC 173-201A-510(1)(b).

¶ 46 Federal regulations recognize that states may implement more stringent water quality standards than provided in federal law. 40 C.F.R. § 122.44(d). Our legislature has expressly stated that it is “the public **1182 policy of the state of Washington to maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and public enjoyment thereof,” and “require the use of all known available and reasonable methods by industries ... to prevent and control the pollution” of waters. RCW 90.48.010.

¶ 47 Washington regulation explains that a testing method must meet one of three requirements for use in NPDES permits: be in accord with 40 C.F.R. § 136, qualify as a superseding published method, or use another Ecology-selected method subject to EPA approval. WAC 173-201A-260(3)(h). A testing method approved under 40 C.F.R. § 136 is acceptable for a state-issued permit, but it is not required. More importantly, where state law precludes pollution and 40 C.F.R. § 136-testing methods cannot ensure compliance with that law, WAC 173-201A-260(3)(h) provides a solution: seeking EPA approval for a different testing method. While it is certainly relevant to this case that 40 C.F.R. § 122.44(i) sets out sufficiently sensitive testing requirements under federal law, this regulation by no means answers the question currently before us: whether *Washington*

law permits a testing method that cannot ensure compliance with applicable toxicant standards.

¶ 48 An enforcement regime that fails to enforce the law renders RCW 90.48.520 meaningless. *State v. J.P.*, 149 Wash.2d 444, 450, 69 P.3d 318 (2003) (statutes must be interpreted so that all language is given effect and no portion rendered meaningless). For example, the heavy contamination of the Waterway, coupled with the tenacious bioaccumulative properties of PCBs, illustrates the significant *651 hazard this pollution poses to aquatic life and to the health of Washington citizens, especially Native American peoples, who consume and commercially harvest Waterway fish and shellfish. To combat and protect against these risks, we must zealously guard our natural resources. Granting an effluent permit that fails to ensure compliance with our strict water quality standards does little to protect these resources and will ultimately contribute to the continued contamination of the Waterway. Entities have no right to pollute state waters.

¶ 49 At issue here is Method 608 and the human health criteria of 0.00017 µg/L (micrograms per liter), the applicable water quality and toxicant standard. Method 608 has a practical quantitation limit of 0.5 µg/L, meaning it can reliably quantify PCBs only at that level. WAC 173-201A-240(5) tbl. 240. Any test result showing toxic substances between 0.00017 and 0.5 µg/L would not reveal effluent limit violations. Because Method 608 cannot quantify these violations, it cannot ensure permit holders comply with state water quality standards under RCW 90.48.520. *See also* 40 C.F.R. § 122.4(d). This results in de jure prohibition and de facto permission to pollute with PCBs. Permits incapable of quantifying toxicant standard violations necessarily allow polluters to go unregulated. Ultimately, to agree with the majority opinion is to accept that toxicant violations can, do, and will continue to occur at a rate greater than 2,900 times the legal limit—more than 2,900 times above the level protective of human health. But the majority does not reconcile this fact or acknowledge that this is the reality.

¶ 50 NPDES permit testing procedures detect toxicants at different concentrations. “All testing methods have a method detection level,” which is the “lowest level at which the concentration of a substance can reliably be detected.” PCHB Order at 26. Using this method detection level, the practical quantitation level is calculated; this represents the lowest level at which a concentration can be reliably quantified.

*652 ¶ 51 The majority cites 40 C.F.R. § 122.44(i)(1)(iv) (A)(2) as validating the use of Method 608 in SIM's permit. Majority at 1177. This regulation provides that a toxicant monitoring method is sufficiently sensitive if the method minimum level is at or below the limit specified in the permit or it is adopted in 40 C.F.R. § 136. Notably, this regulation does not specify the level required by individual states. Indeed, federal regulations leave it to individual states to determine the acceptable testing methods and water quality standards for permit holders.

¶ 52 In light of the applicable toxicant standard set for SIM, to satisfy the law, SIM's permit must contain a testing method **1183 that has the capacity to quantify toxicants at the level of 0.00017 µg/L. Ecology argues that under WAC 173-201A-260(3)(h), it could select only a method approved by 40 C.F.R. § 136. But Ecology's discretion is not so limited. WAC 173-201A-260(3)(h) allows the agency to “also approve other methods following consultation with adjacent states and with the approval of the [EPA].” Ecology may therefore seek approval of other methods, such as Method 1668C or Method 8082A, for use in NPDES permits.¹³ Indeed, Ecology has previously acquired EPA approval for alternative tests in some cases. At a Boeing cleanup site, for example, Ecology staff approached their federal counterparts to obtain permission to use a more sensitive testing method than approved by 40 C.F.R. § 136. Boeing and Ecology jointly wrote to the EPA, and requested use of the alternate method, and within approximately 45 days, EPA granted approval. Verbatim Report of Proceedings (Mar. 19, 2015) at 711-14.

