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March 12, 2009

Via Federal Express Overnight Mail

U.S. Environmental Protection Agency Clerk of the Board Environmental Appeals Board 1341 G Street, N.W. Suite 600 Washington, D.C. 20005

Re: Petition for Review, NPDES Permit No. NM0030759

To Whom It May Concern:

Enclosed for filing please find an original and five copies of a Petition for Review of Los Alamos National Laboratory NPDES Permit No. NM0030759, and an original and three copies of supporting exhibits (we have included only three copies of the exhibits because the combined pages of the exhibits exceed 30 pages). In addition, we have enclosed an extra copy of the Petition for Review and an extra copy of the exhibits to be date stamped and returned in the enclosed envelope.

Please do not hesitate to contact me if you have any questions or need any additional information.

Sincerely,

Megan Anderson

BEFORE THE ENVIRONMENTAL APPEALS BOARD U.S. ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D.C.

In Re: Los Alamos National Laboratory NPDES Permit No. NM0030759 NPDES Appeal No. 09-

PETITION FOR REVIEW OF NPDES PERMIT FOR LOS ALAMOS NATIONAL LABORATORY ISSUED BY EPA REGION 6 AND REQUEST FOR ORAL ARGUMENT

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Dated: March 12, 2009

I. INTRODUCTION

Pursuant to 40 C.F.R. § 124.19(a), Amigos Bravos, Concerned Citizens for Nuclear Safety, Embudo Valley Environmental Monitoring Group, Honor Our Pueblo Existence, New Mexico Acequia Association, Partnership for Earth Spirituality, J. Gilbert Sanchez, Kathy Sanchez, and Tewa Women United (hereinafter "Petitioners") respectfully submit this petition for review for review of NPDES permit no. NM0030759 issued by Environmental Protection Agency ("EPA") Region 6 on February 13, 2009 for Los Alamos National Laboratory ("LANL"). A copy of the Permit is attached as Exhibit 1 (hereinafter "the Permit" or "LANL's Permit").

Petitioners also request oral argument in this matter. This individual Permit, which has been over four years in the making, was issued to a large Department of Energy facility that is home to both legacy waste from over 50 years of weapons production as well as ongoing pollution from current weapons production and other research. Given the complicated nature of the site and the issues involved, Petitioners believe oral argument would assist the Environmental Appeals Board ("this Board") in decision making.

A. Threshold Procedural Issues

This petition is timely filed within 30 days of issuance of the Permit. Petitioners have standing to file a petition for review with the this Board: Petitioners participated throughout the Permit application process through meetings with EPA Region 6 representatives, through

¹ The Permit was issued to both the U.S. Department of Energy, owner of Los Alamos National Laboratory, and Los Alamos National Security, LLC, manager and operator of Los Alamos National Laboratory. For purposes of this petition for review, Petitioners refer to the copermittees collectively as "LANL." **Error! Main Document Only.**

testimony at the public hearing, and by submitting comments to EPA during the public comment period on the draft permit (written comments attached as Exhibit 2). The issues raised in this petition were either raised with EPA during the public comment period, or arise from significant changes from the draft permit to the final Permit. *See* 40 C.F.R. 124.19(a). Consequently, this Board has jurisdiction to hear Petitioners' Request.

B. Issues Presented for Review

- 1. Whether a compliance schedule is allowed in this case given that compliance schedules are impermissible under the CWA; the compliance schedule is not appropriate due to LANL's failure to make good faith efforts to achieve compliance with previous permits; the compliance schedule is not issued for "new or revised" water quality standards; the compliance schedule does not include enforceable actions leading to compliance with effluent limitations and water quality standards; and the compliance schedule does not ensure compliance "as soon as possible."
- 2. Whether the individual Permit issued to LANL ensures compliance with water quality standards given that the Permit fails to ensure EPA oversight or involvement with the Site Discharge Pollution Prevention Plan, which outlines monitoring and Best Management Practices to be used, fails to require representative or adequate monitoring, fails to include numeric limitations, and fails to consider the effects of global warming on this area.

C. Statement of Facts

LANL is located in Los Alamos County approximately 60 miles north-northeast of Albuquerque, New Mexico and 25 miles northwest of Santa Fe, New Mexico. LANL is

bordered by Bandelier National Monument to the south, the community of White Rock and the Rio Grande river to the east, San Ildefonso Pueblo to the northeast, the community of Los Alamos to the north, and the Jemez Mountains and the Santa Fe National Forest to the west.

The 40-square mile LANL facility is situated on the Pajarito Plateau, which consists of a series of finger-like mesas separated by seven deep west-to-east oriented watersheds with streams that all flow towards and into the Rio Grande. These seven distinct watersheds on LANL property, include (from north to south): (1) the Los Alamos and Pueblo Canyon watershed; (2) the Sandia Canyon watershed; (3) the Mortandad Canyon watershed; (4) the Pajarito Canyon watershed; (5) the Water/Canon de Valle watershed; (6) the Ancho Canyon watershed; and (7) the Chaquehui Canyon watershed.

For the past sixty plus years, LANL's nuclear weapons testing, production, and industrial activities, including high explosives testing and chemical and material science research, have generated an enormous amount of solid, hazardous, and radioactive waste. The waste generated by LANL includes high explosives such as RDX, HMX, TNT; volatile organic compounds and semi-volatile organic compounds; metals such as arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, molybdenum, selenium, silver, zinc; inorganic compounds such as ammonia, nitrate, and fluoride; perchlorate; and PCBs ("contaminants"). See Compliance Order On Consent, In the Matter Of: The United States Department of Energy and the Regents of the University of California, at 5 (Mar. 1, 2005)² (hereinafter "RCRA Consent

² This Order was entered into entered into by NMED, the Department of Energy and University of California to address violations the New Mexico Hazardous Waste Act, the New Mexico Solid Waste Act, and the Resource Conservation and Recovery Act.

Order"); Final Site Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico, 4-38-4-40 (May 2008).

