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**RON CURRY**  
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**CHARLES LUNDSTROM**  
DIVISION DIRECTOR

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

August 31, 2004

R. Paul Detwiler, Manager  
Carlsbad Field Office  
Department of Energy  
P. O. Box 3090  
Carlsbad, New Mexico 88221-3090

Steve Warren, General Manager  
Washington TRU Solutions, LLC  
P.O. Box 2078  
Carlsbad, New Mexico 88221-5608

**RE: COMPLIANCE ORDER HWB 04-07 (CO)**  
**WIPP HAZARDOUS WASTE FACILITY PERMIT**  
**EPA I.D. NUMBER NM4890139088**


Dear Mr. Detwiler and Dr. Warren:

The New Mexico Environment Department (**NMED**) issues the enclosed Compliance Order to the Department of Energy Carlsbad Field Office and Washington TRU Solutions LLC (**the Permittees**), pursuant to the New Mexico Hazardous Waste Act, NMSA 1978 74-4-10 (Repl. Pamp. 2000). The Compliance Order is issued because the Permittees failed to comply with the New Mexico Hazardous Waste Management Regulations (20.4.1 et. seq. NMAC) and the Waste Isolation Pilot Plant (**WIPP**) Hazardous Waste Facility Permit. The violations are specifically set out in the Compliance Order, which includes a schedule of compliance. The Permittees may be subject to civil penalties of up to \$25,000 for each day of noncompliance with the Compliance Order, as set forth in 74-4-10.

Paul Detwiler  
Steve Warren  
August 31, 2004  
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Any inquiries concerning this Compliance Order should be directed to James Bearzi, Chief, Hazardous Waste Bureau, New Mexico Environment Department, at (505) 428-2512.

Sincerely,

 - FOR

Charles Lundstrom  
Director  
Water and Waste Management Division

enc.

cc: James Bearzi, NMED HWB  
John Kieling, NMED HWB  
Steve Zappe, NMED HWB  
Tracy Hughes, NMED OGC  
Laurie King, EPA Region 6  
Connie Walker, Trinity Engineering

**STATE OF NEW MEXICO  
ENVIRONMENT DEPARTMENT**

**IN THE MATTER OF  
U.S. DEPARTMENT OF ENERGY  
AND WASHINGTON TRU  
SOLUTIONS LLC, CARLSBAD,  
NEW MEXICO, NM4890139088,  
RESPONDENTS.**

**COMPLIANCE ORDER  
HWB 04-07 (CO)**

**ADMINISTRATIVE COMPLIANCE ORDER**

The Secretary of Environment, acting through the Director of the Water and Waste Management Division of the New Mexico Environment Department (NMED), issues this Administrative Compliance Order (Order) to the U.S. Department of Energy (DOE) and Washington TRU Solutions LLC (WTS) (collectively referred to as Respondents), pursuant to the New Mexico Hazardous Waste Act (HWA), NMSA 1978 Section 74-4-10 (2000).

**FINDINGS OF FACT**

1. NMED is the agency within the executive branch of the government of the State of New Mexico charged with the administration and enforcement of the HWA, NMSA 1978 Section 74-4-1 et seq. (2000), and New Mexico Hazardous Waste Management Regulations (HWMR), 20.4.1 NMAC.
2. Respondents are DOE and WTS, who own and operate the Waste Isolation Pilot Plant (WIPP), a mixed waste storage and disposal facility for which a permit is required under the HWMR, 20.4.1.900 NMAC (incorporating 40 CFR §270.1(a)).
3. DOE is an agency of the federal government and the owner and co-operator of WIPP.
4. WTS is a private limited liability company under contract with DOE and the co-operator of WIPP.

5. WIPP is located approximately twenty-six (26) miles east of Carlsbad in Eddy County, New Mexico.

6. On October 27, 1999, NMED issued a Permit (Permit Number NM4890139088-TSDF) to Respondents to operate a hazardous waste storage and disposal facility at WIPP.

