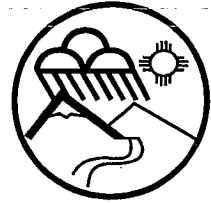


State of New Mexico
ENVIRONMENT DEPARTMENT
Office of General Counsel
Harold Runnels Building
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BILL RICHARDSON
GOVERNOR



RON CURRY
SECRETARY

CINDY PADILLA
DEPUTY SECRETARY

TRACY HUGHES
GENERAL COUNSEL

June 14, 2007

Deborah K. Woitte
Los Alamos National Security, LLC
1650 Trinity Drive
Building 760
Los Alamos, New Mexico 87544

Re: Settlement Agreement
Notice of Violation dated October 25, 2006



Dear Deb:

Enclosed is a signed, file-stamped copy of the Settlement Agreement and Stipulated Final Order resolving the New Mexico Environment Department's claims arising from the failure to report releases of chromium into groundwater at Los Alamos National Laboratory. It was filed today, June 14, 2007. Thank you for your cooperation on this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Charles de Saillan".

Charles de Saillan
Assistant General Counsel

Enclosure

cc: James Bearzi, Hazardous Waste Bureau
Lisa Cummings, U.S. Department of Energy

COPY

STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT



NEW MEXICO ENVIRONMENT)
DEPARTMENT,)
)
Complainant,)
)
 v.)
)
UNITED STATES DEPARTMENT)
OF ENERGY and)
LOS ALAMOS NATIONAL)
SECURITY, LLC,)
)
Respondents.)
_____)

NO. HWB 07-27 (CO)

SETTLEMENT AGREEMENT AND STIPULATED FINAL ORDER

This Settlement Agreement and Stipulated Final Order (“Stipulated Order”) is made by and among the New Mexico Environment Department (the “Department”), and the Respondents, the United States Department of Energy (“DOE”) and Los Alamos National Security, LLC (“LANS”) (collectively the “Parties”). The Parties enter into this Stipulated Order to resolve alleged violations of the Hazardous Waste Facility Permit issued by the Department pursuant to section 74-4-10 of the New Mexico Hazardous Waste Act (“HWA”), and alleged violations of the administrative Compliance Order on Consent (“Consent Order”) dated March 1, 2005, entered pursuant to section 74-4-10 of the HWA and other authority. The Department alleges that DOE and LANS, as successor to the Regents of the University of California (“UC”), violated the Permit and the Consent Order by not notifying the Department of significant increases in chromium levels measured in groundwater at the Los Alamos National Laboratory in Los Alamos County, New Mexico (the “Laboratory”),

contrary to the requirements to report releases of hazardous constituents into the environment from solid waste management units.

I. BACKGROUND

A. PARTIES

1. The Department is an agency of the executive branch of the State of New Mexico, created pursuant to NMSA 1978, § 9-7A-6(B)(3) (1991). The Department is authorized to administer and enforce the HWA, including assessing civil penalties for violations thereof.

2. The Respondent DOE is a Department of the United States government. It is the owner and a co-operator of the Laboratory.

3. The Respondent Los Alamos National Security, LLC is a limited liability company organized under the laws of the State of Delaware. It is a co-operator of the Laboratory pursuant to a contract with DOE that became effective on June 1, 2006. It is the successor to UC, the previous co-operator of the Laboratory.

B. HISTORY

4. The Laboratory is a national research laboratory covering approximately 40 square miles located on the Pajarito Plateau in Los Alamos County, New Mexico. Its operations include nuclear weapons design and testing, high explosives research, development, fabrication, and testing, chemical and material science research, electrical research and development, laser research and development, and photographic processing.

5. The Laboratory operations generate a variety of hazardous wastes and other solid wastes. The Laboratory is a facility that treats and stores hazardous waste under a Hazardous Waste Facility Permit (No. NM0890010515-1) (the "Permit"), and it has in the past disposed of hazardous

waste and other solid waste on-site. Management of hazardous wastes and solid wastes at the Laboratory has resulted in the release of hazardous waste and hazardous waste constituents, and other solid wastes, into the environment.

6. Pursuant to sections 74-4-4(A)(5)(h) and 74-4-10(E) of the HWA, the Laboratory is required to take corrective action for all releases of hazardous waste or hazardous waste constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

7. On November 8, 1989, the New Mexico Department of Health (the predecessor agency to the Department) issued the Permit to DOE and UC for the Laboratory pursuant to section 74-4-10 of the HWA. On March 8, 1990, the United States Environmental Protection Agency ("EPA") issued to DOE and UC the portion of the Permit covering those requirements added by the Hazardous and Solid Waste Amendments of 1984. The Permit requires corrective action for releases of hazardous waste and hazardous constituents into the environment at the Laboratory. On January 2, 1996, the State of New Mexico received EPA authorization to implement its corrective action program under the HWA in lieu of the federal program.