Following rain or snow melting events, stormwater picks up contaminants from approximately 1,300 to 1,405 sites and runs off into the soils, surface water, and shallow groundwater of the Lab's seven watersheds and canyons eventually traveling down-gradient to the Rio Grande. These storm water runoff events are well-documented by LANL, the New Mexico Environment Department ("NMED"), and EPA. According to LANL, stormwater runoff "is the principal agent for moving Laboratory-derived constituents off-site and possibly into the Rio Grande." Environmental Surveillance at Los Alamos During 2004, at 157 (hereinafter "2004 Environmental Surveillance"). Such runoff can "redistribute sediment in a streambed to locations far downstream from where a release or spill occurs." *Id.* at 158. "Plutonium has moved down Pueblo Canyon, through Los Alamos Canyon, off-site across San Ildefonso Pueblo lands, and reaches the Rio Grande near the Otowi Bridge." *Id.* at 168 (citations omitted). Other, "[n]onradiological constituents detected at significant concentrations in the Los Alamos Canyon watershed include [PCBs], benzo(a)pyrene, mercury, copper, lead, and zinc." *Id.* at 170.

The individual NPDES Permit recently issued by EPA for LANL, and which is the subject of this petition, is the latest in a long history of regulation of LANL's stormwater discharges. LANL first sought coverage under a Multi-Sector General Permit ("MSGP") in 1992, 17 years ago. Coverage under the MSGP was renewed in 1997 and 2000. LANL's

coverage under the MSGP expired on December 23, 2005, but was administratively extended pending the issuance of the individual NPDES permit.³

In the course of reviewing LANL's compliance with the MSGP, EPA determined that LANL was violating its permit. See In the Matter of: University of California, NPDES Permit No. NMRO5A734, Findings of Violation and Order for Compliance, Docket No. CWA-06-2005-1734 (Mar. 14, 2005) (attached as Exhibit 3). As a result, on February 3, 2005, LANL and EPA entered into a Federal Facility Compliance Agreement ("FFCA"), which required, among other things, that LANL apply for an individual NPDES permit by December 31, 2004, and to submit any materials to make that application complete by March 31, 2005. In the Matter of United States Department of Energy and the Los Alamos National Laboratory, Federal Facilities Compliance Agreement, NPDES Nos. NMR05A735, NMR05A734, and NM0028355, Docket No. CWA-06-2005-1701 (Feb. 3, 2005) (hereinafter "FFCA") (attached as Exhibit 4).

LANL submitted its first application for an individual permit in December 2004. LANL then submitted updates in March 2005, October 2007, and December 2007. EPA publicly noticed the issuance of a draft permit on January 26, 2008. LANL then submitted additional supplements to its application in January 2008, February 2008, and March 2008. A public hearing was held on March 4, 2008. Many Petitioners attended and gave comments at the hearing. On April 25, during the official comment period, Petitioners submitted detailed

³ However, given the issuance by EPA of a new Multi-Sector General Permit, see 73 FR 56572-01 (Sept. 29, 2008), Petitioners are not clear as to whether LANL can still be covered by the old MSGP or whether LANL has applied for coverage under the new MSGP. Amigos Bravos submitted a Freedom of Information Act ("FOIA") request to the Department of Energy over ten months ago, on May 9, 2008, which sought information regarding LANL most recent Notices of Intent to be covered by the MSGP, but Amigos Bravos has yet to receive a response from the Department of Energy to that FOIA request.

comments on the permit to EPA. On September 11, 2008, EPA scheduled a meeting with Petitioners to discuss "substantial changes to the draft permit." EPA did not provide Petitioners with any notice of the changes before the meeting and although EPA gave Petitioners a one-page summary of the changes to the draft permit at the meeting, EPA did not provide Petitioners with a copy of the revisions to the permit itself. The final Permit was issued on February 13, 2009.

II. ARGUMENT

A. The LANL NPDES Permit Should Be Remanded Because It Includes An Inappropriate Compliance Schedule, Which Allows LANL An Additional Seven Years To Comply With Water Quality Standards, Despite LANL's Failures To Comply For The Last 17 Years.

1. The inclusion of the schedule of compliance is illegal because the CWA does not allow for compliance schedules after July 1, 1977.

The Federal Water Pollution Control Act (hereinafter "CWA") unequivocally creates a mandatory duty to comply with enforceable water quality based effluent limitations ("WQBELs") by July 1, 1977:

In order to carry out the objectives of this chapter, there shall be achieved . . . not later than July 1, 1977, any more stringent limitations necessary to meet water quality standards . . . established pursuant to any State law . . . or required to implement any applicable water quality standard established pursuant to this chapter.

CWA § 301(b)(1)(c), 33 U.S.C. § 1311(b)(1)(C) (emphasis added). As a result of Congress's inclusion of this clear deadline, numerous courts have held that neither the EPA nor a state has the authority to extend the deadline for compliance set forth in the CWA. See State Water Control Board v. Train, 559 F.2d 921, 924 (4th Cir. 1977) ("Section 301(b)(1)'s effluent limitations are, on their face, unconditional."); Bethlehem Steel Corp. v. Train, 544 F.2d 657, 661 (3rd Cir. 1976) cert. denied sub nom. Bethlehem Steel Corp. v. Quarles, 430 U.S. 975 (1977) ("Although we are sympathetic to the plight of Bethlehem and similarly situated dischargers,

examination of the terms of the statute, the legislative history of [CWA] and the case law has convinced us that July 1, 1977 was intended by Congress to be a rigid guidepost."). This point is reinforced by Congress's adoption of CWA section 301(i), which specifically allowed for a limited extension of the July 1, 1977 deadline for publicly owned treatment works. CWA § 301(i)(1)-(2), 33 U.S.C. § 1311(i)(1)-(2); see also United States v. Homestake Mining Co., 595 F.2d 421, 427-28 (8th Cir. 1979). Had Congress wanted to extend the date for compliance for other categories of dischargers, it could have done so for them in a similar fashion. CWA regulations also mandate compliance by CWA deadlines: "Any schedules of compliance under this section shall require compliance as soon as possible, but not later than the applicable statutory deadline under the CWA." 40 C.F.R. § 122.47; see also 40 C.F.R. § 124.55(f) ("Nothing in this section shall affect EPA's obligation to comply with § 122.47. See CWA section 301(b)(1)(C).").

