

Permit

NPDES PERMIT NO. NM0028355
RESPONSE TO COMMENTS

RECEIVED ON THE SUBJECT DRAFT NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM(NPDES) PERMIT IN ACCORDANCE WITH REGULATIONS
LISTED AT 40CFR124.17

APPLICANT: University of California
Management Contractor for Operations
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

and

U.S. Department of Energy
Los Alamos Area Office
Los Alamos, NM 87544

ISSUING OFFICE: U.S. Environmental Protection Agency
Region 6
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PERMIT ACTION: Final permit decision and response to comments received on the
~~draft reissued NPDES~~ permit publicly noticed on January 29, 2000

DATE PREPARED: October 16, 2000

Unless otherwise stated, citations to 40CFR refer to promulgated regulations listed at Title 40,
Code of Federal Regulations, revised as of 7/1/99.

SUBSTANTIAL CHANGES FROM DRAFT PERMIT

There are substantial changes from the draft reissued permit publicly noticed on January 29,
2000.

- (A) Limits were recalculated based on changes to State water quality standards.
- (B) Monitoring requirements have been added to determine the source of radioactive constituents treated at the radioactive liquid waste treatment facility.
- (C) The sampling location for Outfall 13S has been clarified.



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- (D) Language requiring enhancement and maintenance of wetlands to prevent movement of contaminants has been removed from the permit.
- (E) Monitoring requirements for perchlorate have been added to the permit.
- (F) Limits for RDX have been revised.
- (G) Exceedances of State water quality standards based limitations are required to be reported to NMED.
- (H) Sample types for pH monitoring have been changed to grab.
- (I) The permit specifies that total toxic organics limits at Outfalls 051, 05A055, and 05A097 do not include dioxin, pesticides, or polychlorinated biphenols.
- (J) Tiered limits were added to Outfall 13S to account for planned increases in inflow.
- (K) A compliance schedule has been added for total residual chlorine limits.
- (L) Total residual chlorine limits at Outfall 13S do not apply when the effluent is discharged to the reuse line.

STATE CERTIFICATION

Letter, James Davis (NMED) to Gregg Cooke (EPA), dated March 28, 2000

DISCUSSION OF STATE CERTIFICATION

As conditions of certification the New Mexico Environment Department (NMED) requires that the permit is updated to reflect recently revised State water quality standards for total residual chlorine, mercury, and selenium. The permittee also requested incorporation of the new standards in the final permit.

COMMENTS RECEIVED ON DRAFT PERMIT

Letter, David Gurule, P.E. (Department of Energy) to Evelyn Rosborough (EPA), dated February 28, 2000.

Letter, Steven Rae (Los Alamos National Laboratory) to Evelyn Rosborough (EPA), dated March 28, 2000.

RESPONSE TO COMMENTSISSUE NUMBER 1

NMED commented that PCB monitoring previously conducted by the permittee was accomplished using EPA approved methods with a minimum quantification level of 1 ug/l. However, the applicable water quality standard is now 0.014 ug/l. Although the permittee's test results show no detectable PCBs, the facility has many areas which have been contaminated from past activities. NMED recommends once per year monitoring for PCBs at all outfalls using the more sensitive EPA method 1668.

RESPONSE

Although EPA can allow use of a method which is not listed in 40 CFR Part 136, the Agency is not in the practice of requiring one permittee to use methods which are not commonly available and are not required to be used by other permittees. Alternate test methods are usually allowed when there is matrix interference caused by other parameters in the effluent which reduce the reliability of the test method normally used. Available data do not support the existence of matrix interference necessitating the need for an alternate test method and do not show a potential to exceed water quality standards.

ISSUE NUMBER 2

NMED commented that the permit should include a prohibition of the discharge of PCBs at Outfall 001 based on effluent limitations guidelines for the Steam Electric Power Generating Point Source Category.

RESPONSE

The Steam Electric Power Generating Point Source Category Effluent Limitations Guidelines do not apply to the Outfall 001 discharge because the facility does not primarily engage in generation of electricity for distribution and sale (see 40 CFR 423.10). New Mexico's numeric Water Quality Standards for PCBs have been applied to Outfall 001. The new limits will control potential discharges of PCBs and protect water quality.

