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**Subject: Supplemental Comments, Information, and Response Regarding Non-Governmental Organizations (NGO) Comments on the Draft 2019 National Pollutant Discharge Elimination System (NPDES) Permit No. NM0028355 for Los Alamos National Laboratory**

Dear Ms. Rosborough:

The purpose of this letter is to provide supplemental comments, and information to address Non-Governmental Organizations (NGOs) public comments on the draft National Pollutant Discharge Elimination System (NPDES) Permit No. NM0028355 issued by the U.S. Environmental Protection Agency (EPA) on November 30, 2019. Attachment 1 provides the U.S. Department of Energy National Nuclear Security Administration of the (DOE/NNSA) and Triad National Security, LLC (Triad) response to address erroneous interpretations of the Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA); and EPA regulations as they relate to the following:

- 1) NNSA DOE/Triad NPDES permit program.
- 2) Operation of the Technical Area (TA) 50 Radioactive Liquid Wastewater Treatment Facility at the Los Alamos National Laboratory.
- 3) Draft NPDES Permit issued for public comment on November 30, 2019.

In addition, the attachment addresses a number of incorrect factual statements and assertions regarding the contents of the 2019 NPDES Permit Re-Application submitted by DOE/NNSA and Triad to the EPA on March 26, 2019.

The DOE/NNSA and Triad respectfully submit the contents of Attachment 1 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, DOE/NNSA, at 505-665-7314 or Jennifer Griffin, Triad, at 505-667-6741.

Sincerely,

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Attachment(s): Attachment 1 Supplemental Comments and Information in Support of Proposed Renewal of NPDES Permit No. NM0028355

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## SUPPLEMENTAL COMMENTS AND INFORMATION

In support of

PROPOSED RENEWAL OF NPDES PERMIT NO. NM0028355

December 17, 2020

The National Nuclear Security Administration of the U.S. Department of Energy and Triad National Security, LLC (collectively, LANL) submit the following supplemental comments, information, and response to comments filed by Concerned Citizens for Nuclear Safety (CCNS) and others (collectively, the “citizen organizations”) on the proposed renewal of National Pollutant Discharge Elimination System (NPDES) Permit No. NM0028355, dated October 15, 2020 (“Comments”). The permit would authorize discharges to waters of the United States from a number of outfalls located at the Los Alamos National Laboratory (LANL), including Outfall 051 located at LANL’s Radioactive Liquid Waste Treatment Facility (RLWTF).

In their Comments, the citizen organizations present erroneous interpretations of the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), Environmental Protection Agency (EPA) regulations, and relevant case law. They also make a number of erroneous factual statements and assertions. LANL submits this response to those Comments to address the citizen organizations’ misinterpretations of law and factual errors.

## **I. Citizen Organizations Have Misconstrued the Applicable Law.**

The citizen organizations' Comments offer mistaken interpretations of the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the relationship between the two statutes, as they have in the past before the EPA Environmental Appeals Board and several federal courts. First, they erroneously assert that EPA lacks authority under the CWA to issue a discharge permit for outfalls that have not been utilized recently and/or continuously in the past and have not been described as meeting immediate future needs. Second, they mistakenly contend that the wastewater treatment unit (WWTU) exemption under RCRA applies only when the unit has been issued a discharge permit under the CWA. They string together these two misconceptions in order to construct an erroneous conclusion that EPA must deny LANL's application for a CWA permit, which will lead to a duty for the State of New Mexico to commence the permitting process for the RLWTF under RCRA. The discussion below addresses each point in turn.

### **A. EPA Has Clear Authority Under the CWA to Issue the Permit.**

The CWA provides that EPA "may...issue a permit for the discharge of any pollutant...upon condition that such discharge will meet" various statutory

limitations. 33 U.S.C. § 1342(a). This language only makes sense if it is forward looking – i.e., the issuance of a permit for future discharges that “will” comply with the statutory requirements. It would be pointless for Congress to authorize EPA to grant permission for discharges that have already occurred, and it would be impossible for the Agency to ensure that such past discharges “will meet” effluent limitations. Clearly, Congress envisioned that EPA would first grant permission, conditioned as directed in the statute, and that thereafter such discharges would be legally sanctioned.

The citizen organizations nonetheless appear to contend that there must be an imminent future discharge in order that EPA would have such authority. They maintain that “the CWA contains no authority to issue a permit for a discharge that ‘could occur,’ nor for a ‘potential’ or a ‘capability’ to discharge.” Comments at 24. They assert that the LANL intention to discharge “in event of unavailability of evaporation equipment” falls into these categories for which EPA is powerless to issue a permit. Nothing in the statute or EPA’s longstanding practice supports this contention.