The CWA makes no exception to the deadline for compliance even if the water quality standards used to set the WQBELs are established after July 1, 1977. Rather, Congress anticipated that new water quality standards would be set by requiring states to review and revise their water quality standards every three years. *See* CWA § 303(c), 33 U.S.C. §1313(c). Nevertheless, Congress did not draw a distinction between WQBELs designed to meet water quality standards adopted before July 1, 1977 and those after that date. Congress's requirements are consistent with the goals of the CWA: to eliminate the discharge of pollutants into navigable waters by 1985 and wherever possible to make the nations' waters fishable and swimmable. CWA § 101, 33 U.S.C. § 1251. Although we have unfortunately failed to meet those goals yet, the CWA still requires compliance with these mandates in furtherance of Congress's stated goals.

Compliance schedules are likewise inappropriate even if a state has allowed for them in its water quality standards. The CWA expressly prohibits a state from adopting or enforcing an effluent limitation that is less strict than that required by the CWA. 4 CWA § 510, 33 U.S.C. § 1370. Although EPA has cited a decision of this Board to justify its use of compliance schedules where a state has included a provision for compliance schedules in its water quality standards, this Board did not, and could not, rewrite the CWA to allow for compliance schedules. See In the Matter of Star-Kist Caribe, Inc., 3 E.A.D. 172, 1990 WL 324290 (1990). Indeed, in that decision, this Board held that "the Clean Water Act does not authorize EPA to establish schedules of compliance in the permit that would sanction pollutant discharges that do not meet applicable state water quality standards." Id. Although, in dicta, this Board noted that compliance schedules would be appropriate if the state water quality standards provided for them, it did not reach the question of whether states have authority to include a provision for compliance schedules in their water quality standards, which would effectively repeal CWA section 301(b)(1)(C). The CWA does not authorize states to allow for compliance schedules; rather the CWA explicitly states that water quality standards "shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based on such uses." CWA § 303(c)(2)(A), 33 U.S.C. § 1313(c)(2)(A). A provision authorizing compliance schedules does not fit within either of these criteria. Indeed, it would self-contradictory for a water quality standard to both establish a designated use and water quality criteria and then suspend the application of those standards.

⁴ In this case, New Mexico is a non-delegated state and thus EPA is the issuing agency for all NPDES permits in New Mexico except for those governed by tribal standards.

2. Even if this Board decides that schedules of compliance are not per se prohibited by the CWA, the compliance schedule in this Permit is not permissible because it is not issued for pollutants that are new or revised in

the last three years, it is not appropriate pursuant to EPA policy, and because it does not ensure compliance as soon as possible.

If this Board should decide that compliance schedules can be included in this Permit,

situations. 40 C.F.R. § 122.47(a). First, compliance schedules are available only when

necessary to comply with new or revised water quality standards. Id. Second, a compliance

EPA regulations require that a schedule of compliance may be issued only in certain, limited

schedule can be issued only "when appropriate." Id. Finally, a schedule of compliance must

ensure compliance "as soon as possible" Id. New Mexico's water quality standards similarly

limit the use of compliance schedules:

It is the policy of the Commission to allow on a case-by-case basis the inclusion

of a compliance schedule Such schedule of compliance will be for the purpose of providing a permittee with adequate time to make treatment facility modifications necessary to comply with water quality based permit limitations

determined to be necessary to implement new or revised water quality standards. Compliance schedules . . . shall be written to require compliance at the earliest

practicable time.

N.M. Admin. Code § 20.6.4.12(J) (emphasis added). Thus, under both the federal or state

standard, compliance schedules are appropriate only if necessary to comply with new or revised

standards, they are appropriate on a case-by-case basis, and they require compliance as soon as

possible. Considering these factors, as discussed in more detail below, the compliance schedule

included in LANL's NPDES Permit is impermissible.

a. EPA cannot include a compliance schedule in LANL's Permit because the applicable water quality standards are not new or revised within the last

three years.

As noted above, both EPA regulations and New Mexico allow for compliance schedules

only to allow a discharger time to comply with a new or revised water quality standard. See 40

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C.F.R. § 122.47(a)(2) ("a schedule of compliance shall be available only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised less than three years before recommencement of discharge"); N.M. Admin. Code § 20.6.4.12(J) ("compliance schedule will be for the purpose of providing a permittee with adequate time . . . to comply with water quality based permit limitations determined to be necessary to implement new or revised water quality standards"). The last revision of New Mexico's water quality standards became effective on May 23, 2005, almost four years ago. New Mexico Register, Volume XVI, Number 9 (May 13, 2005). Although the standards were not approved by EPA until December 29, 2006, the standards became effective in New Mexico in 2005, and dischargers were put on notice of their applicability at that point. As such, a compliance schedule for standards that were adopted more than three years ago goes against the plain language of EPA regulation.

Furthermore, even if this Board were to find that the standards were not adopted until 2006, and thus fall under the "new or revised" benchmark, EPA must still consider whether the specific standards for which it granted a compliance schedule were in fact revised in the last Triennial Review, or whether they have not been revised for some time. In fact, many of the standards for which LANL was granted an extended amount of time to comply have not been revised. *Compare e.g.*, N.M. Admin. Code § 20.6.4.900(L) (2002) (and associated wildlife habitat numeric criteria, for example, mercury; selenium, total recoverable) with N.M. Admin. Code § 20.6.4.900(G) (2005) (and associated wildlife habitat numeric criteria, for example selenium, total recoverable).

b. The compliance schedule is not appropriate because LANL has had adequate time to comply under prior permits, LANL has not made good

faith efforts to comply, modifications to treatment facilities already should have been made, and thus LANL should not need additional time to comply.