8. On March 1, 2005, the Department, DOE, and UC entered into the Consent Order pursuant to section 74-4-10(A) of the HWA. LANS is the successor to the Regents of the University of California and is subject to the requirements of the Consent Order, as provided in section III.F of the Consent Order. The Consent Order provides for the investigation and cleanup of environmental contamination at the Laboratory.

9. Section VIII.H of the Permit provides, in relevant part:

The Permittee shall notify the [Department], verbally of any release(s) of hazardous waste including hazardous constituents in which there is a statistically significant increase over the background data for the media of concern, during the course of ground water monitoring, field investigation, environmental auditing, or other activities undertaken after the

commencement of the [facility investigation], no later than twenty four (24) hours after discovery. This notification must also be made in writing within 15 days of discovery. Such newly-discovered releases may be from newly identified units, from units for which, based on the findings of the [facility assessment], the [Department] has previously determined that no further investigation was necessary, or from units investigated as part of the [facility investigation].

10. Section V.D of the Consent Order provides, in relevant part:

Within fifteen (15) days after the discovery of any previously unknown releases of a contaminant from a [solid waste management unit] or [area of concern], the Respondents shall notify the Department in writing of such discovery.

11. On January 12, 2004, DOE and UC collected a ground water sample from monitoring well R-28, a well that had recently been completed in the regional aquifer. DOE and UC received the analytical data on the sample on or about January 26, 2004. The data showed chromium at a concentration of 270 micrograms per liter ($\mu\text{g/l}$). DOE and UC included the data in an appendix to the *Completion Report for Regional Aquifer R-28*, dated April 28, 2004, which they submitted to the Department, without otherwise noting the data.

12. DOE and UC did not collect any further samples from R-28 until May 2005. On May 20, 2005, the DOE and UC collected a ground water sample from monitoring well R-28. The data showed chromium at a concentration of 375 $\mu\text{g/l}$ (filtered) and 389 $\mu\text{g/l}$ (unfiltered).

13. On September 1, 2005, DOE and UC collected a second ground water sample from monitoring well R-28. The data showed chromium at a concentration of 397 $\mu\text{g/l}$ (filtered) and 404 $\mu\text{g/l}$ (unfiltered).

14. On November 10, 2005, DOE and UC collected a third ground water sample from monitoring well R-28. The data showed chromium at a concentration of 404 $\mu\text{g/l}$ (filtered) and 416 $\mu\text{g/l}$ (unfiltered).

15. The water quality standard for chromium in groundwater, set by the New Mexico Water Quality Control Commission under the New Mexico Water Quality Act, is 50 µg/l. 20.6.2.3103.A(4) NMAC. The maximum contaminant level for chromium in drinking water, set by the United States Environmental Protection Agency under the federal Safe Drinking Water Act, is 100 µg/l. 40 C.F.R. § 141.62(b)(5). Both are health-based standards.

16. A municipal drinking water supply well for the County of Los Alamos, well PM-3, is located approximately one-half mile from monitoring well R-28.

17. On December 23, 2005, DOE and UC notified the Department of the chromium concentrations in monitoring well R-28 by telephone.

18. On December 29, 2005, the Department sent a letter to the Respondents requiring the submission of an Interim Measures Work Plan pursuant to section VII.B.1 of the Consent Order to fully investigate the chromium contamination. The letter required DOE and UC, among other things, to determine whether the chromium detected in monitoring well R-28 is in the trivalent or the hexavalent form. On March 31, 2006, the Department received from DOE and UC the Interim Measures Work Plan. The Work Plan noted that the chromium is hexavalent.

19. On September 15, 2006, the Department sent a notice of violation letter ("NOV") to DOE and LANS. The NOV alleges that DOE and LANS failed to timely notify the Department of the chromium concentrations as required by the Permit and the Consent Order.

20. The Respondents do not admit the allegations stated in the NOV or in this Stipulated Order.

21. On September 15, 2006, the Department sent a letter to DOE and LANS proposing to settle the Department's claims for civil penalties resulting from the violations. The letter included a civil penalty calculation.

22. On December 8, 2006, and on February 8, 2007, representatives of the Department and the Respondents met in Santa Fe to attempt to reach a settlement of the Department's claims for civil penalties and other relief for the alleged violations.

23. The Parties enter into this Stipulated Order to settle and completely resolve the Department's claims for the violations alleged in Paragraph 19 above, and to avoid further expense and litigation.