7. From 1998 through 2004, NMED issued numerous enforcement letters against Respondents pursuant to the HWA and the HWMR. In 1998, 1999, and 2004, NMED inspected WIPP, discovered violations of the HWMR, 20.4.1 NMAC, and issued letters of violation. The letter of violation issued in 2004 was later rescinded. In 1999, NMED issued two compliance orders against Respondents (CO 99-04, CO 99-05), which sought compliance and assessed civil penalties. In 2001, NMED discovered violations of the HWMR, 20.4.1 NMAC, and issued a notice of violation (NOV 2001). In 2002, NMED issued a compliance order against Respondents (CO 01-08), which sought compliance and assessed civil penalties. In 2003, NMED discovered violations of the HWA and the HWMR, 20.4.1 NMAC, and issued a notice of violation (NOV 2003) that was later rescinded.

8. The violations cited in the enforcement actions set forth above included, but were not limited to, the following: failure to make a hazardous waste determination (CO 99-04), inadequate hazardous waste determination (CO 99-05), failure to obtain a general waste analysis that complies with 40 CFR §265.13(a) (CO 99-05), storing and disposing hazardous waste without following the written waste analysis plan (CO 99-05, CO 01-08), submitting and putting into effect permit modifications that failed to meet the requirements for Class 1 modifications listed in Appendix I of 40 §CFR 270.42 (NOV 2001), and failure to manage, store and dispose of waste as required by Permit Conditions II.C.1 Waste Analysis Plan, IV.B.2.b Prohibited Waste, and 40 CFR §264.13 (NOV 2001).

9. As a result of the compliance orders described above, Respondents submitted a certification of compliance (CO 99-04), or entered into a stipulated final order to compromise and settle the matter (CO 99-05, CO-01-08).

10. 20.4.1.900 - .901 NMAC (incorporating 40 CFR §270.30(a)) requires Respondents to comply with all conditions of their permit.

11. Permit Condition II.B.1 provides that Respondents may only receive transuranic (TRU) mixed waste from those sites which comply with the applicable requirements of the Waste Analysis Plan (WAP) specified in Permit Condition II.C.1 and as verified through Respondents' Audit and Surveillance Program specified in Permit Condition II.C.2.

12. Permit Attachment B, Introduction and Attachment Highlights, states, "Characterization requirements for individual containers of TRU mixed waste are specified on a waste stream basis."

13. Permit Attachment B, Section B-1a, Waste Stream Identification, states, "All of the waste within a waste stream may not be available for sampling and analysis at one time. In these instances, generator/storage sites may divide waste streams into waste stream lots based on staging, transportation, or handling issues. Characterization activities shall then be undertaken on a waste stream lot basis. A WSPF [Waste Stream Profile Form] need not be submitted for subsequent waste stream lots unless warranted by the characterization information."

14. Permit Attachment B4, Section B4-3d, Requirements for Confirmation of Acceptable Knowledge Information, states in relevant part, "To determine the mean concentration of solvent VOCs, all headspace-gas data and homogeneous waste data for a waste stream or waste stream lot (i.e., the portion of the waste stream that is characterized as a unit) will be used..."

15. In April 1999, Bechtel BWXT Idaho commenced shipping TRU waste from the Idaho National Engineering and Environmental Laboratory (INEEL) to WIPP for disposal under the 1995 Idaho Settlement Agreement. The campaign to meet the Settlement Agreement's requirement to ship no fewer than 3,100 cubic meters of transuranic waste out of the State of Idaho by December 31, 2002 was known as the "3100 m<sup>3</sup> Project".

16. On or about May 24, 2001, DOE submitted a DOE-approved WSPF from INEEL for waste stream INW216.001, which was described as "First/Second Stage Sludge". A report attached to the WSPF entitled, "Hazardous Waste Code Determination for First/Second-Stage Sludge Waste Stream (IDCs 001, 002, 800)", INEEL-EXT-01-00015, Revision 2, stated (Section 1.1, Scope), "This waste stream consists of a population of 6,752 drums generated by liquid waste treatment operations in Building 774, at the Rocky Flats Plant (RFP), located outside Denver, Colorado. These wastes were generated from 1972 through 1988 and currently reside at the INEEL Radioactive Waste Management Complex (RWMC)." In no instance does the INEEL-EXT-01-00015 report either state or imply that the waste stream includes more than the 6,752 drums identified in the report.