EPA regulations on compliance schedules were interpreted by EPA in an EPA review of and memorandum about compliance schedules in EPA Region 9. See California Permit Quality Review Report on Compliance Schedules (Oct. 31, 2007) ("EPA Report"); see also Memorandum from James Hanlon to Alexis Strauss (May 10, 2007) ("Hanlon Memo") (attachment to EPA Report) (attached as Exhibit 5). The Hanlon Memo laid out four factors to determine whether a compliance schedule is "appropriate" under 40 C.F.R. § 122.47(a): (1) "how much time the discharger has already had to meet the WQBEL(s) under prior permits"; (2) "the extent to which the discharger has made good faith efforts to comply with the WQBELs and other requirements in its prior permit(s);" (3) "whether there is any need for modifications to treatment facilities, operations or measures to meet the WOBELs; and (4) "if so, how long would it take to implement the modifications to treatment, operations or other measures; or whether the discharger would be expected to use the same treatment facilities, operations or other measures to meet the WQBEL as it would have used to meet the WQBEL in its prior permit." Hanlon Memo at ¶ 8. In addition, the EPA Report notes that "an adequate discussion of the 'appropriateness' of the compliance schedules in light of the factors identified [in the Hanlon Memo]" is necessary to determine whether a compliance schedule is in fact appropriate. Finally, the CWA itself allows for a compliance schedule only if EPA can ensure that the compliance schedule will lead to compliance with an effluent limitation to meet water quality standards by the end of the compliance period. Applying these factors to the Permit at issue reveals that EPA's inclusion of a compliance schedule in LANL's Permit was not appropriate.

First, LANL has already had 17 years to comply with its stormwater permits, and has failed to do so. Moreover, LANL has had four years to comply with the FFCA. In short, and as discussed more below, it is not a lack of time that is hindering LANL's ability to comply.

Second, LANL unfortunately has not made good faith efforts to comply with WQBELs in its prior permits. Indeed, LANL's performance has been abysmal. As noted above, after a review of LANL's compliance with the MSGP, in 2005, EPA issued an Administrative Order, "Findings of Violation and Notice of Compliance," which discussed LANL's violations of its NPDES permit, and outlined the necessity for LANL to comply. At the same time, EPA and LANL entered into the FFCA, which set forth "a schedule to ensure compliance with the NPDES storm water permitting program." FFCA at ¶ 1. Despite these drastic measures by EPA, LANL is still failing to comply with the requirements of the FFCA and the MSGP under which it now operates. LANL did not complete an application with EPA for an individual permit, as required by the FFCA, until some months *after* EPA had issued a draft permit, and more than three years after the date mandated by the FFCA. Instead, LANL continued to draw the process out with numerous submittals over several years.

More importantly, LANL is not complying with the requirements of the MSGP and FFCA to ensure that its discharges do not cause or contribute to a violation of water quality standards. As an example, monitoring data from LANL of discharges from LANL property continue to show PCBs at levels that are tens of thousands times the water quality standard.⁶ EPA itself acknowledges the exceedances: "information in the record, including storm water

⁵ LANL has also been failing to comply with the RCRA Consent Order. *See* Exhibit 24 to Petitioners' Comments on Draft Permit.

⁶ See Exhibit 12 to Petitioners' Comments on Draft Permit (data taken from LANL database).

monitoring data collected under the FFCA and 2005 RCRA Consent Order, as well as the permittees' own water quality database, indicate numerous exceedances of New Mexico water quality standards for the listed pollutants at the points of discharge." Permit, Response to Comments (hereinafter "RTC") at 9. Although such discharges by themselves are egregious, they are compounded by the fact that some of the waters into which LANL discharges are already listed on the CWA 303(d) list as impaired for PCBs. 2006-2008 State of New Mexico Integrated 303d List, 99. In addition, LANL is failing to meet the requirements of the MSGP and FFCA by failing to conduct representative monitoring, conduct the required monitoring at all

Third, the compliance schedule is inappropriate because although it is likely that LANL still needs to install modifications to meet WQBELs, this factor appropriately ties into the fourth factor: "whether the discharger would be expected to use the same treatment facilities, operations or other measures to meet the WQBEL as it would have used to meet the WQBEL in its prior permit." Despite the fact that LANL has not installed adequate BMPs or eliminated the sources of pollution at its facility so as to limit discharges, it has had more than adequate time to do so, and indeed was required to do so by both the MSGP and the FFCA. Thus, LANL's failure to do so should not be seen as a justification for an extended schedule of compliance. On the contrary, it illustrates that no matter how much time LANL is given, it has failed to comply. Such extensions could go on forever if LANL continues to fail to act, and then asks for additional time

⁷ See also Exhibit 12 to Petitioners' Comments on Draft Permit.

in some instances, and failing to submit reports as required.⁸

⁸ Petitioners have also pursued a lawsuit against LANL for these violations. *Amigos Bravos et al.* v. *Department of Energy et al.*, No. 08-CV-137 (D. N.M. filed Feb. 7, 2008).

to act because it has not yet completed its previous obligations. Such circular logic cannot justify a compliance schedule in this case.

Furthermore, EPA cannot support a finding that a compliance schedule in this case is reasonable, as required by the EPA Report and Hanlon Memo. EPA attempts to justify the compliance schedule by relying on the time LANL will need to complete BMPs and the complexity of the site. Permit RTC, 24. The CWA, however, does not allow for such considerations. See, e.g. Oklahoma v. E.P.A., 908 F.2d 595 (10th Cir. 1990) rev'd on other grounds Arkansas v. Oklahoma, 503 US 91 (1992); ("EPA 'is under a specific obligation to require that level of effluent control which is needed to implement existing water quality standards without regard to the limits of practicability."") citing S.Rep. No. 414, reprinted in 1972 U.S. Code Cong. & Admin. News 3668, 3710.