*653 ¶ 53 I am not advocating for a categorical proclamation against issuing NPDES permits. We recognize that the

process of establishing a permittee's permissible effluent discharge limit and water quality standard is highly fact specific. Where a permit holder's effluent discharges can be reliably measured, by Method 608 for example, and those measurements ensure compliance with applicable water quality standards, such a permit would likely comply with both state and federal law and regulation. In instances where a testing method cannot ensure compliance with state water quality standards, Ecology is not required to deny a permit—it may review the applicable toxicant standard or seek EPA approval for alternative testing methods, as it has done in the past.

¶ 54 The Board's ruling that Ecology may issue a waste discharge permit that complies with state regulation but cannot accurately quantify water quality violations was contrary to state law, RCW 90.48.520, and federal regulation, 40 C.F.R. § 122.44(d)(1). To find otherwise, as the majority does, jeopardizes the well-being of our environment. In the future, if using a method that does not comport with state statutory standards, Ecology must make recorded attempts to get EPA approval of a sufficient alternative testing method per WAC 173-201A-260(3)(h). NPDES permits should be denied if the required method cannot ensure compliance with our state law. Accordingly, I respectfully dissent.

Yu, J.

All Citations

191 Wash.2d 631, 424 P.3d 1173

Footnotes

- 1 The Court of Appeals affirmed in part and reversed in part the Pollution Control Hearings Board's decisions on two different permit provisions that Puget Soundkeeper Alliance challenged below. The lower court's partial reversal is not before us.
- 2 SIM's current permit is set to expire on October 1, 2018.
- 3 The regulation reads, in relevant part, “The analytical testing methods for [the] numeric criteria must be in accordance with the ‘Guidelines Establishing Test Procedures for the Analysis of Pollutants’ (40 C.F.R. Part 136) or superseding methods published. The department may also approve other methods following consultation with adjacent states and with the approval of the [EPA].”
- 4 In the record, Method 608 is referenced as having a practical quantitation limit of 0.5 µg/L and a method detection limit of 0.25 µg/L. The former represents “the lowest level at which a concentration can be detected

where the accuracy (precision and bias) of the detection achieves the objectives of the intended purpose.” Clerk’s Papers at 39.

5 [Puget Soundkeeper All. v. State, No. 48267-3-II, slip op. at 11, 2017 WL 702504 \(Wash. Ct. App. Feb. 22, 2017\)](#) (unpublished), [http://www.courts.wa.gov/opinions/pdf/D2% 2048267-3II% 20Unpublished% 20Opinion.pdf](http://www.courts.wa.gov/opinions/pdf/D2%2048267-3II%20Unpublished%20Opinion.pdf) (emphasis added).

6 See, e.g., [40 C.F.R. § 122.41\(e\)](#) (“The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.” (emphasis added)).

7 While Method 1668C has not been approved by 40 C.F.R. § 136, [WAC 173-201A-260\(3\)\(h\)](#) allows Ecology to “also approve other methods following consultation with adjacent states and with the approval of the [EPA].”

8 We note here that Ecology is wise to keep exploring the best testing available and might even have a duty to implement the most technologically superior monitoring methods. Based in its widespread adoption in the watershed and other facts in the record, CP (Finding of Fact 51) at 40, the Board encouraged Ecology to seek EPA approval to use Method 8082A for monitoring of permit compliance at SIM. CP (Conclusion of Law 29) at 61. Whether Ecology has a duty to do so, we need not consider because the issue is not currently before us.

9 Ecology has previously issued SIM notices of violation for exceeding its 2007 permit effluent limits resulting in SIM making improvements to its discharge treatment system. CP at 20.

10 Wash. Supreme Court oral argument, *supra*, at 16 min., 46 sec. through 17 min., 10 sec. (explaining how “it is common to have the limit driving the technology. In other words, we have a number of toxic chemicals ... where the limit is lower than what the current tests are able to reach. But, setting that human health limit where we know it needs to be still has value because it allows laboratories to strive towards that goal”).

11 Ecology previously issued a discharge permit to SIM in 2007. Neither the 2007 permit nor earlier violations are at issue here.

12 [Clean Water Act Methods Update Rule for the Analysis of Effluent, 82 Fed. Reg. 40,836, 40,876 \(Aug. 28, 2017\)](#) (explaining that while Method 1668C “may be useful for determination of PCBs as individual chlorinated biphenyl congeners ... [it] ha[s] not been approved for use at 40 CFR part 136”).