II. CIVIL PENALTY

24. The Respondents shall pay to the State of New Mexico a civil penalty of two hundred and fifty-one thousand, eight hundred and seventy dollars (\$251,870.00) to resolve their liability for the violations alleged in Paragraph 19 above. The Respondents shall pay the civil penalty to the State of New Mexico within thirty (30) days after the effective date of this Stipulated Order. Payment shall be by certified check or other guaranteed negotiable instrument, payable to the New Mexico Hazardous Waste Emergency Fund, and shall be sent to the Department at the following address:

New Mexico Environment Department
Hazardous Waste Bureau
c/o Mr. James Bearzi, Bureau Chief
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

A copy of the transmittal letter shall be sent to counsel for the Department.

25. If the Respondents fail to make timely and complete payment, the Respondents shall pay interest on the outstanding balance at the rate established for judgments and decrees under NMSA 1978, § 56-8-4.

III. NOTIFICATION OF MONITORING RESULTS

26. The Respondents agree that the Parties will modify the Consent Order, in writing pursuant to section III.J.1 of the Consent Order, to add the following new provision as section IV.A.3.g:

IV.A.3.g Notification

By the fifteenth day of each month, the Respondents shall review the analytical data from all groundwater monitoring conducted under this Consent Order that was received during the previous month, and shall record the date of such review; provided, however, that if the fifteenth day of a month is a non-business day, then the review shall be conducted by the next business day. The Respondents shall notify the Department orally within one business day after review of the analytical data if such data show detection of a contaminant in a well screen interval or spring at a concentration that exceeds either the WQCC water quality standard or the federal maximum contaminant level if that contaminant has not previously exceeded such water quality standard or maximum contaminant level in such well screen interval or spring.

The Respondents shall notify the Department in writing within fifteen days after review of the analytical data if the data show any of the following:

1. Detection of a contaminant that is an organic compound in a spring or screened interval of a well if that contaminant has not previously been detected in the spring or screened interval.
2. Detection of a contaminant that is a metal or other inorganic compound at a concentration above the background level in a spring or screened interval of a well if that contaminant has not previously exceeded the background level in the spring or screened interval.
3. Detection of a contaminant in a spring or screened interval of a well at a concentration that exceeds either one-half the New Mexico water quality standard or one-half the federal maximum contaminant level, or if there is no such standard for the contaminant, one-half the EPA Region VI Human Health Medium-Specific

Screening Level for tap water, if that contaminant has not previously exceeded one-half such standard or screening level in the spring or screened interval.

4. Detection of perchlorate in a spring or screened interval of a well at a concentration of 2 µg/L or greater if perchlorate at such concentration has not previously been detected in the spring or screened interval.
5. Detection of a contaminant that is a metal or other inorganic compound in a spring or screened interval of a well at a concentration that exceeds two times the background level for the third consecutive sampling of the spring or screened interval.
6. Detection of a contaminant in a spring or screened interval of a well at a concentration that exceeds either one-half the New Mexico water quality standard or one-half the federal maximum contaminant level, and that has increased for the third consecutive sampling of that spring or screened interval.

The written notification shall be submitted to the Department in a letter report that includes in table format, at a minimum, the date or dates of the sampling event, an identification of the well or spring, the location of the well or spring, the depth of the screened interval of the well or zone sampled, a list of the analytical data that triggered the reporting requirement, any known issues with sample quality, and the specific category for which the data is reported under this Section (IV.A.3.g). The Respondents may submit a proposal for further sampling or investigation, or the Department may require further sampling or investigation.

Previous data to be evaluated under this Section (IV.A.3.g) to determine whether specified levels have been exceeded, or to determine trends in data for three consecutive samples, shall include only data acquired after [insert the effective date of this Stipulated Order]. For the purpose of the notice requirements of this Section (IV.A.3.g), the background level of a contaminant shall be the most recent Department-approved 95 percent upper tolerance limit for the background for that contaminant set forth in the *Groundwater Background Investigation Report* prepared under Section IV.A.3.d of this Consent Order once approved by the Department, including any approved revisions. Until such time as the Department approves the report, the concentrations proposed in the report shall apply.

27. For purposes of section III.J.1 of the Consent Order, the Respondents agree that the modification described in Paragraph 26 would be a class 2 modification if made under the Permit pursuant to the regulations at section 20.4.1.900 NMAC (incorporating 40 C.F.R. § 270.42) and section 20.4.1.901 NMAC. The wording of the final modification may deviate from that in Paragraph 26 based on public comment received during the public comment period required under

section 20.4.1.900 NMAC (incorporating 40 C.F.R. § 270.42) and section 20.4.1.901 NMAC, subject to the agreement of the parties.