Furthermore, EPA fails to consider the other factors laid out in the Hanlon Memo, in particular, whether LANL has already had time to comply and whether it has made good faith efforts to do so. Rather, EPA dismisses those permits by pointing out that this Permit differs significantly from the previous permits in that it takes a site-specific approach. *Id.* While this Permit may take a slightly different approach, the ultimate requirement of all of LANL's permits have been the same: compliance with water quality standards. MSGP, § 3.3, 65 Fed. Reg. 64746 (Oct. 30, 2000) (discharges "must not be causing or have the reasonable potential to cause or contribute to a violation of a water quality standard."); FFCA at ¶ 24 ("DOE shall comply with the applicable surface water quality standards...."). Indeed, the MSGP states, similarly to the individual Permit: "Pollutants in storm water discharges from industrial plants may be reduced using the following methods: Eliminating pollution sources, implementing BMPs to prevent pollution, using traditional storm water management practices, and providing end-of-pipe

treatment." MSGP at I(B). The FFCA also creates a similar structure, requiring BMPs to be installed where there are exceedances of water screening action levels (wSALs). FFCA at ¶ 24. Thus, EPA's argument that this Permit is materially different from previous permits is disingenuous, as it is and has been LANL's responsibility to implement necessary measures to meet permit limits and water quality standards. Indeed, this Permit acknowledges that fact by noting that the permittee should have "flexibility to assess all Sites as a whole to determine the most efficient and effective way to proceed." *Id.* Thus, EPA's suggestion that LANL should be granted more time to comply, solely because LANL—one of the premier research facilities in the United States—has been unable to implement an apparently necessary site-specific approach on its own, cannot be reasonable.

Finally, "to grant a compliance schedule in an NPDES permit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record" that the compliance schedule includes "an enforceable sequence of actions or operations leading to compliance with an effluent limitation" to meet water quality standards. Hanlon Memo at 2; CWA § 502(17), 33 U.S.C. § 1362(17); CWA § 301 (b)(1)(C), 33 U.S.C. § 1311(b)(1)(C). The compliance schedule in this case does not meet this test. The compliance schedule in the Permit includes a sequence of actions, consisting of a series of BMPs, starting with basic BMPs for all sites, followed by "additional, expanded or better-tailored BMPs at any Sites shown to be discharging pollutants in excess of applicable target action levels established in the permit." Permit, Part I, Page 1. Target action levels are set at the same levels as water quality criteria. *Id*.

The problem with this approach is that although LANL would be in violation if it failed to move to the next stage BMP, there is no requirement as to what BMP shall be used at any stage. As the target action levels are not enforceable, LANL could install "additional" BMPs at

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IN RE: LOS ALAMOS NAT'L LAB. NPDES PERMIT NO. NM0030759 every required juncture and never achieve compliance with target action levels, and therefore fail to meet water quality standards. As EPA wrote the draft permit, it appeared that the final BMP would require LANL to "take decisive actions to totally ELIMINATE either the source of pollutants (e.g., clean-up), the exposure of pollutants (e.g., caps), or the discharge of pollutants (e.g., collection or total retention)." Draft Permit, Part I at 6 (emphasis in original). Arguably, a final requirement to eliminate the source of pollutants would constitute an enforceable effluent limitation leading to compliance with water quality standards as required. CWA § 502(17).

However, as the final Permit is written, there is only a requirement to install "Stage III" or "final BMPs" if discharges remain above target action levels. Permit, Part I at 9. "The Permit does not require 'total elimination' of the source, discharge or exposure of pollutants. . . ."

Permit RTC at 9. If the "final BMPs" still fail to result in meeting target action levels, there is no further requirement for LANL to act to ensure that discharges do not impair water quality.

Permit, Part I at 8-11. Remarkably, at this point, the Permit instead allows LANL to request that EPA determine whether LANL has "achieved compliance with the requirements of the permit" for that site so that it can be removed from the Permit. Permit, Part I at 11. Given the stated language of the Permit, achieving compliance with the requirements can only mean that LANL has implemented some fashion of BMP at each stage. Permit, Part I at 8-11. Thus, it is not clear on what grounds EPA could deny the request even if the BMP was inadequate and the discharges were still above target action levels.

Furthermore, the Permit does not specify what LANL could do in a situation where it decides (if possible) that that LANL has not "achieved compliance." Nor is there any discussion as to whether EPA has considered whether compliance with such open-ended BMPs will result in an achievement of water quality standards. As such, the compliance schedule set forth in

LANL's Permit does not include, as required by the CWA, an *enforceable* sequence of actions

leading to compliance with water quality standards. See Hanlon Memo at 2.

c. The compliance schedule does not ensure compliance "as soon as possible"

because LANL has already had years to take steps to modify or install treatment facilities and EPA has not provided adequate justification as to

why additional time is needed.

The compliance schedule in LANL's Permit, in addition to being inappropriate, fails to

ensure compliance as soon as possible, as mandated by both EPA regulation and New Mexico

water quality standards. 40 C.F.R. § 122.47(a)(1); N.M. Admin. Code § 20.6.4.12(J). EPA must

be able to justify that the compliance schedule is achieved as soon as possible. However,

nothing in the Permit or Response to Comments makes that demonstration. Instead, EPA makes

only conclusory statements about the Permit structure: "permit is intended to ensure compliance.

. . via the BMP coupled with State WQS equivalent target action levels approach through which

all discharges from [Solid Waste Management Units] will be gradually brought into compliance

with state WQS." Permit, RTC at 15 (emphasis added). EPA determined, without providing

support, that "it is both appropriate and necessary to provide a reasonable period of time for the

permittee to evaluate the various sites and design and install the most effective BMPs."

Although considering the time needed to modify or install treatment facilities is listed as

a factor to determine whether the schedule ensures compliance as soon as possible, see Hanlon

Memo at 3, as discussed above, LANL should already have performed many of these actions.