17. Following the submission of a DOE-approved WSPF from INEEL for waste stream INW216.001, and prior to 2004, Respondents disposed of four containers not identified on the lot list for the waste stream.

18. On or about July 24, 2001, DOE submitted a DOE-approved WSPF from INEEL for waste stream INW218.001, which was described as "Building 374 Sludge". A report attached to the WSPF entitled, "Characterization of Rocky Flats Plant Building 374 Sludge Waste Stream (IDCs 007, 803, and 807)", INEEL/EXT-01-00517, stated, "RFP Building 374 sludge wastes were generated by liquid waste treatment operations from 1980 to 1988. The waste (identified under Item Description Codes [IDCs] 007, 803 and 807) currently resides at the INEEL

Radioactive Waste Management Complex (RWMC) and consists of a population of 6,083 drums.” In no instance does the INEEL/EXT-01-00517 report either state or imply that the waste stream includes more than the 6,083 drums identified in the report, or that analytical data associated with the 6,083 drums would be used to assign hazardous waste codes to subsequent waste streams or waste stream lots.

19. Respondents initially approved WSPFs for INW216.001 and INW218.001 only for “the portion of the waste stream that is characterized as a unit” because not “all of the waste within a waste stream [was] available for sampling and analysis at one time” and were therefore waste stream lots.

20. In October 2002, Bechtel BWXT Idaho completed its final shipment of waste from INEEL to WIPP under the 3100 m<sup>3</sup> Project.

21. In December 2002, BNFL, the operating contractor of INEEL’s Advanced Mixed Waste Treatment Project (AMWTP) accepted responsibility from Bechtel BWXT Idaho for all TRU waste in the Transuranic Storage Area at INEEL for characterization, including waste previously characterized by Bechtel BWXT Idaho under the 3100 m<sup>3</sup> Project.

22. On August 22, 2003, Respondents concluded Audit A-03-05 at INEEL to evaluate the AMWTP’s retrievably stored debris and homogeneous waste characterization program and to verify compliance with the Permit WAP requirements.

23. During Audit A-03-05, NMED submitted an “observer inquiry” to the DOE through the audit team, questioning INEEL’s intent to use solid sampling data results from the 3100 m<sup>3</sup> Project (i.e., Lot 1 for Waste Stream Profile Number INW216.001) to satisfy the preliminary samples and required number of samples specified in Permit Attachment B2, Section B2-2a, Statistical Selection of Containers for Totals Analysis, for further waste stream lots associated with Waste Stream Profile Number INW216.001.

24. On or about November 13, 2003, DOE submitted the first Final Audit Report for AMWTP (Audit A-03-05).

25. On December 9, 2003, NMED withheld approval of the Final Audit Report for AMWTP (Audit A-03-05) until Respondents submitted additional information demonstrating full implementation of WAP requirements.

26. On or about December 12, 2003, DOE submitted a response to NMED's observer inquiry, stating that no further sampling would be necessary for Lot 2 (containers from the same waste stream generated during the same time period that were not available for random selection) of Waste Stream Profile Number INW216.001. The response further stated, "The lot one samples are representative of lot two because all of the containers in lots one and two are from the same treatment process, processed with the same procedures, and meet the definition of a single waste stream." The letter also stated that "[t]he draft AMWTP WSPF included the remaining 1,761 containers from the randomly sorted population, as well as the approximately 21,000 drums to be recovered."

27. On or about December 16, 2003, DOE submitted a revised Final Audit Report for AMWTP, including a response to comments and additional objective evidence in support of AMWTP's compliance with WAP requirements.