13 At the Board’s hearing in this matter, an Ecology representative acknowledged that Method 8082A was originally required in SIM’s 2013 permit because the agency felt it needed to detect PCBs at lower levels than Method 608 allowed. PCHB Order at 27. Prior to the hearing, Ecology determined Method 8082A was ineligible for use in discharge permits because it was not included in 40 C.F.R. § 136, and Ecology modified SIM’s permit to require Method 608 instead. Ecology’s representative testified that requesting blanket approval from the EPA to use Method 8082A for Duwamish sites would “be a good proposal because the method is already being used by several government agencies, including Ecology.” *Id.*

77 Fed. Reg. 29758, 29763 (May 18, 2012)

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 136, 260, 423, 430, and 435

[EPA-HQ-OW-2010-0192; FRL-9664-6]

RIN 2040-AF09

Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; Analysis and Sampling Procedures

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule modifies the testing procedures approved for analysis and sampling under the Clean Water Act. EPA proposed these changes for public comment on September 23, 2010. The changes adopted in this final rule fall into the following categories: New and revised EPA methods and new and revised methods published by voluntary consensus standard bodies (VCSB), such as ASTM International and the Standard Methods Committee; updated versions of currently approved methods; methods reviewed under the alternate test procedures (ATP) program; clarifications to the process for EPA approval for use of alternate procedures for nationwide and Regional use; minimum quality control requirements to improve consistency across method versions; corrections to previously approved methods; and revisions to sample collection, preservation, and holding time requirements. Finally, EPA makes changes to three effluent guideline regulations.

DATES: This regulation is effective on June 18, 2012. The incorporation by reference of these methods is approved

by the Director of the Federal Register on June 18, 2012. For judicial review purposes, this final rule is promulgated as of 1:00 p.m. (Eastern time) on June 1, 2012 as provided at 40 CFR 23.2 and 23.7.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-OW-2010-0192. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publically available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other materials, such as copyrighted material, are not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the HQ Water Docket Center, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 202-566-1744, and the telephone number is 202-566-2426 for the HQ Water Docket.

FOR FURTHER INFORMATION CONTACT: For information regarding the changes to inorganic chemical methods, contact Lemuel Walker, Engineering and Analysis Division (4303T), USEPA Office of Science and Technology, 1200 Pennsylvania Ave. NW., Washington, DC 20460, 202-566-1077 (email: walker.lemuel@epa.gov). For information regarding the changes to organic chemical methods, contact Maria Gomez-Taylor, Engineering and Analysis Division (4303T), USEPA Office of Science and Technology, 1200

Pennsylvania Ave. NW., Washington, DC 20460, 202-566-1005 (email: gomez-taylor.maria@epa.gov). For information regarding the changes to microbiological and whole effluent toxicity methods, contact Robin Oshiro, Engineering and Analysis Division (4303T), USEPA Office of Science and Technology, 1200 Pennsylvania Ave. NW., Washington, DC 20460, 202-566-1075 (email: oshiro.robin@epa.gov).

SUPPLEMENTARY INFORMATION:

A. General Information

1. Does this action apply to me?

EPA Regions, as well as States, Territories and Tribes authorized to implement the National Pollutant Discharge Elimination System (NPDES) program, issue permits with conditions designed to ensure compliance with the technology-based and water quality-based requirements of the Clean Water Act (CWA). These permits may include restrictions on the quantity of pollutants that may be discharged as well as pollutant measurement and reporting requirements. If EPA has approved a test procedure for analysis of a specific pollutant, the NPDES permittee must use an approved test procedure (or an approved alternate test procedure if specified by the permitting authority) for the specific pollutant when measuring the required waste constituent. Similarly, if EPA has established sampling requirements, measurements taken under an NPDES permit must comply with these requirements. Therefore, entities with NPDES permits will potentially be affected by the actions in this rulemaking. Categories and entities that may potentially be affected by the requirements of today's rule include:

Category	Examples of potentially affected entities
State, Territorial, and Indian Tribal Governments.	States, Territories, and Tribes authorized to administer the NPDES permitting program; States, Territories, and Tribes providing certification under Clean Water Act section 401; State, Territorial, and Indian Tribal owned facilities that must conduct monitoring to comply with NPDES permits.
Industry	Facilities that must conduct monitoring to comply with NPDES permits.
Municipalities	POTWs or other municipality owned facilities that must conduct monitoring to comply with NPDES permits.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. This table lists types of entities that EPA is now aware of that could potentially be affected by this action. Other types of entities not listed in the table could also be affected. To determine whether your facility is affected by this action, you should carefully examine the applicability language at 40 CFR 122.1 (NPDES

purpose and scope), 40 CFR 136.1 (NPDES permits and CWA) and 40 CFR 403.1 (Pretreatment standards purpose and applicability). If you have questions regarding the applicability of this action to a particular entity, consult the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. What process governs judicial review of this rule?

Under Section 509(b)(1) of the Clean Water Act (CWA), judicial review of today's CWA rule may be obtained by filing a petition for review in a United States Circuit Court of Appeals within 120 days from the date of promulgation of this rule. For judicial review purposes, this final rule is promulgated as of 1 p.m. (Eastern time) on June 1, 2012 as provided at 40 CFR 23.2. The

III. Changes Between the Proposed Rule and the Final Rule

Except as noted below, the content of the final rule is the same as that of the proposed rule.