Thus, assuming LANL should get to start over at square one is inappropriate and not justifiable

as a mechanism to ensure compliance as soon as possible. EPA's justification for doing so fails

to account for the fact that requirements to install BMPs are not new to this Permit; the FFCA

expressly required LANL to implement BMPs where there were exceedances of wSALs, similar

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to the structure of the Permit now at issue. FFCA ¶ 24; see generally MSGP at I(B). As the New Mexico Environment Department succinctly stated in its comments: "This permit is intended to be a transition from the FFCA, not a new beginning." NMED, State Certification, LANL, NPDES Permit No. NM0030759 (May 8, 2008) (attached as Exhibit 6). EPA's failure to incorporate any of the work done under past permits fails to ensure compliance as soon as possible.

In sum, the compliance schedule included in LANL's individual NPDES Permit is fatally flawed. First, compliance schedules are illegal pursuant to the CWA. Second, a compliance schedule cannot be issued for water quality standards that were issued more than three years ago. Third, a compliance schedule is not appropriate for LANL: LANL has had 17 years to comply with its stormwater permits and has failed to do so; it has not engaged in good faith efforts to comply, resulting in an EPA investigation and compliance order; had it complied with its prior obligations, it would no longer need to install modifications to control stormwater discharges; EPA cannot justify this compliance schedule as reasonable, given LANL's history of noncompliance; and finally, EPA cannot demonstrate that this compliance schedule includes "enforceable effluent limitations" leading to compliance with water quality standards. Fourth, the compliance schedule fails to require enforceable effluent limitations that will lead to compliance with water quality standards. Finally, there is no analysis or justification for this compliance schedule ensuring compliance as soon as possible; rather it seems to grant LANL a clean slate despite 17 years of history and noncompliance. Consequently, the use of a compliance schedule in this case is neither appropriate nor allowable under the CWA, and Petitioners respectfully request that this Board grant review of this issue.

B. The LANL NPDES Permit Should Be Remanded Because EPA Fails to Ensure Compliance With Water Quality Standards.

The CWA and CWA regulations require that "no permit may be issued: (a) When the conditions of the permit do not provide for compliance with the applicable requirements of CWA, or regulations promulgated under CWA." 40 C.F.R. § 122.4(a); CWA § 402(a)(1), 33 U.S.C. \S 1342(a)(1)-(2); see also \S 122.4(d) ("no permit may be issued . . . (d) When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States."); Waterkeeper Alliance, Inc. v. U.S. E.P.A. 399 F.3d 486, 498 (2nd Cir. 2005) ("The Act further provides that the EPA "shall prescribe conditions for such permits to assure compliance with [all applicable requirements, including effluent limitations].""). EPA has failed to meet this duty in the LANL Permit. First, EPA fails to ensure that specific requirements of the Site Discharge Pollution Prevention Plan ("SDPPP") are included within the Permit itself. As such, there is no way to ensure that the Permit will comply with the requirements of the CWA. Second, the monitoring required in the Permit is not representative and therefore cannot serve as the basis to ensure that LANL is complying with water quality standards. Third, the monitoring required in the Permit is not adequate to ensure compliance with the requirements of the CWA. Fourth, including numeric limitations in the Permit would help ensure that water quality standards are met. Finally, the Permit must take into account global warming so that monitoring requirements are adequate.

1. The Permit As Issued By EPA Does Not Assure Compliance With The Requirements Of The CWA Because It Does Not Include The Requirements Of The Site Discharge Pollution Prevention Plan Within The Permit And Does Not Provide For EPA Approval Of That Plan.

It is difficult to discuss the specifics of whether monitoring requirements in the Permit ensure compliance with water quality standards because the majority of this information is not

included in the Permit. Instead, EPA allows LANL to outline all of these specifics, including site descriptions, receiving waters, summaries of potential pollutant sources, descriptions of control measures, schedules for BMP installation, and monitoring and inspection procedures, in a Site Discharge Pollution Prevention Plan ("SDPPP"). Permit, Part I at 12-13. This plan, however, is not part of the Permit and is not subject to EPA approval. As such, it is unclear how the Permit ensures compliance with the requirements of the CWA when EPA does not have any oversight as to what BMPs will be implemented for the various sites, whether those BMPs, in particular the Stage III BMPs, will be sufficient to assure compliance with the CWA and, in particular, water quality standards. See Waterkeeper Alliance, 399 F.3d at 499 (failure to provide for agency review of Nutrient Management Plans, which provided plan for specific BMPs, violated CWA requirements to assure that permit terms provided for compliance with CWA); Environmental Defense Center, Inc. v. U.S. E.P.A., 344 F.3d 832, 856 (9th Cir. 2003); ("[S]tormwater management programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity to ensure that each such program reduces the discharge of pollutants to the maximum extent practicable."). As such, by allowing LANL to develop a SDPPP, without "meaningful review" by EPA, EPA is ignoring its duty to include provisions in the Permit to provide for compliance with the applicable requirements of CWA and water quality standards of the state. See 40 C.F.R. § 122.4(a), (d).

2. Monitoring Requirements In The Permit Do Not Ensure Representative Monitoring As The Collection Sites Are Often Very Large In Area, And Monitoring Equipment May Not Always Function Properly.

A permit cannot provide for compliance with water quality standards when monitoring requirements in the permit do not provide results that are representative of the sites to be monitored. Furthermore, CWA regulations expressly require that: "Samples and measurements

taken for the purpose of monitoring shall be representative of the monitored activity." 40 C.F.R. § 122.41(j).

The Permit issued to EPA does not ensure representative monitoring. First, the Permit allows the use of Site Monitoring Areas ("SMAs"), which are often very large areas (in some cases exceeding 50 acres), and in many cases include more than one regulated site. Permit Part I at 5. Theoretically, SMAs are designed so that runoff from the area included drains to a single point where a sample is taken. This method, however, has the potential to result in substantial dilution of the samples. Furthermore, the method allows for collection of only one sample for multiple sites. Additionally, the collection mechanisms at these sites do not appear to be adequate, given the size of the area of collection. EPA has not provided any analysis justifying the use of SMAs or collection mechanisms for multiple sites, noting only that "Sites covered under this Permit vary widely in characteristics." Permit, RTC at 19. For this reason, EPA does not believe it appropriate to establish fixed restrictions on SMAs." Id. EPA goes on to note that it has authority, when the SDPPP is issued, to "require permittees to modify sampling . . . for more representative samples, if necessary." Id. Petitioners, however, are not able to find a place in the Permit that allows EPA to make such changes to the SDPPP. In any event, without this information up front, it is difficult to see how the Permit conditions are ensuring representative monitoring as required by CWA regulations.