The citizen organizations’ contention boils down to an argument that the applicant must show it has an unconditional intention to discharge in the near future, regardless of circumstances, or at least has demonstrated that a discharge is

likely, before EPA would have authority to grant the application. *Id.* We demonstrate below in Section II.A.1 that LANL satisfies even this extreme and erroneous test. But the statute does not mention such a limit on EPA's authority, and for good reason. Permit applicants who envision even the possibility of a discharge in unusual or rare circumstances are in fact meeting their responsibility to avoid unpermitted, and unlawful, discharges by ensuring they have permit authorization to cover such possibilities. It would be bizarre, to say the least, if Congress had imposed on EPA an obligation to assess the likelihood that circumstances would arise necessitating a discharge, and to issue a permit only when satisfied that the probabilities were sufficiently large. In the context of such a requirement, EPA could hardly justify enforcing the statute's prohibition on unpermitted discharges if it had previously deemed such discharges to be too remote to justify issuing a permit. The statutory scheme makes no provision for such a scenario.

The citizen organizations apparently reach their remarkable position by misapplying the holdings in two decisions from the Second and Fifth Circuits. Comments, 25-28. Those decisions have nothing to do with whether EPA has authority to issue a requested permit under the CWA.

In the first decision, industry petitioners challenged a provision in EPA’s programmatic regulation governing Concentrated Animal Feeding Operations (CAFOs) that had required CAFO owners and operators to apply for a CWA discharge permit if there was a “potential to discharge” from their operations. *Waterkeeper Alliance, Inc. v. U.S. Environmental Protection Agency*, 399 F.3d 486 (2d Cir. 2005). EPA had termed this requirement a “duty to apply,” and said the duty was based on a presumption that every CAFO has the potential to discharge. See Comments at 25, n. 42. Thus, the “duty to apply” was an EPA command requiring that all CAFOs must submit themselves to regulation that would control and constrain their means of operating their businesses. The “duty to apply” was itself an enforceable requirement, punishable by civil and criminal penalties independent of whether there had been any discharge of pollutants from the CAFOs. The Second Circuit concluded that the CWA conferred no authority on EPA to compel the filing of a permit application in the absence of an actual discharge. Because a mere potential to discharge lacks all of the elements triggering the statute’s prohibition against unpermitted discharges (actual addition of pollutants to navigable waters from a point source), the court said there was “no statutory obligation of point sources to seek or obtain a [CWA] permit in the first instance.” *Waterkeeper Alliance*, 399 F.3d at 505. Thus, there could be “no duty to apply” based on a mere potential to discharge, but the court never addressed



whether EPA could issue a permit in response to a voluntary permit application.

The court did not address that question because no petitioner had raised it.

Despite this context and with no regard for the limits of the case or controversy before the court, the citizen organizations focus on a single sentence in the Second Circuit’s decision, calling it a “categorical ruling”: the court said “the Clean Water Act gives EPA jurisdiction to regulate and control only actual discharges—not potential discharges, and certainly not point sources themselves.” *Id.* See Comments at 25-26. The citizen organizations work to utilize the court’s language – “jurisdiction to regulate and control” – in support of their theory that EPA’s permit issuance authority depends on the high likelihood of a discharge. The citizen organizations’ reliance on this passage misuses the court’s language and should be disregarded.

First, because no party had brought a challenge to EPA’s authority to issue permits (as opposed to its authority to compel submission of permit applications), the court had no occasion to address it, and interpreting the court’s language to cover EPA’s permit-issuance authority, as the citizen organizations endeavor to do, renders the court’s passage mere dictum. *Monod v. Futura, Inc.*, 415 F.2d 1170, 1173 (10th Cir. 1969) (“Because this issue was not properly before that court the conclusion is mere dicta and must be read as such.”) *Tokoph v. United States*, 774

F.3d 1300, 1303 (10th Cir. 2014) (“[D]icta are statements and comments in an opinion concerning some rule of law or legal proposition not necessarily involved nor essential to determination of the case in hand.”) (quoting *United States v. Villarreal-Ortiz*, 553 F.3d 1326, 1328 n.3 (10th Cir. 2009)). Reading a court’s language so as to reduce it to dicta can hardly be seen as a plausible interpretation.

Second, the context of the case leads to a different interpretation of the court’s language -- one that supports the common-sense notion that EPA has jurisdiction to require the “regulat[ion] and control” of private activity only when that activity would otherwise be unlawful (e.g., the prohibited discharge of a pollutant without a permit). The court was dealing with an EPA effort to compel CAFOs’ submission to a regulatory regime. EPA sought to unilaterally impose requirements on CAFOs, in the absence of pollutant discharges or any otherwise unlawful actions, by requiring them to seek a permit which, according to the regulations, inevitably would restrict the CAFOs’ operations. This is what the Second Circuit said could not be done, and the quoted passage stands for no more than that.