28. On December 23, 2003, NMED approved Respondents' Final Audit Report for AMWTP (Audit A-03-05), limiting the approval "to only those waste containers remaining from the first lot of the original 3100 m<sup>3</sup> sampling pool described in the December 12, 2003 Response to Observer Inquiry letter and documented in Waste Stream Profile Number INW216.001, pending further discussions regarding preliminary sampling between the Permittees and NMED."



29. The basis for NMED limiting approval to Lot 1 was the requirement in Permit Attachment B2, Section B2-2a, regarding statistical selection of waste containers for totals analysis, which states, “Once segregated by waste stream, *random selection and sampling of the waste containers* followed by analysis of the waste samples shall be performed to ensure that the resulting mean contaminant concentration provides an unbiased representation of the true mean contaminant concentration for each waste stream.” NMED stated that Respondents had failed to demonstrate during Audit A-03-05 that random selection and sampling of waste containers had been achieved for any containers outside of Lot 1 of Waste Stream Profile Number INW216.001.

30. On or about March 8, 2004, DOE submitted a DOE-approved WSPF for AMWTP, Waste Stream Profile Number BNINW216 (First/Second Stage Sludge). Whereas the original WSPF for INW216.001 approved by DOE on or about May 24, 2001 identified 6,752 drums in the waste stream population, the newly approved WSPF for BNINW216 identified 21,304 drums in the waste stream population. The drum population associated with the WSPF for waste stream BNINW216 apparently included the remaining 1,761 containers from the randomly sorted population from Lot 1 of INW216.001, as well as approximately 21,000 drums remaining to be recovered that had not been included in Lot 1 of INW216.001. The Characterization Information Summary attached to the WSPF stated (Characterization Description), “To fulfill the solid sampling confirmation data requirements for this profile, the AMWTP used WAP compliant solid sampling data collected in support of INEEL’s WSPF INW216.001 as preliminary samples and as the required (“n”) samples to determine the mean concentrations and the upper confidence levels  $UCL_{90S}$ ) for toxicity characteristic compounds and to assign and/or confirm hazardous waste codes.”

31. On March 9, 2004, DOE issued a memorandum granting authority to AMWTP to characterize and certify contact handled homogeneous solid TRU waste, limiting the use of

preliminary solids sampling and analysis data collected by INEEL during the 3100 m<sup>3</sup> Project for first/second stage sludge waste to only those containers identified to be within Lot 1. Attachment 4 of the memorandum listed AMWTP container IDs from Lot 1 of waste stream BNINW216 that could be input into the WIPP Waste Information System (WWIS) for characterization and certification purposes.

32. On March 15, 2004, DOE commenced the shipment of waste stream BNINW216 from AMWTP to WIPP.

33. On or about March 19, 2004, Respondents received shipment IN040003 and emplaced the shipped ten drum overpack (TDOP) BN10008776 that included, among other 55-gallon drums, AMWTP container ID BN10002897 from waste stream BNINW216. This container was not listed on the approved AMWTP container ID list in Attachment 4 to the March 9, 2004 DOE certification letter to AMWTP, but was listed in the WWIS with a container data status code of "Certification Data Approved by WIPP".

34. Between March 19 and June 29, 2004, Respondents emplaced six TDOPs containing 55-gallon waste containers associated with waste stream BNINW216. The emplaced TDOPs included the following six AMWTP containers associated with waste stream BNINW216 that were not on the approved AMWTP container ID list in Attachment 4 to the March 9, 2004 DOE certification letter to AMWTP, but were listed in the WWIS with a container data status code of "Certification Data Approved by WIPP".