3. Monitoring Requirements In The Permit Are Not Adequate Given That Not All Pollutants Of Concern Are Included And There Are Not A Sufficient Number Of Samples To Ensure Compliance.

In addition to not being representative, the monitoring required by EPA in the Permit is also inadequate to ensure compliance with water quality standards. First, the Permit does not provide for an adequate number of confirmation samples, either while the Site is still being

addressed, or after final BMPs have been implemented. Second, confirmation monitoring is sometimes waived altogether, although no justification is provided explaining that such an exemption will still ensure compliance with water quality standards. Third, the Permit does not provide for monitoring of all constituents of concern.

First, the Permit does not provide for sufficient confirmation monitoring to ensure compliance with water quality standards. After each BMP installation, the Permit requires only two confirmation samples, and only one for PCBs. Permit Part I at 8-9. Petitioners question whether two confirmation samples can possibly identify problems with BMPs and whether those BMPs are holding up. Particularly egregious is the requirement that only one confirmation sample be taken for PCBs at each stage. PCBs have been a source of concern at LANL for many years. As noted above, LANL has shown exceedances tens of thousands times over the limit; in one case, the exceedance was 38,000 times over the applicable human health standard.

In addition to being a concern to determine whether the BMPs are adequate, if confirmation sample results are below target action levels, the Permit allows LANL to cease monitoring for that site and/or pollutant for the remainder of the Permit. Permit, Part I at 8.

Thus, in the case of PCBs, for example, if LANL manages to collect one sample below target action levels, it can essentially drop that site off the Permit altogether. Given the intensity of storm events in New Mexico, it is highly likely that BMPs could fail during a large storm event. However, under the Permit structure, those failures could go unnoticed. Furthermore, it is not at all clear that one or even two samples adequately shows that the BMPs are functioning so as to remove the site altogether.

Second, the Permit allows EPA to waive confirmation monitoring altogether in cases where LANL implements capping or total retention BMPs. Permit, Part I at 9. Although

Petitioners support the use of capping or retention, Petitioners do not believe eliminating confirmation monitoring will ensure compliance with water quality standards. As discussed above, BMPs may fail, and given the history and extent of contamination at LANL, removing requirements to ensure that BMPs are adequately containing discharges, without any confirmation whatsoever, does not meet the goals or requirements of the CWA.

Third, the Permit fails to require monitoring for all pollutants that are constituents that may violate water quality standards. The Permit sets forth a table of required monitoring for sites included in the Permit. Permit, Appendix B. However, the language of the Permit allows LANL to avoid sampling for parameters that previous monitoring data, including those collected under the FFCA, showed no exceedances. Permit, Part I at 10. Thus, if samples under the FFCA did not show exceedances, LANL could be exempt from further confirmation monitoring for many of the parameters required by the Permit. Again, there is no analysis regarding whether allowing LANL to discontinue monitoring will ensure compliance with water quality standards.

4. Including Numeric Limitations In The Permit Would Help Ensure That Water Quality Standards Are Achieved.

The final Permit, instead of including numeric effluent limitations, includes a series of BMPs and confirmation monitoring to determine whether samples exceed target action levels.

EPA states that it "believes that these enhanced pollution prevention techniques [BMPs] can only

⁹ In addition to the more general failure to require monitoring, the Permit seems to leave out constituents of concern. For example, there are only two High Explosives listed in the Permit. However, LANL has identified almost 80 established explosives at just one Technical Area. *See* Excerpt from WT-5 Safe Operating Procedure 1.1.0, LA-UR-08-07293 (attached as Exhibit 7).

¹⁰ Petitioners are particularly troubled by EPA's allowance of monitoring data from the FFCA, while considering requirements to implement BMPs under the FFCA and instead allowing LANL to start anew under this Permit. *See* Section II(A)(2)(b) and (c).

act to improve existing storm water and surface water quality." Permit, RTC at 14. In addition, EPA cites to 40 C.F.R. section 122.44(k)(2), where it has interpreted the CWA to allow for non-numeric limitations where numeric limitations are infeasible. Thus, EPA asserts the Permit "is intended to ensure compliance with water quality standards (WQS) via the BMP coupled with State WQS equivalent target action levels approach through which all discharges . . . will be gradually brought into compliance with State WQS." *Id.* at 15. In short, EPA's conclusion is that BMPs coupled with target action level screening will "gradually" "act to improve" water quality.

The fundamental flaw with EPA's argument, as explained above in reference to compliance schedules, is that the CWA does not allow EPA to issue a permit which will eventually ensure compliance with water quality standards. Rather, it expressly disallows EPA from issuing a permit that does not contain terms that will ensure compliance with water quality standards. See § 122.4(d); 40 C.F.R. § 122.4(a); CWA § 402(a)(1), 33 U.S.C.§ 1342(a)(1)-(2). Furthermore, EPA's search for language that justifies its "better than before" approach has it citing to a section of the CWA that does not apply to this Permit. EPA cites to CWA section 402(p)(3)(B)(iii), 33 U.S.C. § 1342(p)(3)(B)(iii), for the proposition that EPA has "the authority to determine what pollution controls are appropriate for municipal storm water discharges . . . to reduce the discharges of pollutants to the maximum extent practicable." Permit, RTC at 14 (emphasis added). This Permit, however, is not a permit for municipal discharges. Rather it is an individual industrial permit, for which the CWA requires: "Permit for discharges associated with industrial activity shall meet all applicable provisions of this section and section 1311 of this title." CWA § 402(p)(3)(A), 33 U.S.C. § 1342(p)(3)(A) (emphasis added). Thus, the applicable section does not allow for the more compromised approach of reduction to the

"maximum extent practicable," but rather requires strict compliance with the CWA's mandate to require "any more stringent limitation, including those necessary to meet water quality standards." CWA § 301(b)(1)(C), 33 U.S.C. § 1311(b)(1)(C).