In the second decision, industry petitioners had challenged EPA’s attempt to draft around the limitation that had been imposed by the Second Circuit. *National Pork Producers Council v. U.S. Environmental Protection Agency*, 635 F.3d 738

(5<sup>th</sup> Cir. 2011). Instead of regulating a CAFO with the “potential to discharge,” EPA revised the CAFO regulation to enforce its “duty to apply” where a CAFO “proposes to discharge,” and EPA defined that phrase as being a CAFO “designed, constructed, operated, and maintained in a manner such that the CAFO will discharge....” *Id.*, 635 F.3d 738, 750. The Fifth Circuit rejected this attempt. As with the Second Circuit’s decision in *Waterkeeper*, the Fifth Circuit in *National Pork* addressed only the EPA’s authority to compel permit applications in the absence of actual discharges, not the Agency’s quite different authority to issue a CWA permit in response to a voluntary application.

Other prominent features of the statute also underscore that EPA has jurisdiction to issue permits where discharges might or might not occur depending on external circumstances and irrespective of the applicant’s aspirations or plans. EPA can exercise its jurisdiction whenever a person applies for a permit in order to remain in compliance with the law if circumstances make a discharge necessary. Nowhere is this authority better illustrated than in the storm water permitting provisions of the Act.

Storm water permitting represents a central feature of the Section 402 NPDES program. The statutory authority to permit future, episodic discharges of storm water has existed in the CWA since passage of the landmark 1972 Federal

Water Pollution Control Act Amendments, which later became known as the CWA. Pub. L. No. 92-500, 86 Stat. 816 (1972). The 1972 legislation established the Section 301 prohibition on unpermitted pollutant discharges and the Section 402 NPDES permit program. *Id.* at 844, 880. The same, original statutory commands and definitions that provide EPA's authority to permit discharges from LANL's Outfall 051 also provide the basis for permitting episodic storm water discharges.

In 1987, Congress enacted amendments to the CWA that required EPA to undertake rulemaking and implement comprehensive permitting for these pollutant sources. Water Quality Act of 1987, Pub. L. No. 100-4, 101 Stat. 7 (1987). While the 1987 amendments breathed new life into EPA's storm water permitting program, they did not augment the original statutory authority to deal with these future, episodic discharges. The amendments added subsection 402(p), which directs EPA to issue permits that will authorize future storm water discharges from municipal and industrial point sources in the event that precipitation, together with other circumstances at a facility, necessitate a discharge. Pub. L. No. 100-4, 101 Stat. 7, 69-70 (1987) (codified as amended at 33 U.S.C. § 1342(p)(2)(B)—(D)).

The CWA stormwater permitting program is vast. The National Academy of Sciences estimated in 2009 that EPA and delegated States had provided NPDES

storm water discharge authorizations to about 7,000 municipalities and 100,000 industrial facilities. Committee on Reducing Stormwater Discharge Contributions to Water Pollution, National Academy of Sciences, *Urban Stormwater Management in the United States* 36 (2009). In addition, NPDES storm water permit coverage is authorized for about 200,000 construction projects each year. *Id.* Storm water discharge permit holders are required to implement a variety of best management practices to retard, retain and control the runoff of storm water containing pollutants ranging from eroded soil at construction sites to petroleum and chemicals at industrial sites. *Id.*

Because the large number of industrial facilities requiring NPDES storm water authorizations could easily overwhelm State and federal permitting agencies, EPA has issued and periodically updates a Multi-Sector General Permit ("MSGP") and associated guidance documents to provide permit coverage for industrial dischargers. *Final 2015 MSGP Documents*, U.S. EPA, <https://www.epa.gov/npdes/final-2015-msgp-documents>. The MSGP provides that dischargers must employ control measures to "divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff to minimize pollutants" in their discharges. U.S. EPA, *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* 18, § 2.1.2.6 (2015). These measures must be specified in

the facility's Storm Water Pollution Prevention Plan ("SWPPP"). *Id.* at 33, § 5.2.4. And they must be described in detail in the discharger's permit application. *See* 40 C.F.R. § 122.26(c).

Detention basins are a typical and widely used example of control measures that capture sediment and other pollutants washed by precipitation runoff from the facility property. Detention basins are designed to impound storm water for a time sufficient for the pollutants to settle out and leave the storm water clean enough to be discharged by pumping the cleaner water near the basin's surface into receiving waters (thus, also creating capacity to contain runoff from the next storm). 3

Michael L. Clar, Billy J. Barfield & Thomas P. O'Connor, *Stormwater Best Management Practice Design Guide: Basin Best Management Practices* § 222 (2004). Detention basins are designed to control precipitation events of a certain size—e.g., the 25-year storm or the 50-year storm. *Id.* at § 2-2. In other words, if a future precipitation event does not exceed the “design storm,” the control measure will be sufficient to promote settling of pollutants, and will result in a discharge that meets water quality objectives.

Thus, the CWA authorizes EPA to issue permits authorizing future discharges—both expected discharges based upon approved design criteria (emptying the basin following a smaller storm), and unexpected discharges that

were neither planned for nor intended (overflow from a storm larger than the basin's design basis). Unexpected discharges can occur due to a number of factors beyond the discharger's control, but EPA is not required to deny a permit application because it believes the circumstances that would result in a discharge may be remote.