A. EPA Is Not Adding EPA Method 1614A

The Agency proposed to add Method 1614A, "Brominated Diphenyl Ethers in Water, Soil, Sediment, and Tissue by HRGC/HRMS." EPA developed this method to determine 49 polybrominated diphenyl ether (PBDE) congeners in aqueous, solid, tissue, and multi-phase matrices. This method uses isotope dilution and internal standard high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS). The commenters were divided on whether EPA should approve this method. Two commenters stated that Method 1614A would be a valuable addition to the list of approved methods, while two other commenters stated that the method has not been sufficiently validated for use in Clean Water Act programs. Upon further evaluation of the data supporting the use of this test procedure and the peer review comments, EPA agrees with those commenters who stated that additional validation data are needed to fully characterize the performance of this method for various matrices and has decided not to include Method 1614A in today's final rule.

B. Deferral of Action on EPA Method 1668C

The Agency proposed to add EPA Method 1668C, "Chlorinated Biphenyl Congeners in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS." This method measures individual chlorinated biphenyl congeners in environmental samples by isotope dilution and internal standard high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS). As discussed in the proposal, Part 136 methods for chlorinated biphenyls (PCBs) only measure a mixture of congeners in seven Aroclors—PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260, while Method 1668C can measure the 209 PCB congeners in these mixtures.

EPA began development of this method in 1995, initially covering 13 congeners labeled "toxic" by the World Health Organization. In 1999, EPA expanded the scope of the method to include all 209 PCB congeners. The method has been used to support several studies, including the 2001 National Sewage Sludge Survey and the

National Lake Fish Tissue Survey. Since 1999, EPA has revised the method to incorporate additional information and data collected such as the results of an inter-laboratory validation study, peer reviews of the method and the validation study data, additional QC performance criteria and MDL data, and user experiences. In the development and subsequent multi-laboratory validation of this method, EPA evaluated method performance characteristics, such as selectivity, calibration, bias, precision, quantitation and detection limits. The Agency is aware that this method is being used in some states in their regulatory programs and by other groups for some projects with good success. For example, in a study of data comparability between two laboratories on samples collected from the Passaic River in New Jersey, in which 151 PCB congeners were identified and measured, accuracy, as measured by analysis of an NIST SRM, was 15% or better. Recoveries of the PCB congeners ranged from 90% to 124% and averaged 105%; precision ranged from 4.2 to 23% (Passaic River 2010). This type of data shows that recoveries and precision for this method are within the performance achievable with other approved methods.

EPA received comments from thirty-five individuals or organizations on this method. Of these commenters, five (three states, one laboratory, and one laboratory organization) supported the approval of this method. Some states indicated that they are already requiring this method for use in permits and for other purposes. On the other hand, industry and industry groups/associations were critical of the method for various reasons. Commenters opposing the method provided a detailed critique of the method, the inter-laboratory study, the peer reviews and the other supporting documentation. Among the criticisms of the inter-laboratory study, commenters argued that: (1) EPA did not produce documentation supporting changes to the method approved by EPA for the interlaboratory study, (2) the raw data for wastewater and biosolids was poor and is not fit for use in a comprehensive interlaboratory study, (3) EPA cited certain guidelines such as ASTM but deviated from those guidelines (e.g., used only one Youden pair per matrix), (4) the peer reviewers' qualifications were questioned, (5) the addendum and the pooled MDLs/MLs were not subjected to peer review, (6) MDL/ML are flawed, the process to calculate MDLs/MLs for congeners that co-elute was flawed, the MDL/ML ignored the

ubiquitous problem of background contamination, and (7) the validation study did not include all matrices in the method (soil and sediment excluded). In addition, some commenters also suggested that EPA should first promulgate new detection and quantitation procedures. Further, commenters raised questions about possible adverse effects of this new method on compliance monitoring as well as concerns about data reporting and costs.

EPA is still evaluating the large number of public comments and intends to make a determination on the approval of this method at a later date. In the meantime, the Agency has decided to go forward with the promulgation of the other proposed analytical methods to expedite their implementation by the regulated community and laboratories. This decision does not negate the merits of this method for the determination of PCB congeners in regulatory programs or for other purposes when analyses are performed by an experienced laboratory.

C. EPA Is Not Adding ASTM Methods D7574-09 and D7485-09

In today's rule, EPA is not adding two proposed ASTM methods, ASTM D7574-09 "Standard Test Method for Determination of Bisphenol A (BPA)," and ASTM D7485-09 "Standard Test Method for Determination of NP, OP, NP1EO, and NP2EO." These two methods involve liquid chromatography and tandem mass spectrometry (LC/MS/MS). The methods have been tested by a single laboratory in several environmental waters, and may be useful for many applications. However, EPA has decided to postpone approval of these two methods for general use until completion of a full inter-laboratory validation study designed to fully characterize the performance of these methods across multiple laboratories and matrices.