ISSUE NUMBER 3

NMED commented that the permit should require the permittee to provide information on the DMR verifying that the source of tritium at Outfall 051 is not accelerator produced. The permit only regulates accelerator produced tritium but the Radioactive Liquid Waste Treatment Facility (RLWTF) treats waste water from other sources which is mixed with accelerator waste water. NMED stated that "Acceptable Knowledge" is used by Los Alamos National Laboratory (LANL) to segregate and characterize the different radiological components of the waste stream and should be usable as a means to distinguish between accelerator and non-accelerator produced tritium discharged at Outfall 051.

RESPONSE

LANL produces an annual report on the various sources of radioactive constituents discharged to the Radioactive Liquid Waste Treatment Facility. The final permit requires the permittee to submit that report to EPA Region 6 and NMED. In addition, requirements have been added to require internal monitoring of influents to the RLWTF to determine the quantity of constituents attributable to different sources.

ISSUE NUMBER 4

NMED commented that it is unclear whether LANL plans to discharge to Canada del Buey at Outfall 13S because the line is presently plugged. The discharge to Canada del Buey is listed in the permit application as 13S(b), but there is no 13S(b) outfall in the permit. NMED also states that LANL personnel have reported that no discharge has occurred at the outfall.

RESPONSE

Although LANL has not discharged from Outfall 13S to Canada del Buey since startup of the TA-46 SWS facility the permittee has requested that the permit continue to allow the option to discharge to Canada del Buey. The ability to discharge to Canada del Buey is necessary in case of an emergency situation such as pump failure which would halt LANL's ability to discharge to the re-use line. Since the permit requires monitoring at the Parshall flume which is located downstream of any treatment and prior to routing to the re-use line or Canada del Buey, no additional outfall designation is warranted. The permit will ensure compliance with all applicable technology based and water quality based limitations. This discharge is appropriately designated as being made from Outfall 13S.

ISSUE NUMBER 5

NMED commented that monitoring at the location specified for Outfall 13S will not produce samples which are representative of the volume and nature of the discharge. Piping exists which could allow LANL to bypass the chlorine contact chamber and route effluent directly from the clarifier to the holding pond and then to Canada del Buey. NMED has noted water and residue in the outfall box at Canada del Buey which may suggest possible storm water intrusion or drainage from the sludge drying beds uphill of the discharge point. Additionally, NMED noted that diagrams of the treatment plant show an SO₂ diffuser after the sampling point when discharge is made to Canada del Buey. If there is treatment after the sampling point, sampling is probably not representative of the discharge.

RESPONSE

The sampling location has been clarified in the final permit. EPA believes sampling accomplished after the final treatment unit and prior to discharge to Canada del Buey will be representative of the quantity and quality of the final effluent. Although piping exists which could allow a bypass of the chlorine contact chamber, such a bypass is generally prohibited by the permit (see Part III.B.4) and is required to be reported. EPA has examined the outfall box. The water and residue described by NMED do not appear indicative of any significant storm water inflow or drainage from the sludge drying beds. Part III.B.6. of the permit requires that

sludge is disposed of in a manner which prevents it from being discharged to a navigable water. Discharge of sewage sludge from the drying beds to Canada del Buey would be in violation of that requirement. The sludge drying beds are consistent with that requirement and are designed to prevent runoff of sludge to Canada del Buey or the outfall box.

ISSUE NUMBER 6

NMED commented that flow measurements taken at the Parshall Flume at Outfall 13S do not provide data which show the quantity of effluent discharged to the reuse line and subsequently to other canyons versus Canada del Buey. Effluent routed to the holding pond through the chlorine contact bypass from the clarifier would not be measured. Also, NMED stated that measurements taken at the flume may not be accurate. The schematic diagrams for the plant show that the effluent passes through two 90° bends just prior to the flume while available information suggests that Parshall flumes should not be placed at a right angle to flowing streams.

RESPONSE

Available information suggests that the Parshall Flume has been properly calibrated and will accurately measure the discharge rate to the reuse line or Canada del Buey at Outfall 13S. Discharges of reuse water to other canyons will be measured at the outfalls to those canyons. Although piping exists which could be used to bypass the chlorine contact chamber, such an action is generally prohibited by the permit.

ISSUE NUMBER 7

NMED suggested a language clarification for Outfall 13S which would read:

Treated effluent from the SWSC plant shall be controlled utilizing Best Management Practices, control, enhance and maintain wetlands such that offsite movement of any contaminants held by wetlands associated with discharges from these outfalls are minimized.

LANL also commented on the language in the permit requesting clarification stating that there is currently no discharge to Canada del Buey and it therefore presently does not have wetlands.