For storm water permitting, the relevant circumstances include extreme swings between periods of normal-to-heavy precipitation and periods of drought. It is not uncommon for extended periods of time to pass without any discharge pursuant to the discharge authorization granted by a storm water permit. *See generally Drought Monitoring*, National Weather Service, <https://www.weather.gov/ilm/drought>. Extreme and prolonged drought conditions can leave geographic areas with no precipitation for years, especially in the arid Western and Southwestern regions of the United States. *Id.* If prolonged periods devoid of discharges were to provide a basis for denying applications for renewal of NPDES permits, EPA's Section 402(p) permitting program would be in shambles. Unanticipated storms do occur, and when they do, there will be discharges.

For some years, LANL has occupied a similar situation here. It has designed the evaporation equipment to handle the currently expected volume of wastewater.

The operating principle has been that, if the evaporation equipment operates reliably and continuously, and if the wastewater volume does not increase due to a change in the Laboratory's mission, then Outfall 051 should not be needed. But if the evaporation equipment becomes unavailable due to malfunction or maintenance needs, and/or there is an increase in treatment demands, the LANL would need an authorization to discharge treated wastewater. LANL has made this perfectly clear in its submissions, as the citizen organizations acknowledge. Like the storm water discharger in an arid region, the operating plan has been that LANL might not discharge via Outfall 051 for extended periods, but LANL has consistently sought a permit that specifically authorizes the use of Outfall 051 in anticipation of circumstances that will make a discharge necessary -- a permit that will make that discharge lawful.

In sum, the CWA does not withhold authorization for EPA to permit future discharges in circumstances that, while they may be rare, have been anticipated and stated in the permit application. The citizen organizations' contrary interpretation of the statute should be rejected.

Furthermore, as explained below in Section II.A.1, LANL now envisions a more integral role for Outfall 051 than it has in the past. Whereas the outfall will remain as a back-up alternative when evaporation equipment is unavailable, as



before, the outfall will henceforth be utilized even when evaporation equipment is on line but influent volume is of a magnitude that operational efficiency makes it advisable to rely on both the evaporation equipment and Outfall 051 simultaneously for short or longer-term periods of time.

**B. The RLWTF is Exempt From RCRA Permitting Regardless of Whether EPA issues the Permit for Outfall 051.**

The citizen organizations also misunderstand the applicable legal requirements in arguing that EPA should not renew the CWA permit because EPA's issuance of the permit gives effect to the WWTU exemption from RCRA permitting. Comments at 4, 23-24. They point to 40 CFR § 264.1(g)(6), which exempts the tanks and associated ancillary equipment at the RLWTF from the substantive RCRA standards. But they never mention 40 CFR § 270.1(c)(2)(v), which provides that owners and operators of wastewater treatment units "are not required to obtain a RCRA permit." Both section 264 and section 270 contribute to the WWTU exemption, one for substantive RCRA requirements, and one for RCRA permitting. Both provisions point to section 260.10 for the definition of a "wastewater treatment unit." The key element of that definition is that such a unit must be "subject to regulation under either section 402 or 307(b)" of the Clean Water Act. 40 CFR § 260.10.

EPA has a long standing and consistent interpretation of what is meant by this definition in its regulation. Nearly 30 years ago, EPA's Office of Solid Waste and Emergency Response (OSWER) issued an official directive addressing the issue. Exemption from Permitting Requirements for Waste Water Treatment Units, OSWER 9522.1992(01), 1992 WL 754630 (January 16, 1992) (ATTACHMENT A). OSWER emphasized that:

It is important to note that it is not necessary that the Clean Water Act permits actually be issued for the units to be eligible for the RCRA exemption; it is sufficient that the facility be subject to the requirements of the Clean Water Act.

Id. at 1. Explaining further, OSWER made clear that "subject to regulation under Section 402" of the CWA covers facilities "which are permitted, were ever permitted, or should have been permitted under NPDES." Id.

OSWER went further, moreover, in explaining the exemption's applicability to so-called "zero discharge" facilities:

With regard to the question of a "zero discharge" facility, EPA would like to clarify the difference between a facility that produces no treated wastewater as a direct result of Clean Water Act requirements and units that are not required to obtain an NPDES permit because they do not discharge treated effluent. In the first case, the facility would have had a surface water discharge at one time, but has since eliminated the discharge as a result of, or by exceeding, NPDES or pretreatment requirements. Such facility would qualify for the waste water

treatment unit exemption under RCRA. In the second case, the facility never had a surface water discharge, and therefore was never subject to NPDES permitting or Clean Water Act requirements. The RCRA exemption is not available in these cases.

Id. at 2.