D. Revisions and Clarifications to EPA Method 200.7

EPA Method 200.5 "Determination of Trace Elements in Drinking Water by Axially Viewed Inductively Coupled Plasma—Atomic Emission Spectrometry" employs a plasma torch viewed in the axial orientation to measure chemical elements (metals). As stated earlier in today's rule, EPA is adding Method 200.5 for some metals in Table IB. Both Methods 200.5 and 200.7 are acceptable methods under Part 136 and both methods employ ICP/AES technology. However, Method 200.5 includes performance data for the axial configuration that is not in Method 200.7 because the axial technology torch

82 Fed. Reg. 40836, 40876 (Aug. 28, 2017)

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 136

[EPA-HQ-OW-2014-0797; FRL-9957-24-OW]

RIN 2040-AF48

Clean Water Act Methods Update Rule for the Analysis of Effluent

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule modifies the testing procedures approved for analysis and sampling under the Clean Water Act. The changes adopted in this final rule fall into the following categories: New and revised EPA methods (including new and/or revised methods published by voluntary consensus standard bodies (VCSB), such as ASTM International and the Standard Methods Committee); updated versions of currently approved methods; methods reviewed under the alternate test procedures (ATP) program; clarifications to the procedures for EPA approval of nationwide and limited use ATPs; and amendments to the procedure for determination of the method detection limit to address laboratory contamination and to better account for intra-laboratory variability. **DATES:** This regulation is effective on September 27, 2017. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of

September 27, 2017. For judicial review purposes, this final rule is promulgated as of 1:00 p.m. (Eastern time) on September 12, 2017 as provided at 40 CFR 23.2 and 23.7.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-OW-2014-0797. All documents in the docket are listed on the www.regulations.gov Web site. Although listed in the index, some information is not publicly available, e.g., confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other materials, such as copyrighted material are not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the Water Docket in EPA Docket Center, EPA/DC, EPA West William J. Clinton Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 202-566-1744 and the telephone number for the Water Docket is 202-566-2426.

FOR FURTHER INFORMATION CONTACT: Adrian Hanley, Engineering and Analysis Division (4303T), Office of Water, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460-0001; telephone:

202-564-1564; email: hanley.adrian@epa.gov.

SUPPLEMENTARY INFORMATION:

A. General Information

1. Does this Action apply to me?

EPA proposed the changes in this method update rule for public comment on February 19, 2015 (80 FR 8956).

EPA Regions, as well as States, Territories and Tribes authorized to implement the National Pollutant Discharge Elimination System (NPDES) program, issue permits with conditions designed to ensure compliance with the technology-based and water quality-based requirements of the Clean Water Act (CWA). These permits may include restrictions on the quantity of pollutants that may be discharged as well as pollutant measurement and reporting requirements. If EPA has approved a test procedure for analysis of a specific pollutant, the NPDES permittee must use an approved test procedure (or an approved alternate test procedure if specified by the permitting authority) for the specific pollutant when measuring the required waste constituent. Similarly, if EPA has established sampling requirements, measurements taken under an NPDES permit must comply with these requirements. Therefore, entities with NPDES permits will potentially be affected by the actions in this rulemaking.

Entities potentially affected by the requirements of this rule include:

Category	Examples of potentially affected entities
State, Territorial, and Indian Tribal Governments	States, territories, and tribes authorized to administer the National Pollutant Discharge Elimination System (NPDES) permitting program; states, territories, and tribes providing certification under CWA section 401; state, territorial, and tribal owned facilities that must conduct monitoring to comply with NPDES permits.
Industry	Facilities that must conduct monitoring to comply with NPDES permits.
Municipalities	Publicly Owned Treatment Works (POTWs) or other municipality owned facilities that must conduct monitoring to comply with NPDES permits.

This table is not exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. This table lists types of entities that EPA is now aware of that could potentially be affected by this action. Other types of entities not listed in the table could also be affected. To determine whether your facility is affected by this action, you should carefully examine the applicability language at 40 CFR 122.1 (NPDES purpose and scope), 40 CFR 136.1 (NPDES permits and CWA) and 40 CFR 403.1 (pretreatment standards purpose and applicability). If you have questions regarding the applicability of this action

to a particular entity, consult the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. What process governs judicial review of this rule?

Under Section 509(b)(1) of the Clean Water Act (CWA), judicial review of this CWA rule may be obtained by filing a petition for review in a United States Circuit Court of Appeals within 120 days from the date of promulgation of this rule. For judicial review purposes, this final rule is promulgated as of 1 p.m. (Eastern time) on September 12, 2017 as provided at 40 CFR 23.2.

Section 509(b)(2) provides that any rule (or requirements of any rule) for which review could have been obtained under Section 509(b)(1) may also not be challenged later in civil or criminal proceedings for enforcement.