RESPONSE

Discharges authorized at Outfall 13S will meet all applicable water quality standards. There are no wetlands which are affected by the discharge from Outfall 13S; therefore, the requirement does not apply and the language has been removed from the final permit. Offsite migration of pollutants from solid waste management units or wetlands are best managed under the facility's storm water permit or Resource Conservation and Recovery Act permit.

ISSUE NUMBER 8

NMED commented that the permit's language suggests SWSC plant effluent will be reused at facilities discharging category 03A waste water. Since some Category 03A facilities discharge to other canyons besides Sandia Canyon and Canada del Buey which may contain wetlands, the permit should require Best Management Practices to maintain and enhance the wetlands which may be associated with those other discharges. NMED also stated that, while EPA has proposed requirements to utilize Best Management Practices, monitoring and reporting requirements are not proposed. Annual reporting requirements were suggested.

RESPONSE

Erosion of contaminated areas at the facility and potential movement of those contaminants offsite will be better addressed under the facility's storm water permit or under its Resource Conservation and Recovery Act (RCRA) permit. Those permits require specific management practices which will meet NMED's intent.

ISSUE NUMBER 9

NMED requested the addition of perchlorate monitoring at a minimum frequency of once per year on the effluent from the Radioactive Liquid Waste Treatment Facility (Outfall 051). The Department stated that perchlorate containing compounds are treated by the facility and have been found in its effluent at concentrations of 1.5 mg/l and in concentrations of 1.0 to 4.4 ppm in Mortandad Canyon sediments collected below the treatment plant.

RESPONSE

Monitoring has been added to the permit as requested.

ISSUE NUMBER 10

NMED stated that effluent data for the High Explosive Waste Treatment Facility (HEWTF) show that HMX, RDX, and TNT are present in the discharge. It noted that RDX limits were proposed based on LANL data and that TNT limits were proposed based on Best Available Technology Economically Achievable (BAT) established in the PANTEX NPDES permit (TX0107107). The PANTEX permit also limits the high explosives components HMX and PETN. NMED suggested monitoring requirements for HMX and PETN based on BAT established in the PANTEX permit at Outfalls 05A055 and 05A097 until it is determined that the HEWTF is operating in such a manner as to protect the environment and human health

RESPONSE

Numerous different types of high explosives are used at the facility and may be present in the effluent. It is not EPA's intention to limit each individual explosive used but to require monitoring and limits for pollutants which would be indicators of other pollutants, thus ensuring BAT is met. Monitoring and limits for RDX and trinitrotoluene were included in the permit because they have been found to exist in the effluent on a fairly frequent basis. The parameter total toxic organics has been limited as an indicator parameter. The parameter total toxic organics includes a broad range of organic pollutants and serves as an indicator for constituents

of other types of high explosives used at the facility. The permit also includes limits for all applicable State water quality standards. Limits and monitoring included in the final permit are protective of the environment and human health.

ISSUE NUMBER 11

NMED commented that correspondence from LANL has stated that Outfalls 05A055 and 05A097 are considered potential contaminated sites because perchlorate may have been present in trace amounts in the effluent. Perchlorate containing compounds have been present in material developed and processed at the facility. NMED requested monitoring for perchlorate at the outfalls.

RESPONSE

Monitoring has been added to the permit as requested.

ISSUE NUMBER 12

NMED commented that the permit application suggests that RCRA regulated metals may be present in the waste stream treated at the High Explosive Wastewater Treatment Facility. Also, LANL has previously requested adding "investigative derived" waste water to the treatment system at Outfall 05A055. Since many of the outfalls at LANL are now associated with solid waste management units regulated under RCRA, NMED views the exclusions to RCRA via NPDES permits as problematic. As insurance that the NPDES permit is not used as an avenue for discharging RCRA constituents, NMED requests increased monitoring for metals when RCRA investigative derived waste is treated at the facility.

RESPONSE

Available effluent data do not show a potential to exceed numeric Water Quality Standards at Outfall 05A055. An increase in the monitoring frequency does not appear justified. Additionally, any discharge to the High Explosives Waste Water Treatment Facility is required to meet the facility's waste acceptance criteria. RCRA derived waste is required to be analyzed and characterized prior to disposal at the facility.

ISSUE NUMBER 13

NMED commented that, to address the concerns about downstream migration of contaminated soils and sediments, LANL has voluntarily decreased the discharge rate at Outfall 051 to 500 gpm and has agreed to install erosional controls under the BMPs of the facility's Storm Water Management Plan. The Department requested that the permit include these voluntary control measures as a footnote to the requirements for Outfall 051. NMED stated that such a footnote would eliminate LANL's concerns about making a flow limit part of the permit but would also show that the lab is proactive in addressing the Department's erosional concerns.