The Agency's directive settles the question of whether the RLWTF is exempt from RCRA permitting under 40 CFR §§ 270.1 and 260.10. Because LANL has held an NPDES permit for Outfall 051 in the past, and clearly was required to do so, the directive concludes that the exemption applies. And if, as the citizen organizations erroneously maintain, the RLWTF has "eliminated" its discharge by employing treatment technology (evaporation equipment) that meets or exceeds NPDES requirements, then the directive deems it a "zero discharge" facility, and it likewise is entitled to the exemption.

As the citizen organizations point out, in the past LANL also had erroneously assumed that continuous renewal of the NPDES permit for Outfall 051 was necessary in order for the WWTU exemption to apply. Comments at 5-7. LANL was mistaken then, just as the citizen organizations are mistaken now.

## **II. The Citizen Organizations' Comments Are Replete With Material Errors.**

Finally, the discussion below addresses a number of factual errors and misconceptions in the citizen organizations' Comments that bear on LANL's use

of other outfalls, LANL's flow estimates for Outfall 051, and statements lifted from prior LANL submissions to EPA.

### **A. Facts Concerning Discharges From LANL Outfalls.**

The citizen organizations' Comments contain numerous factual errors in describing discharges from various LANL outfalls. Those errors are corrected in the discussion below.

**1. Outfall 051.** The Comments state that, since 2010, LANL has made only a single discharge, on June 18, 2019, from Outfall 051. See, e.g., Comments at 4, 18. That is incorrect. LANL has discharged from Outfall 051 on June 18, 2019, March 10, 2020, and August 18, 2020. These discharges are documented in Discharge Monitoring Reports (DMRs) submitted to EPA. The citizen organizations' error may be due to their misplaced reliance on quarterly reports submitted to the New Mexico Environment Department (NMED) Ground Water Quality Bureau, which does not have jurisdiction over discharges to surface waters, rather than the DMRs LANL has submitted to EPA, which does.

The discharges in March and August of 2020 are especially noteworthy. As the citizen organizations acknowledge, LANL has made it clear that Outfall 051 is needed, and will be used, when necessary because the evaporation equipment is unavailable or when increased treatment needs arise that would not be handled in

the most efficient manner by utilizing the evaporation equipment alone. Comments at 12. Since the solar evaporation tanks are not in service, the key equipment is the mechanical evaporator. On March 10, 2020, LANL discharged via Outfall 051 because influent volumes made that advisable even though the mechanical evaporator was in service. On August 18, 2020, LANL utilized Outfall 051 because the mechanical evaporator was down for maintenance, including maintenance on the burners. Thus, Outfall 051 is being used precisely as LANL has said it would be – as a back-up or supplemental alternative when circumstances require. Had Outfall 051 not been permitted to discharge on those dates, LANL would have encountered a choice of either violating the CWA or curtailing operations at one of DOE’s most important laboratories.

The citizen organizations are plainly wrong in their repeated assertion that such events are “highly unlikely,” see Comments at 20. Discharges from Outfall 051 are not merely events that “could occur.” See Comments at 15. These discharges have occurred in the recent past, and they will occur as required by operations in the future, within the limits allowed by the permit.

In this regard, we note that LANL has recently adjusted its wastewater treatment operational plan so as to utilize Outfall 051 as an integral component of its operations, rather than solely as a backup, and discharges from the outfall are

expected to be more routine and frequent in the future. As explained in the Affidavit of Stuart A. McKernan, Facility Operations Director at LANL (ATTACHMENT B), with the evaporation tanks not in service, there will be occasions on which influent to the RLWTF will be significant enough that LANL will choose to use both the mechanical evaporator and Outfall 051 simultaneously. Outfall 051 thus provides both operational flexibility and back-up capability.

**2. Outfall 13S.** The Comments assert that “Outfall 13S did not discharge between October 2014 and September 2018 and analytical results were taken from operational flows.” This statement misrepresents the information provided in the 2019 NPDES Permit Re-Application. Outfall 13S is associated with the LANL sanitary wastewater system (SWWS) treatment facility. This facility and Outfall 13S are located at a lower elevation than all of the other outfalls at LANL, and the 2019 Permit NPDES Permit Re-Application clearly states that treated effluent from the SWWS can be discharged to Outfall 13S or pumped to the Power Plant Reuse Tank (located at a higher elevation). Treated SWWS effluent that is pumped to the Power Plant Reuse Tank is either discharged to Outfall 001 or treated for reuse at the Sanitary Effluent Reclamation Facility (SERF). Outfall 13S is routinely maintained, has an automatic flow meter, automatic sampler, and is fully capable of receiving SWWS treated effluent based upon demand, volume, and availability

of equipment to pump, store, discharge, and/or treat using facilities and equipment located at an elevation that is much higher than SWWS. The outfall provides operational flexibility for maintenance, repair, and replacement of equipment (i.e., pumps, SERF, Reuse Tank, Outfall 001) and serves as a critical backup should LANL be unable to pump to a higher elevation due to equipment failure or an increase in treated effluent volume. The analytical data provided on the 2019 NPDES Permit Re-Application Form 2C were from recently collected representative samples of the SWWS effluent before it was pumped to the Power Plant Reuse Tank or SWWS de-chlorination for discharge to Outfall 13S. The samples were collected on September 19-20, 2018 and February 22, 2019 (13S Fact Sheet Section 5.1).