C. Abbreviations and Acronyms Used in the Preamble and Final Rule Text

- 4AAP: 4-Aminoantipyrine
- AA: Atomic Absorption
- ADMI: American Dye Manufacturers Institute
- AOAC: AOAC International
- ASTM: ASTM International
- ATP: Alternate Test Procedure
- BOD₅: 5-day Biochemical Oxygen Demand test
- CAS: Chemical Abstract Services

qualitative technique. This method gives analytical conditions for a second GC column that can be used to confirm and quantify measurements. Additionally, Method 625.1 provides gas chromatograph/mass spectrometer (GC/MS) conditions appropriate for the qualitative confirmation of results for the analytes listed in Tables 1 and 2 using the extract produced by this method, and Method 1699 (Reference 18) provides high resolution GC/MS conditions for qualitative confirmation of results using the original sample. When such methods are used to confirm the identifications of the target analytes, the quantitative results should be derived from the procedure with the calibration range and sensitivity that are most appropriate for the intended application.

1.4 The large number of analytes in Tables 1 and 2 makes testing difficult if all analytes are determined simultaneously. Therefore, it is necessary to determine and perform quality control (QC) tests for the "analytes of interest" only. The analytes of interest are those required to be determined by a regulatory/control authority or in a permit, or by a client. If a list of analytes is not specified, the analytes in Table 1 must be determined, at a minimum, and QC testing must be performed for these analytes. The analytes in Table 1 and some of the analytes in Table 2 have been identified as Toxic Pollutants (40 CFR 401.15), expanded to a list of Priority Pollutants (40 CFR part 423, appendix A).

1.5 In this revision to Method 608, Chlordane has been listed as the alpha- and gamma- isomers in Table 1. Reporting may be by the individual isomers, or as the sum of the concentrations of these isomers, as requested or required by a regulatory/control authority or in a permit. Technical Chlordane is listed in Table 2 and may be used in cases where historical reporting has only been the Technical Chlordane. Toxaphene and the PCBs have been moved from Table 1 to Table 2 (Additional Analytes) to distinguish these analytes from the analytes required in quality control tests (Table 1). QC acceptance criteria for Toxaphene and the PCBs have been retained in Table 4 and may continue to be applied if desired, or if these analytes are requested or required by a regulatory/control authority or in a permit. Method 1668C (Reference 17) may be useful for determination of PCBs as individual chlorinated biphenyl congeners, and Method 1699 (Reference 18) may be useful for determination of the pesticides listed in this method. However, at the time of writing of this revision, Methods 1668C and 1699 had not been approved for use at 40 CFR part 136.

1.6 Method detection limits (MDLs; Reference 3) for the analytes in Tables 1 and some of the analytes in Table 2 are listed in those tables. These MDLs were determined in reagent water (Reference 3). Advances in analytical technology, particularly the use of capillary (open-tubular) columns, allowed laboratories to routinely achieve MDLs for the analytes in this method that are 2–10 times lower than those in the version promulgated in 1984. The MDL for an analyte in a specific wastewater may differ from those listed, depending upon the nature of interferences in the sample matrix.

1.6.1 EPA has promulgated this method at 40 CFR part 136 for use in wastewater compliance monitoring under the National Pollutant Discharge Elimination System (NPDES). The data reporting practices described in section 15.6 are focused on such monitoring needs and may not be relevant to other uses of the method.

1.6.2 This method includes "reporting limits" based on EPA's "minimum level" (ML) concept (see the glossary in section 23). Tables 1 and 2 contain MDL values and ML values for many of the analytes.

1.7 The separatory funnel and continuous liquid-liquid sample extraction and concentration steps in this method are essentially the same as those steps in Methods 606, 609, 611, and 612. Thus, a single sample may be extracted to measure the analytes included in the scope of each of these methods. Samples may also be extracted using a disk-based solid-phase extraction (SPE) procedure developed by the 3M Corporation and approved by EPA as an Alternate Test Procedure (ATP) for wastewater analyses in 1995 (Reference 20).

1.8 This method is performance-based. It may be modified to improve performance (e.g., to overcome interferences or improve the accuracy of results) provided all performance requirements are met.

1.8.1 Examples of allowed method modifications are described at 40 CFR 136.6. Other examples of allowed modifications specific to this method are described in section 8.1.2.

1.8.2 Any modification beyond those expressly permitted at 40 CFR 136.6 or in section 8.1.2 of this method shall be considered a major modification subject to application and approval of an alternate test procedure under 40 CFR 136.4 and 136.5.

1.8.3 For regulatory compliance, any modification must be demonstrated to produce results equivalent or superior to results produced by this method when applied to relevant wastewaters (section 8.1.2).

1.9 This method is restricted to use by or under the supervision of analysts experienced in the use of GC/HSD. The laboratory must demonstrate the ability to generate acceptable results with this method using the procedure in section 8.2.

1.10 Terms and units of measure used in this method are given in the glossary at the end of the method.

2. Summary of Method

2.1 A measured volume of sample, the amount required to meet an MDL or reporting limit (nominally 1–L), is extracted with methylene chloride using a separatory funnel, a continuous liquid/liquid extractor, or disk-based solid-phase extraction equipment. The extract is dried and concentrated for cleanup, if required. After cleanup, or if cleanup is not required, the extract is exchanged into an appropriate solvent and concentrated to the volume necessary to meet the required compliance or detection limit, and analyzed by GC/HSD.