<b>AMWTP Container ID</b>	<b>WWIS Container Certification Date</b>	<b>TDOP ID</b>	<b>Shipment Certification Date</b>	<b>Emplacement Date</b>
BN10002897	3/10/2004	BN10008776	3/17/2004	3/19/2004
BN10002891	3/10/2004	BN10008786	3/18/2004	3/24/2004
BN10002892	3/10/2004	BN10008782	3/18/2004	3/25/2004
BN10002884	3/10/2004	BN10008778	5/11/2004	5/16/2004
BN10002882	3/10/2004	BN10008774	5/11/2004	5/22/2004
BN10002887	6/11/2004	BN10008788	6/21/2004	6/29/2004

35. On or about March 19, 2004, DOE submitted a DOE-approved WSPF for AMWTP, Waste Stream Profile Number BNINW218 (Building 374 Sludge). Whereas the original WSPF for INW218.001 approved by DOE on or about July 24, 2001 identified 6,083 drums in the waste stream population, the newly approved WSPF for BNINW218 identified 2,000 drums in the waste stream population. The Characterization Information Summary attached to the WSPF stated (Characterization Description), “In support of the required solid sampling confirmation data, AMWTP has used the solid sampling data collected in support of INEEL’s WSPF INW218.001 as preliminary data used to determine the mean concentration of toxicity characteristic compounds and to assign/confirm hazardous waste codes.”

36. On or about June 1, 2004, DOE commenced the shipment of waste stream BNINW218 from AMWTP to WIPP.

37. On June 29, 2004, DOE issued Corrective Action Report (CAR) 04-032, stating that DOE had determined on June 22, 2004 that AMWTP had shipped container number BN10002892 without it being identified on the approved AMWTP container ID list for waste stream BNINW216. CAR 04-032 established an AMWTP response due date of July 9, 2004.

38. On July 9, 2004, AMWTP responded to CAR 04-032, stating that a review of historical documentation confirmed that container number BN10002892 was among the containers in Lot 1 of waste stream INW216.001 and was therefore eligible for disposal at WIPP.

The response also stated that the list of containers authorized for shipment submitted by AMWTP to DOE that served as Attachment 4 to the March 9, 2004 memorandum was incomplete.

39. On July 14, 2004, NMED received an oral report via telephone at approximately 5:00 PM from R. Paul Detwiler, DOE Carlsbad Field Office Acting Manager, and Kerry Watson, DOE Office of Characterization and Transportation Director, stating that they had identified problems with the list of containers authorized for shipment to WIPP for waste streams BNINW216 and BNINW218, and that one shipment (IN040030) en route to WIPP had been turned around at approximately 1:00 PM at Trinidad, Colorado, and sent back to INEEL. Another shipment (IN040029) had been received earlier that morning and was unloaded before the problems were identified. The containers from this shipment were placed under controls in the Waste Handling Building Container Storage Unit to prevent emplacement until the problems could be resolved.

40. On July 19, 2004, DOE issued CAR 04-033, stating that AMWTP had misidentified the populations available for homogeneous solid sampling for waste streams BNINW216 and BNINW218, and that requirements for random sampling specified in the permit regarding waste stream identification (Permit Attachment B, Section B-1a), homogeneous waste sampling and analysis (Permit Attachment B, Section B-3a(2)), and statistical selection of containers for totals analysis (Permit Attachment B2, Section B2-2a) had not been met. CAR 04-033 also suspended shipments of these waste streams and entry of data from these waste streams into the WWIS until further notice. CAR 04-033 established an AMWTP response due date of July 26, 2004.

41. On July 20, 2004, R. Paul Detwiler stated at the 87<sup>th</sup> WIPP Quarterly Meeting, “it appears there are 103 containers in the underground that should not have been added to the approved lots for these waste streams.”

42. On July 21, 2004, DOE rejected the corrective action plan proposed by AMWTP for CAR 04-032, and directed AMWTP to address the revised Remedial, Investigative, Root Cause, and Actions to Preclude Recurrence for CAR 04-032 within the corrective action plan for the new CAR 04-033.

43. On July 21, 2004, DOE faxed three lists of container IDs to NMED. The first list identified 108 containers that had been emplaced and were not traceable to Lot 1 for either INW216.001/BNINW216 or INW218.001/BINW218, including five containers from waste stream INW216.001 that had been shipped by Bechtel under the 3100 m<sup>3</sup> Project at INEEL and emplaced in Panel 1 prior to 2004. The second list identified 352 containers from waste stream BNINW218 that had been certified in WWIS as of July 15, 2004, and included information regarding historical container IDs, traceability to Lot 1, and shipment status. The third list identified 505 containers from waste stream BNINW216 that had been certified in WWIS as of July 15, 2004, and included information regarding historical container IDs, traceability to Lot 1, and shipment status.