IV. RACER

28. The Respondents shall continue to fund the "Risk Analysis, Communication, Evaluation, and Reduction at Los Alamos National Laboratory" ("RACER") project, managed by Colorado State University and Risk Assessment Corporation, to complete the following tasks:

- a. Public Participation. The project managers will involve the public, including all interested stakeholders, in the project through public meetings and other opportunities for public comment.
- b. Data Management. The project will accumulate, consolidate, and organize all environmental data, such as soil and groundwater monitoring data, from the Laboratory and enter the data into a computer database. The database will allow the spatial display of the data, the comparison of the data to standards and reference values, and the plotting of trends in the data. The database will be functioning and accessible to the Department and to the public by December 31, 2007.
- c. Independent Manager. The database will be turned over to an independent manager, the New Mexico Community Foundation, by September 30, 2008.
- d. Ranking. The project will qualitatively rank solid waste management units and areas of concern at the Laboratory according to risk. The ranking shall not be quantitative, and shall not include any formal risk assessment. Development of the ranking tool will be completed and submitted to the Department September 1, 2008.

e. Report on Public Participation. The project will prepare a report making recommendations for the Department, and DOE and LANS, to increase public participation and involvement. The report will be submitted to the Department, DOE, and LANS by March 31, 2008.

29. As soon as the database is functioning, the Respondents shall provide updated data to the independent manager each week until the termination of the Consent Order.

V. OTHER TERMS AND CONDITIONS

A. ENFORCEMENT

30. Except as expressly provided in Paragraph 31 of Section V.B (Covenants Not to Sue), the Department reserves the right to take any action, administrative or judicial, civil or criminal, to enforce the requirements of the HWA, the Permit, the Consent Order, or this Stipulated Order. In any such action, the Respondents reserve the right to assert any defenses they may have.

B. COVENANTS NOT TO SUE

31. The Department covenants not to sue or take any administrative action against DOE or LANS for the violations of the HWA, the Permit, and the Consent Order alleged in Paragraph 19 above, or in the September 15, 2006 NOV. Such covenant applies only to civil liability.

32. DOE and LANS covenant not to sue the State of New Mexico for any claims arising from the September 15, 2006 NOV.

C. LIABILITY

33. The Respondents shall assume all costs and liabilities incurred in performing all obligations under this Stipulated Order. The Department, on its own behalf and on behalf of the State of New Mexico, does not assume any liability for the Respondents' performance of any obligation under this Stipulated Order.

34. DOE and LANS shall be jointly and severally liable for their obligations under this Stipulated Order.

D. EFFECTIVE DATE

35. This Stipulated Order shall become effective on the date it is approved and signed by the Department Secretary.

E. INTEGRATION

36. This Stipulated Order merges all prior written and oral communications between or among the Parties concerning the subject matter of this Stipulated Order, contains the entire agreement among the Parties, and shall not be modified without the express written agreement of the Parties.


F. BINDING EFFECT

37. This Stipulated Order shall be binding on the Department and its successor agencies, on DOE and its successor agencies, and on LANS and its successors as operators of the Laboratory.

G. AUTHORITY OF SIGNATORIES

38. Each person executing this Stipulated Order represents that he or she has the authority to bind the Party he or she represents to this Stipulated Order, and such representation shall be legally sufficient evidence of actual or apparent authority to bind such Party to this Stipulated Order.

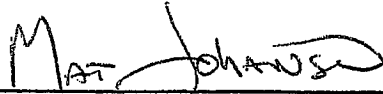
For the NEW MEXICO ENVIRONMENT DEPARTMENT:

By: 
JON GOLDSTEIN
DIRECTOR
WATER AND WASTE MANAGEMENT DIVISION

Date: 6-14-07

For the UNITED STATES DEPARTMENT OF ENERGY:

By:



Date:

6-8-07

GEORGE J. RAEI
ASSISTANT MANAGER, ENVIRONMENTAL OPERATIONS
LOS ALAMOS SITE OFFICE
NATIONAL NUCLEAR SECURITY ADMINISTRATION

For the LOS ALAMOS NATIONAL SECURITY, LLC:

By:



Date:

6-12-07

SUSAN G. SPIGER
ASSOCIATE DIRECTOR FOR ENVIRONMENTAL PROGRAMS
LOS ALAMOS NATIONAL SECURITY, LLC
LOS ALAMOS NATIONAL LABORATORY

Pursuant to 20.1.5.601.B NMAC, this Settlement Agreement and Stipulated Final Order, agreed to by the Department and the Respondents the United States Department of Energy and Los Alamos National Security, LLC, is hereby **APPROVED** as a **FINAL ORDER**.



RON CURRY
SECRETARY OF ENVIRONMENT

Date:

6/14/07