2.2 Qualitative identification of an analyte in the extract is performed using the retention times on dissimilar GC columns. Quantitative analysis is performed using the peak areas or peak heights for the analyte on

the dissimilar columns with either the external or internal standard technique.

2.3 Florisil®, alumina, a C18 solid-phase cleanup, and an elemental sulfur cleanup procedure are provided to aid in elimination of interferences that may be encountered. Other cleanup procedures may be used if demonstrated to be effective for the analytes in a wastewater matrix.

3. Contamination and Interferences

3.1 Solvents, reagents, glassware, and other sample processing lab ware may yield artifacts, elevated baselines, or matrix interferences causing misinterpretation of chromatograms. All materials used in the analysis must be demonstrated free from contamination and interferences by running blanks initially and with each extraction batch (samples started through the extraction process in a given 24-hour period, to a maximum of 20 samples—see Glossary for detailed definition), as described in section 8.5. Specific selection of reagents and purification of solvents by distillation in all-glass systems may be required. Where possible, labware is cleaned by extraction or solvent rinse, or baking in a kiln or oven.

3.2 Glassware must be scrupulously cleaned (Reference 4). Clean all glassware as soon as possible after use by rinsing with the last solvent used in it. Solvent rinsing should be followed by detergent washing with hot water, and rinses with tap water and reagent water. The glassware should then be drained dry, and heated at 400 °C for 15–30 minutes. Some thermally stable materials, such as PCBs, may require higher temperatures and longer baking times for removal. Solvent rinses with pesticide quality acetone, hexane, or other solvents may be substituted for heating. Do not heat volumetric labware above 90 °C. After drying and cooling, store inverted or capped with solvent-rinsed or baked aluminum foil in a clean environment to prevent accumulation of dust or other contaminants.

3.3 Interferences by phthalate esters can pose a major problem in pesticide analysis when using the electron capture detector. The phthalate esters generally appear in the chromatogram as large late eluting peaks, especially in the 15 and 50% fractions from Florisil®. Common flexible plastics contain varying amounts of phthalates that may be extracted or leached from such materials during laboratory operations. Cross contamination of clean glassware routinely occurs when plastics are handled during extraction steps, especially when solvent-wetted surfaces are handled. Interferences from phthalates can best be minimized by avoiding use of non-fluoropolymer plastics in the laboratory. Exhaustive cleanup of reagents and glassware may be required to eliminate background phthalate contamination (References 5 and 6). Interferences from phthalate esters can be avoided by using a microcoulometric or electrolytic conductivity detector.

3.4 Matrix interferences may be caused by contaminants co-extracted from the sample. The extent of matrix interferences will vary considerably from source to source, depending upon the nature and diversity of the industrial complex or municipality being sampled. Interferences extracted from

75 Fed. Reg. 58024 (Sept. 23, 2010)

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 136, 260, 423, 430, and 435

[EPA-HQ-OW-2010-0192; FRL-9189-4]

RIN 2040-AF09

Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; Analysis and Sampling Procedures

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing changes to analysis and sampling test procedures in wastewater regulations. These changes will provide increased flexibility to the regulated community and laboratories in their selection of analytical methods (test procedures) for use in Clean Water Act programs. The changes include proposal of EPA methods and methods published by voluntary consensus standard bodies, such as ASTM International and the Standard Methods Committee and updated versions of currently approved methods. EPA is also proposing to add certain methods reviewed under the alternate test procedures program. Further, EPA is proposing changes to the current regulations to clarify the process for EPA approval for use of alternate procedures for nationwide and Regional use. In addition, EPA is proposing minimum quality control requirements to improve consistency across method versions; corrections to previously approved methods; and changes to sample collection, preservation, and holding time requirements. Finally, EPA is proposing changes to how EPA cites methods in three effluent guideline regulations.

DATES: EPA must receive your comments on this proposal on or before November 22, 2010.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OW-2010-0192, by one of the following methods:

- <http://www.regulations.gov>: Follow the on-line instructions for submitting comments.

- *E-mail:* OW-Docket@epa.gov, Attention Docket ID No. EPA-HQ-OW-2010-0192.

- *Mail:* Water Docket, U.S. Environmental Protection Agency, Mailcode: 2822T, 1200 Pennsylvania

Ave., NW., Washington, DC 20460. Attention Docket ID No. EPA-HQ-OW-2010-0192. Please include a total of 3 copies.

- *Hand Delivery:* Water Docket, EPA Docket Center, EPA West Building Room 3334, 1301 Constitution Ave., NW., Washington, DC, Attention Docket ID No. EPA-HQ-OW-2010-0192. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information by calling 202-566-2426.