**3. Outfall 03A027.** The Comments assert that “Outfall 03A027 did not discharge from September 2016 to at least May 2019, so older monitoring data was submitted.” Comments at 20, (quoting from 03A027 LANL Fact Sheet). This statement misrepresents the information provided in the 2019 NPDES Permit Re-Application. Outfall 03A027 is located approximately 30 feet downstream from Outfall 001 and continues to be capable of receiving SCC Cooling Tower blowdown discharges. In September 2016, the valving on the blowdown line was modified to allow discharge to Outfall 03A027, Outfall 001, the Reuse Tank at the

Power Plant for recycle at SERF, or the SWWS treatment plant (03A160 Fact Sheet Section 2.2 and Attachment B) based upon demand, volume, and outfall/equipment availability. The 2019 NPDES Permit Re-Application Form 2C included analytical data from DMR submittals and representative samples collected on August 29, 2018 and February 4, 2019 from a sample port on the SCC Cooling Tower blowdown line (03A160 Fact Sheet Section 5.1).

**4. Outfall 03A113.** The Comments assert that LANL does not discharge or propose to discharge from Outfall 03A113. Comments at 20-21. This conclusion apparently was derived from a statement in the Fact Sheet explaining that the cooling towers served by this outfall are not currently in use. Id. at 21. The Comments misrepresent the information provided in the 2019 NPDES Permit Re-Application. Outfall 03A113 receives stormwater and cooling tower blowdown from TA-53-293 and TA-53-952 (Fact Sheet Attachment B). The TA-53-952 cooling tower discharges routinely to the outfall as shown in Fact Sheet Attachment D and the various Discharge Monitoring Reports Submitted for the current permit term of October 2014 - Present. The outfall discharged 529,234 gallons in 2017, 436,400 gallons in 2018, 198,530 gallons in 2019, and 154,390 gallons as of October 30, 2020. Cooling Tower TA-53-293 is in operational



standby and is currently not discharging to the outfall, but the permit application proposes this as a future discharge source to the outfall.

**5. Outfall 03A160.** The Comments erroneously assert that LANL does not propose to discharge from this outfall. Id. at 20-21. The statement from the Fact Sheet quoted by the citizen organizations plainly states that LANL intends to discharge from this outfall if an operational upset prevents the discharge of cooling water to the SWWS. The cooling tower blowdown discharged to Outfall 03A160 was routed to SWWS in May of 2018 to support the recycling of water through the SERF facility and to allow the NHMFL to construct a water treatment system and perform rehabilitation of the cooling system (i.e., replace heat exchangers, tank cleaning, tank integrity testing). The 2019 NPDES Permit Re-Application proposed discharges to that outfall based upon historical data and the use of the outfall as an operational backup. The proposed water treatment system mentioned in the permit and the cooling system rehabilitation were completed in the summer of 2020. A representative sample of the cooling tower blowdown was recently collected, and those supplemental data were provided as an attachment to the Triad Comments on the Draft Industrial and Sanitary Wastewater NPDES Permit No. NM0028355 published for public comment on November 30, 2019.

**6. Outfall 05A055.** The Comments assert that Outfall 05A055 did not discharge between October 2014 and September 2018; that it has not discharged since November 2007, and that the analytical results were taken from operational flows. These statements misrepresent the information provided in the 2019 NPDES Permit Re-Application. Outfall 05A055 is associated with the High Explosives Waste Water Treatment Facility (HEWTF) and is located in a remote part of LANL. The 2019 NPDES Permit Re-Application clearly states “The treatment process is designed to circulate the wastewater through the process multiple times prior to storage in the post treatment tanks and discharge to either electric evaporators or to Outfall 05A055” (05A055 Fact Sheet Section 2.2.). Outfall 05A055 is fully capable of receiving treated HEWTF effluent based upon demand, volume, and availability of evaporation equipment. The outfall provides operational flexibility for maintenance, repair and replacement of equipment (i.e., evaporator), and serves as a critical backup should LANL be unable to evaporate effluent. There will be occasions when the volume of effluent or equipment availability (i.e., evaporator) will require discharge to Outfall 05A055. This is demonstrated in the discharge monitoring reports submitted to the EPA for previous discharges to the outfall. The 2019 NPDES Permit Re-Application Form 2C included analytical data from representative samples of the effluent that were

collected on September 26, 2018 and January 24, 2019 (05A055 Fact Sheet Section 5.1).