RESPONSE

EPA disagrees. Downstream migration of pollutants from contaminated areas are best addressed through the facility's RCRA permit or as BMPs under its storm water permit. Additionally, in discussions with the Pueblo of San Ildefonso, they expressed concerns about slowing the rate of discharge, which might cause pooling of material upstream of tribal land.

ISSUE NUMBER 14

NMED stated that ground water seepage is listed in the permit application as a discharge at the Omega West Reactor site but was not included as an Outfall in the proposed permit. Available data do not show exceedances of water quality standards; however, NMED expressed concern that when decommissioning and decontamination of the site commences the water quality from the seepage pumped to the receiving stream may change. NMED requests consideration of those concerns in the final decision on the permit.

RESPONSE

Ground water seepage at the Omega West Reactor site is thought to be naturally occurring and caused by the relatively low elevation. Available information do not suggest that the ground water seepage is a hydrologically connected discharge of pollutants from a point source operation at LANL. Therefore, it is not a discharge which EPA has the authority to regulate under the Clean Water Act.

ISSUE NUMBER 15

NMED noted that the proposed permit requires 24 hour oral reporting to EPA for exceedances of water quality standards based daily maximum limits and requested that the permit also require reporting to the State.

RESPONSE

The change has been made as requested.

ISSUE NUMBER 16

NMED commented that a study to determine stream uses has been conducted by the U.S. Fish and Wildlife Service as part of a settlement agreement on the expired permit. Although a final report for that study has not been produced, the permit's reopener clause should reflect that the permit may be reopened in the future to accommodate the results of the study.

RESPONSE

A reopener clause is included in the permit which will allow EPA to modify the permit in the event of a change in State Water Quality Standards.

ISSUE NUMBER 17

NMED noted that the permit requires continuous pH monitoring at Outfall 051. The Department stated that language limiting pH excursions is not appropriate because the discharge is a batch discharge and is not continuous. NMED also stated that there is no need for pH excursions since LANL has the ability to test the effluent and make adjustments as needed prior to discharge.

RESPONSE

The pH sample type has been changed to grab in the final permit and the continuous monitoring language referenced by NMED has been removed.

ISSUE NUMBER 18

Los Alamos National Laboratory (LANL) commented that the permit's language should be changed to show that the limits and monitoring for total toxic organics at Outfalls 05A055, 05A097, and 051 do not include 2,3,7,8-tetrachlorodibenzo-p-dioxin, pesticides, or polychlorinated biphenyls.

RESPONSE

The permit has been changed as requested.

ISSUE NUMBER 19

LANL stated that although the radioactive liquid waste treatment facility (RLWTF) receives and treats a mix of accelerator and reactor produced isotopes and New Mexico has water quality standards for tritium, radium 226 and 228, and total gross alpha, EPA does not have the authority to regulate those isotopes which are reactor produced. The RLWTF only receives a small quantity of short lived accelerator produced radioisotopes which include: Na22, Rb83, Rb84, Y88, Se75, Zn75, and Co60. The waste acceptance criteria for the RLWTF does not allow accelerator produced tritium into the radioactive liquid waste collection system and the laboratory has conducted surveys to identify and eliminate discharges of accelerator produced isotopes into the RLWTF. LANL added that although the discharge from the RLWTF exceeds the water quality standard for total gross alpha, the major sources of radioactivity in the effluent are reactor produced radioactive isotopes. The permittee requested that EPA develop methodology for differentiating between reactor produced and accelerator produced isotopes. Such a method would allow improved evaluation of operations at the RLWTF and help to determine compliance with the water quality standard for total gross alpha.

RESPONSE

EPA agrees. As stated previously internal monitoring is required by the final permit to determine the source of isotopes. The permit also requires submittal of LANL's annual report on the source of radioactive constituents discharged to the Radioactive Liquid Waste Treatment Facility to both EPA Region 6 and NMED.

ISSUE NUMBER 20

LANL commented that it may connect a Los Alamos County subdivision and a research office park to the sanitary waste system to provide influent during off hours and improve plant efficiency during those times. To account for those possible future increases in influent, the permittee requested limits either based on the design flow of the treatment plant or inclusion of tiered limits in the permit to account for those future increased flows.