Given the requirements of the CWA, numeric effluent limitations are necessary to stop pollution from migrating from Solid Waste Management Units and Areas of Concern into the regional aquifer and the Río Grande – both of which are sources for drinking water. In addition, numeric limits are essential for ensuring the protection of New Mexico State Water Quality Standards. See Ackels v. U.S. Envtl. Protection Agency, 7 F.3d 862, 865 (9th Cir. 1993) ("the Clean Water Act requires the permits to meet state water quality standards); see also Defenders of Wildlife v. Browner 191 F.3d 1159, 1163 (9th Cir. 1999). "Accordingly, the economic and technological restraints are not a valid consideration." Ackels, 7 F.3d at 865-66; see also Oklahoma v. Envtl. Protection Agency, 908 F.2d 595 (10th Cir. 1990) rev'd on other grounds Arkansas v. Oklahoma, 503 US 91 (1992); ("EPA 'is under a specific obligation to require that level of effluent control which is needed to implement existing water quality standards without regard to the limits of practicability."") citing S.Rep. No. 414, reprinted in 1972 U.S. Code Cong. & Admin. News 3668, 3710.

In this case, numeric effluent limitations are essential for ensuring strict compliance with water quality standards and for determining if the permittee is in compliance with its permit requirements. 33 U.S.C. § 1342(p)(3)(A); 33 U.S.C. § 1311; 40 C.F.R. § 122.44(d). A panel of eight experts convened by the California State Water Board determined in a 2006 report entitled *The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities* found that "numeric

limitations are feasible for some industrial categories."11 The panel found that numeric limits are

appropriate for existing facilities where there is water quality monitoring data available. LANL is

an existing facility and there is certainly a large amount of water quality monitoring data on

hand. Therefore, it is appropriate, and in fact necessary for the protection of water quality

standards, for numeric limits to be included as a permit requirement. Specifically, the maximum

target levels (MTL) and the average target levels (ATL) in the draft permit should be revised to

incorporate a margin of safety and then be converted to numeric permit limits. As demonstrated

above, LANL has already shown an unwillingness to apply the appropriate resources to control

storm water discharges, which is apparent by the fact that both EPA and NMED have had to

create separate, site-specific enforcement documents (the FFCA and RCRA Consent Order) to

force LANL to comply with existing permits, regulations, water quality standards and

enforcement mechanisms.

Indeed, LANL has failed to meet several milestones under NMED's Consent Order. In a

2008 letter to DOE, NMED details the factors that they perceive to be at play in this

noncompliance: "NMED recognizes that insufficient budget is an important factor in driving

further noncompliance. It is, however, by no means the only factor, as disagreements over

technical approach, inadequate project oversight, management breakdowns, and mistakes in

execution have emerged as other important factors." More recently, the DOE Inspector

General reported that DOE was experiencing delays in meeting deadlines outlined in the cleanup

11 Exhibit 23 to Petitioners' Comments on Draft Permit.

¹² Exhibit 24 to Petitioners' Comments on Draft Permit.

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order with NMED for LANL.¹³ Furthermore, DOE did not certify the documents necessary to support its funding requests to Congress until last November, even though the Consent Order has been in place for over three years. Stormwater pollutants are consistently discharged at levels above water quality standards (in the case of PCBs, up to 38,000 times over water quality standards), despite numerous attempts, over many years, by both federal and state officials to bring LANL into compliance. All of this leads to the conclusion that the time has come to require clear-cut conditions, such as numeric effluent limitations, with fines for noncompliance, to ensure that the more than ten impacted streams at LANL and the Rio Grande downstream are protected from future discharges.

5. The Permit Does Not Ensure Compliance Because It Fails To Consider The Impacts Of Global Warming On New Mexico's Hydrological System

New Mexico is already seeing the impacts of climate change on its hydrological system. In 2006, the New Mexico Office of the State Engineer and the Interstate Stream Commission published a report entitled *The Impact of Climate Change on New Mexico's Water Supply and Ability to Manage Water Resources*. ¹⁴ This report outlines the impacts that we can expect to see on New Mexico's water resources including an increase in the intensity of flood events. The DOE Oversight Bureau in their 2006 Annual Report, ¹⁵ notes that the LANL canyons "experienced the highest storm water flows ever recorded." The Permit should take into the predicted increase in intensity of storm events by making sure that monitoring requirements take

¹³ The Department's Progress in Meeting Los Alamos National Laboratory Consent Order Milestones, available at: http://www.ig.energy.gov/documents/IG-0793.pdf, and hereby incorporated by reference.

¹⁴ See Exhibit 35 to Petitioners' Comments on Draft Permit.

¹⁵ See Exhibit 17 to Petitioners' Comments on Draft Permit, at 16.

into account large storm events so that they may be adequately monitored so as to ensure compliance with water quality standards.

In sum, the conditions included in this Permit do not ensure compliance with the CWA or that water quality standards will be met. First, given the present language of the Permit, EPA cannot ensure that the conditions of the Permit will ensure compliance because most of the specifics are to be included in a SDPPP, which is not subject to EPA approval. Second, monitoring required by the Permit is not representative and thus cannot show that the Permit is ensuring compliance. Third, monitoring requirements are inadequate to ensure compliance. Fourth, numeric limitations are required to ensure that LANL meets water quality standards. Finally, the Permit must take into account the impacts of global warming to ensure that requirements in the Permit are adequate to ensure compliance.

III. CONCLUSION

For the foregoing reasons, Petitioners respectfully request that this Board grant review of the Permit to determine: (1) whether the compliance schedule included in the Permit is permissible; and (2) whether the conditions of the Permit ensure compliance with the CWA.

Respectfully Submitted:

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