### **B. Renewal Application Flow Estimates.**

The citizen organizations' Comments assert that LANL's estimates of average and maximum flow rates at Outfall 051 "are inaccurate and are misstatements, since discharges from Outfall 051 ended in 2010 (with a single exception, termed an operational readiness discharge)." Comments at 18. As demonstrated by the discussion above, the premise of this assertion – that discharges from Outfall 051 ended in 2010 – is incorrect. The flow-rate estimates are correct; the 2019 NPDES Permit Re-Application provided volumes and frequencies on Form 2C Section II.C that were estimated based upon the total capacity of the two treated effluent tanks (20,000 gallons) at the RLWTF and a proposed operational scenario where one or both of those tanks discharged four days a week and 12 months a year. The proposed discharge volume, therefore, was an estimated average volume of 20,000 gallons/day or an estimated maximum volume of 40,000 gallons/day.

### **C. Misplaced Reliance on Documents Associated With Prior Permits.**

The citizen organizations' Comments make extensive references to snippets of language from LANL submissions and associated documents dating back decades,

and they emphasize the fact that LANL requested that some of its prior submissions be considered part of the 2019 re-application due to the complex nature of the NPDES Permit Re-Application and potential need for supplemental information. Comments at 19. In seeking to ensure that all available data are accessible to EPA, LANL obviously did not intend for the Agency to rely on outdated or inaccurate information where more recent data are available. Information submitted in connection with the 2019 Re-Application supersedes the data provided in previous applications to the extent there is conflict and/or overlap.

**ATTACHMENT A**  
**TO LANL SUPPLEMENTAL**  
**INFORMATION**

OSWER Directive, OSWER 9522.1992(01) (1992)

OSWER 9522.1992(01), 1992 WL 754630

Environmental Protection Agency

Office of Solid Waste and Emergency Response  
OSWER Directive

?? 16, 1992

\*1 Mr. Thomas W. Cervino, P.E.  
Colonial Pipeline Company  
Lenox Towers  
3390 Peachtree Road, N.E.  
Atlanta, GA 30326

Dear Mr. Cervino:

This letter is in response to your August 9, 1991 correspondence requesting a clarification of the conditions under which waste water treatment units qualify for an exemption from RCRA permitting requirements. In your letter you explained that Colonial Pipeline Company has several locations that generate waste waters that are hazardous under the toxicity characteristic, and you asked whether a RCRA permit would be required for a new treatment unit that you are considering.

The primary reason for the waste water treatment exemption is to avoid imposing duplicative requirements pursuant to both a NPDES permit and a RCRA permit for the same unit. As you are aware, in order for a unit to qualify for this exemption contained in 40 CFR §264.1(g)(6), it must:

- (1) Be part of a waste water treatment facility that is subject to regulation under either Section 402 or 307(b) of the Clean Water Act;
- (2) Receive, treat, or store influent wastewater; or generate, accumulate, treat, or store a wastewater treatment sludge; and,
- (3) Meet the definition of tank or tank system in 40 CFR §260.10.

The main question that you raised concerns the first criteria; i.e., which units are considered subject to the Clean Water Act. As you are aware, the Agency provided some discussion of this requirement in 53 FR 34080 (September 2, 1988) which states that: "the wastewater treatment unit exemption is intended to cover only tank systems that are part of a wastewater treatment facility that (1) produces a treated wastewater effluent which is discharged into surface waters or into a POTW sewer system and therefore is subject to the NPDES or pretreatment requirements of the Clean Water Act, or (2) produces no treated wastewater effluent as a direct result of such requirements".

It is important to note that it is not necessary that the Clean Water Act permits actually be issued for the units to be eligible for the RCRA exemption; it is sufficient that the facility be subject to the requirements of the Clean Water Act.

Based on a review of the information provided, EPA has determined that any of the treatment systems (including the proposed treatment unit) at the Colonial Pipeline facilities which are currently permitted, were ever permitted, or should have been permitted under NPDES, all meet the first test of the Section 264.1(g)(6) exemption. The key issue is whether the treatment system ever had a discharge to surface water, and thus was ever permitted (or should have been permitted) under NPDES. If there was never a discharge to surface waters, then the exemption criteria is not satisfied. You also mentioned that some of your facilities employ waste water treatment systems which are regulated in accordance with other applicable state laws, rules, and regulations. Without more specific information regarding these state requirements and permits, EPA cannot address whether

these facilities would qualify for the exemption. However, as discussed above, the exemption in the federal regulations would only be available if the state requirements stem from the identified sections of the Clean Water Act.