Instructions: Direct your comments to Docket ID No. EPA-HQ-OW-2010-0192. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or e-mail. The <http://www.regulations.gov> Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through <http://www.regulations.gov> your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket

materials are available either electronically in <http://www.regulations.gov> or in hard copy at the Water Docket in the EPA Docket Center, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 202-566-1744, and the telephone number for the Water Docket is 202-566-2426.

FOR FURTHER INFORMATION CONTACT:

Lemuel Walker, Engineering and Analysis Division (4303T), USEPA Office of Science and Technology, 1200 Pennsylvania Ave., NW., Washington, DC 20460, 202-566-1077, (*e-mail:* walker.lemuel@epa.gov), or Meghan Hessenauer, Engineering and Analysis Division (4303T), USEPA Office of Science and Technology, 1200 Pennsylvania Ave., NW., Washington, DC 20460, 202-566-1040 (*e-mail:* hessenauer.meghan@epa.gov).

SUPPLEMENTARY INFORMATION:

A. General Information

1. Does this action apply to me?

This proposed rule could affect a number of different entities. Potential regulators may include EPA Regions, as well as States, Territories and Tribes authorized to implement the National Pollutant Discharge Elimination System (NPDES) program, and issue permits with conditions designed to ensure compliance with the technology-based and water quality-based requirements of the Clean Water Act (CWA). These permits may include restrictions on the quantity of pollutants that may be discharged as well as pollutant measurement and reporting requirements. If EPA has approved a test procedure for analysis of a specific pollutant, the NPDES permittee must use an approved test procedure (or an approved alternate test procedure) for the specific pollutant when measuring the required waste constituent. Similarly, if EPA has established sampling requirements, measurements taken under an NPDES permit must comply with these requirements. Therefore, entities with NPDES permits will potentially be regulated by the actions in this rulemaking. Categories and entities that may potentially be subject to the requirements of today's rule include:

80 Fed. Reg. 8956 (Feb. 19, 2015)

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 136

[EPA-HQ-OW-2014-0797; FRL-9920-55-OW]

RIN 2040-AF48

Clean Water Act Methods Update Rule for the Analysis of Effluent

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes changes to pollutant analysis methods that are used by industries and municipalities to analyze the chemical, physical, and biological components of wastewater and other environmental samples that are required by regulations under the Clean Water Act. EPA designed the proposed changes to increase flexibility for the regulated community, improve data quality, and update CWA methods to keep current with technology advances and analytical methods science. EPA updates and revises the CWA analytical methods from time to time, the most recent updates being completed in 2012. The new set of proposed changes described in this notice include revisions to current EPA methods and new and/or revised methods published by voluntary consensus standard bodies, such as ASTM International and the Standard Methods Committee. EPA also proposes to approve certain methods reviewed under the alternate test procedures program and clarify the procedures for EPA approval of nationwide and limited use alternate test procedures. Further, EPA proposes amendments to the procedure for determination of the method detection limit to address laboratory contamination and to better account for intra-laboratory variability.

DATES: Comments on this proposed rule must be received on or before April 20, 2015.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-

OW-2014-0797, by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *Email:* OW-Docket@epa.gov, Attention Docket ID number EPA-HQ-OW-2014-0797.
- *Mail:* Water Docket, Environmental Protection Agency, Mail code: 4203M, 1200 Pennsylvania Ave. NW., Washington, DC 20460. Attention Docket ID number EPA-HQ-OW-2014-0797. Please include a total of 3 copies.
- *Hand Delivery:* Water Docket, EPA Docket Center, EPA West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC, Attention Docket ID number EPA-HQ-OW-2014-0797. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information by calling 202-566-2426.

Instructions: Direct your comments to Docket ID number EPA-HQ-OW-2014-0797. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or email. The *www.regulations.gov* Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through *www.regulations.gov* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA

cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information in the docket is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the Water Docket in EPA Docket Center, EPA/DC, EPA West William J. Clinton Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 202-566-1744 and the telephone number for the Water Docket is 202-566-2426.

FOR FURTHER INFORMATION CONTACT: Adrian Hanley, Engineering and Analysis Division (4303T), Office of Water, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460-0001; telephone: 202-564-1564; email: *hanley.adrian@epa.gov*.

SUPPLEMENTARY INFORMATION:

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- II. Overview
- III. Statutory Authority
- IV. Purpose and Summary of Proposed Rule
- V. Statutory and Executive Order Reviews

I. General Information

A. Does this Action apply to me?

Entities potentially affected by the requirements of this proposed action include:

Category	Examples of potentially affected entities
State, Territorial, and Indian Tribal Governments.	States, territories, and tribes authorized to administer the National Pollutant Discharge Elimination System (NPDES) permitting program; states, territories, and tribes providing certification under CWA section 401; state, territorial, and tribal owned facilities that must conduct monitoring to comply with NPDES permits.
Industry	Facilities that must conduct monitoring to comply with NPDES permits.
Municipalities	Publicly Owned Treatment Works (POTWs) or other municipality owned facilities that must conduct monitoring to comply with NPDES permits.