RESPONSE

EPA can only base limits on the design flow of the treatment facility if it is a publicly owned treatment works (see 40 CFR 122.45(b)). Limits for facilities which are not publicly owned treatment works are required by 40 CFR 122.45(b)(2)(i) to be based on a reasonable measure of actual production for the facility. Mass limits for Outfall 13S are consistent with those regulations and were calculated based on the average discharge rate for the facility as reported in the permit renewal application.

40 CFR 122.45(b)(2)(ii)(A)(1) however, does allow alternate, or tiered, permit limits upon anticipation of a production increase. As allowed under that regulation, the final permit contains tiered limits to account for LANL's anticipated increases in influent to the sanitary waste system.

ISSUE NUMBER 21

LANL commented that the proposed permit included a total toxic organics limit of 1 mg/l on the high explosives waste stream based on the Metal Finishing Point Source Category Effluent Limitations Guidelines; however, the limit in the guidelines is 2.3 mg/l. LANL requested an increase in the limit to 2.3 mg/l.

RESPONSE

As stated in the Fact Sheet for the draft permit, total toxic organic limits were proposed which are consistent with those contained in the expired permit for Outfall 051. Limits for total toxic organics were proposed as a means of monitoring the broad spectrum of organic contaminants which may be present in the influent to the high explosives waste stream. Available effluent data for Outfalls 05A055 and 05A097 suggest that the discharges can comply with the proposed total toxic organics limits of 1 mg/l. Since LANL has not supplied data showing that the available treatment can not achieve the limits they remain in the final permit.

ISSUE NUMBER 22

LANL requested inclusion of compliance schedules in the final permit to allow time to add de-chlorination units at fifteen cooling tower discharges to comply with the new water quality standards based limits for total residual chlorine. Additionally the laboratory requested time to comply with new limits at the high explosives waste water discharges if the proposed limits are retained in the final permit.

RESPONSE

A compliance schedule has been included as requested for the total residual chlorine limits. Available data suggest that the existing high explosives waste water treatment facility can achieve the limits contained in the final permit and a compliance schedule is not necessary. Additionally, the Clean Water Act requires that all NPDES permits issued after March 31, 1989 contain limitations based on BAT; therefore, the technology based limits must apply when the permit is issued, and the permit cannot contain a compliance schedule.

ISSUE NUMBER 23

Due to the complexity of the permit and changes which will potentially be made as a result of comments, Los Alamos National Laboratory requested that EPA re-propose the permit and allow an additional thirty day public comment period.

RESPONSE

EPA Region 6 has extensive experience issuing permits for discharges from complex industrial facilities. There is no single discharge at Los Alamos National Laboratory which is so complex it would preclude issuance of this permit with a single proposal. Although the permit authorizes discharges from twenty-one outfalls, most of those are fairly simple discharges of sanitary waste water, boiler blow down, or cooling water. The most complex discharges at the facility are radioactive liquid waste water and high explosives waste water. Neither of those waste streams involves highly complex processes which make derivation of permit limits difficult. EPA held extensive discussions with the permittee, NMED, and other interested parties to get input in development of the permit. Additionally, LANL and NMED were both given an extended period of time to comment on the proposed permit. Therefore, EPA does not agree that re-proposal of the permit or an additional comment period are needed.

ISSUE NUMBER 24

LANL commented that there are currently no EPA approved analytical methods listed in 40 CFR Part 136 for RDX or TNT. The permittee requested inclusion in the permit of SW846 Method 8330 Nitroaromatics and Nitramines by High Performance Liquids Chromatography (HPLC) for analysis of RDX and TNT.

RESPONSE

The permit allows use of the methods as requested.

ISSUE NUMBER 25

LANL requested that the final permit reference and allow use of methods 200.7, 200.8, 200.9, and 300.0 which were proposed by EPA on October 18, 1995. EPA previously approved use of those methods by the laboratory. LANL also requested approval to use method 200.2 (microwave Digestion).

RESPONSE

The methods have been referenced in the final permit. They are appropriate and will produce reliable results.

ISSUE NUMBER 26

LANL stated that the proposed permit does not list minimum quantification levels (MQLs) for RDX, TNT, tritium, radium 226 and 228, COD, pH, fecal coliform, oil and grease, or TSS and requested the final permit either include MQLs or state that they are not required.

RESPONSE

Minimum quantification levels (MQLs) are listed in permits when a limitation is close to or below the MQL for the parameter. In those cases the MQL is listed so that a sufficiently sensitive test method is used to ensure compliance with the limit and a permittee will not be penalized if limits are required to be lower than commonly available test methods will can measure . Each of the parameters for which LANL requested MQLs is limited in the permit at a concentration which is sufficiently high so that compliance will not be effected by the MQL. Therefore, the requested MQLs were not added to the final permit.