\*2 With regard to the question of a “zero discharge” facility, EPA would like to clarify the difference between a facility that produces no treated wastewater as a direct result of Clean Water Act requirements and units that are not required to obtain an NPDES permit because they do not discharge treated effluent. In the first case, the facility would have had a surface water discharge at one time, but has since eliminated the discharge as a result of, or by exceeding, NPDES or pretreatment requirements. Such facility would qualify for the waste water treatment unit exemption under RCRA. In the second case, the facility never had a surface water discharge, and therefore was never subject to NPDES permitting or clean Water Act requirements (53 FR 34080). The RCRA exemption is not available in these cases. (We should point out that the language you referred to on Page 2 of the May 22, 1984 memo on zero discharge has been further refined and clarified by recent program policies and interpretations.)

There is another management option that my staff has discussed with you on the phone. That approach would be to treat your waste water in tank units pursuant to the generator accumulation exemption of 40 CFR §262.34. This provision allows generators of hazardous wastes to treat or store such wastes in tanks or containers for short periods of time (i.e., 90 days) without obtaining a RCRA permit, provided that all the conditions of §262.34 are met, including compliance with specified tank or container standards in 40 CFR Part 265. In many cases air strippers may be considered tank units under RCRA and might be eligible for this exemption. Of course, as long as the treated waste water meets a hazardous waste listing description or exhibits a hazardous waste characteristic it must continue to be managed as a hazardous waste.

If you have facility-specific questions, please contact individuals in the appropriate EPA Regional Offices. For Region III (Philadelphia), contact Ms. Susan Sciarra at (215) 597-7259 and for Region IV (Atlanta), contact Ms. Beth Antley at (404) 347-3433. Should you have further questions about this letter, please contact Glenn Strahs of my staff at (202) 260-4782.

Sincerely,

Sylvia K. Lowrance  
Director  
Office of Solid Waste

cc:

Kathy Nam, OGC

EPA RCRA Branch Chiefs, Regions I-X

Barbara Simcoe, ASTSWMO

OSWER 9522.1992(01), 1992 WL 754630

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**ATTACHMENT B**  
**TO LANL SUPPLEMENTAL**  
**INFORMATION**

Affidavit of Stuart A. McKernan  
Triad National Security LLC  
Los Alamos National Laboratory



## AFFIDAVIT OF STUART A. MCKERNAN

1. I, Stuart A. McKernan, am an employee of Triad National Security, LLC (Triad) at Los Alamos National Laboratory (LANL or the Laboratory). I have been employed at LANL since 1998.
2. I am currently employed as the Facility Operations Director (FOD) for nuclear and support facilities at LANL Technical Areas (TA) 03, 50, 55, and 63. I have served in this capacity for approximately nine months. Before taking this position, I was the Deputy Facility Operations Director (DFOD) at these facilities for the previous 12 years. My other laboratory experience has been in Operations, Safety Basis, and Engineering at TA-55, one of the primary generator sites supported by the TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF).
3. As a FOD, I am responsible for managing and overseeing operations at the TA-50 RLWTF. I am responsible and accountable for facility-related engineering, maintenance, and treatment operations, as well as RLWTF safety, environmental, and waste services.
4. I am familiar with Outfall 051 located at RLWTF. The Laboratory has been operating the RLWTF under NPDES Permit #NM0028355 (NPDES Permit) since 1978. The permit is issued by the U.S. Environmental Protection Agency (EPA) to the U.S. Department of Energy (DOE) and Triad as co-permittees for LANL. The NPDES Permit authorizes the Laboratory to discharge from eleven (11) sanitary and/or industrial outfalls, including the discharge of treated radioactive liquid wastewater from the RLWTF through Outfall 051 into Effluent Canyon, a tributary to Mortandad Canyon. The NPDES Permit has been renewed multiple times and the last permit was re-issued on August 12, 2014. The last renewal application was submitted on March 26, 2019.
5. RLWTF is a mission-critical facility that treats low-level and transuranic liquid wastewater from processes at generator facilities throughout the Laboratory. The Laboratory is authorized under the NPDES Permit to discharge wastewater from the facility through Outfall 051, the Mechanical Evaporator System (MES), and/or the Solar Evaporation Tanks (SET). All three discharge options are available for use as needed to support RLWTF operations. Outfall 051 is an integral component of RLWTF, and is required to maintain operational flexibility and readiness to meet the Laboratory's mission demands. Outfall 051 is not used only as a back-up, but also has been and will be used routinely in conjunction with the MES to support the Laboratory's operational priorities, such as when influent to the RLWTF makes such use advisable, and to confirm operability. In addition, as in the past, Outfall 051 will remain available in the event the MES is taken out of service for repair, replacement, or maintenance. Outfall 051 is especially critical due to the fact that the SET is not currently available for use.
6. Due to COVID-19 concerns, I am unable to meet a notary in person to have this Affidavit notarized. All of the information above is true, accurate, and complete.

FURTHER AFFIANT SAYETH NAUGHT.

Date: December 7, 2020

STUART MCKERNAN (Affiliate)  
Digitally signed by STUART MCKERNAN (Affiliate)  
Date: 2020.12.07 15:30:11 -07'00'

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Stuart A. McKernan