ISSUE NUMBER 27

The permittee noted that a use study was conducted by the U.S. Fish and Wildlife Service to determine existing and attainable uses in canyons at the facility. LANL requested that the study is not used to develop permit conditions or State certification until it has been released and the Laboratory and Department of Energy have had the opportunity to review its contents.

RESPONSE

Results from the use attainability study have not been made available to EPA and were not used in development of the final permit. Any future changes to the permit based on a those study results will need to be publicly noticed. If that happens, LANL will have an opportunity to review the study and comment on its results prior to issuance of a final permit.

ISSUE NUMBER 28

LANL commented that the steam plant does not have a demineralizer waste stream and the permit should be corrected to state water softener instead of demineralizer. Also, LANL requested removal of the total iron limits for the outfall since the steam processes do not add iron to the waste stream.

RESPONSE

The permit was corrected as requested.

ISSUE NUMBER 29

LANL commented that additional data are needed if EPA will use a 95th percentile to calculate RDX limits as proposed for Outfall 05A055. The laboratory stated that Best Available Technology (BAT) based limits for RDX have previously been established for the PANTEX facility (NPDES Permit No. TX0107107) which should be used in this final permit.

RESPONSE

EPA agrees that the data are fairly limited and show a relatively high level of variability. Since additional data may not support the proposed limits, BAT based limits previously established in the PANTEX permit have been included in the final permit.

ISSUE NUMBER 30

LANL commented that the high explosives waste water discharged at Outfall 05A097 consists of storm water and occasional potable water used to wash down the drop pad. The existing treatment for the discharge is settling in a sump. With the existing treatment the discharge may violate the proposed limits for pH, TSS, RDX, TNT, chlorine, and oil & grease for the following reasons: the pH of rainfall in New Mexico is usually 5 or less; storm water contains natural debris such as soil, pine needles, and pollen which could result in a violation of the TSS limits; fine particles of RDX and TNT could easily pass through the sumps and exceed the permit's limits; and substances such as pollen and high explosives are measured by the oil & grease test method and can cause exceedances of the limit. LANL further stated that the oil & grease limits are based on discharges at army ammunitions plants which package high explosives mixed with petroleum liquids into shells and are not representative of operations at the drop pad.

RESPONSE

The proposed limits for pH, TSS, and oil & grease are based on the expired permit's limits for the outfall. Available data show that they are achievable. The new water quality based limits for chlorine will not be met with the present treatment at Outfall 05A097. Additional treatment or source control will be required. A compliance schedule has been included in the final permit for chlorine. As discussed previously, the final permit's limits for RDX and TNT are considered BAT for those parameters. If the limits cannot be met with the simple treatment of settling in a sump, LANL may need to add treatment or transport the effluent to the High Explosives Waste Water Treatment Facility.

ISSUE NUMBER 31

LANL commented that the present average discharge rate from the RLWTF (Outfall 051) is 25,000 gallons per day, but the long range plan is to increase the average discharge rate to 35,000 gallons per day.

RESPONSE

Since the discharge is intermittent, the final permit only contains concentration based limits. Mass limits, which would be effected by the discharge rate, were not proposed and are not included in the final permit. An increase in effluent treated at the facility will not cause problems with compliance.

ISSUE NUMBER 32

LANL noted several inconsistencies in the permit's limits for arsenic, chromium, copper, lead, and zinc which were calculated using the linear partition coefficient shown on page 37 of the Fact Sheet.

RESPONSE

The permit's limits were corrected where appropriate.

ISSUE NUMBER 33

LANL requested that EPA not apply the new chlorine water quality standard at Outfall 13S unless discharge is made directly to Canada del Buey. Discharge has not been made to Canada del Buey since start-up of the treatment plant. The effluent is presently reused in cooling towers at the TA-3 power plant and de-chlorinated prior to discharge at Outfall 001. Residual chlorine is needed in the effluent in the re-use line to prevent fouling.

RESPONSE

EPA agrees that the chlorine limits should not be applied at Outfall 13S unless discharge is made to Canada del Buey. The standard is designed to protect the uses of the receiving water; therefore, limiting chlorine at Outfall 13S is not necessary to ensure compliance with water quality standards when the effluent is pumped to the reuse line. The limits and monitoring for chlorine are applicable at Outfall 001 or other outfalls where the effluent is discharged to a receiving water.