44. On July 22, 2004, a representative from NMED met with representatives of Respondents in Carlsbad and obtained additional information regarding the lists of container IDs and disposal locations for all containers not on the approved lists. NMED also inspected the WIPP facility to verify the containers from shipment IN040029 that had been placed under controls were still in storage and had not been emplaced.

45. On July 23, 2004, DOE submitted a notice of noncompliance to NMED regarding waste containers disposed at WIPP from AMWTP to satisfy the written notice requirement of

Permit Condition I.E.13.c. This notice included background information, a description of the noncompliance and its cause, the period of noncompliance and its anticipated duration, and steps taken or planned to reduce, eliminate, and prevent recurrence of noncompliance.

46. On July 27, 2004, AMWTP provided a corrective action plan for the combined CARs 04-032 and 04-033 that included immediate actions, remedial actions, and investigative and preventive actions. The action completion date for any remaining incomplete actions was August 18, 2004.

47. On July 30, 2004, AMWTP responded to CAR 04-033, stating that it had completed certain remedial corrective actions related to identifying the population of containers in the original Waste Stream Profile Numbers INW216.001 and INW218.001 and providing evidence of traceability to the original sampling populations and efforts. The response also identified proposed remedial corrective actions that would be completed by August 18, 2004.

48. On August 9, 2004, in an apparent reversal of DOE's July 23, 2004 notice of noncompliance with the permit, DOE issued a revised CAR 04-033 (originally issued on July 19, 2004), stating that extensive document reviews and interviews led to the determination that Block 8 "Requirement that was violated" and Block 9 "Condition adverse to quality" of the CAR required revision. Most notably, the revised CAR no longer cited permit requirements regarding waste stream identification (Permit Attachment B, Section B-1a), homogeneous waste sampling and analysis (Permit Attachment B, Section B-3a(2)), and statistical selection of containers for totals analysis (Permit Attachment B2, Section B2-2a), but instead cited statements contained in NMED's December 23, 2003 approval of Audit A-03-05 and DOE's March 9, 2004 certification letter. Also, the revised CAR no longer cited the permit as the controlling document under Block 4, but instead cited DOE's March 9, 2004 certification letter. CAR 04-033 Revision 1 established an AMWTP response due date of August 13, 2004.

49. On August 10, 2004, DOE submitted a letter providing the status of containers in AMWTP waste streams BNINW216 and BNINW218, along with three AMWTP contractor reports: "Population Determination for Waste Stream Profiles BNINW216 and BNINW218 (BNFL-5232-RPT-TRUW-19, July 30, 2004); Evaluation of Characterization Data Associated with 74 AMWTP Containers of Rocky Flats First/Second Stage Sludge Waste (BNFL-5232-RPT-TRUW-21, August 2004); and Evaluation of Characterization Data Associated with 29 AMWTP Containers of Rocky Flats Building 374 Sludge Waste (BNFL-5232-RPT-TRUW-22, August 2004).

50. DOE made the following statements and conclusions in the August 10, 2004 letter to NMED:

A. Incorrect information was contained in the December 12, 2003 letter from DOE to NMED in that the number of containers remaining from the randomly sampled population (i.e., Lot 1 of BNINW216) should have been 847 containers, not the 1,761 originally stated in the letter. This was because the AMWTP contractor had incorrectly assumed that all 55-gallon drums from INW216.001 that were in above-ground storage were part of Lot 1, whereas the INEEL 3100 m<sup>3</sup> Project had excluded any drums that were in overpack containers at the time containers were selected for sampling.

B. 54 of the 74 emplaced BNINW216 drums that were not in Lot 1 of BNINW216 had been sampled and analyzed prior to the effective date of the permit.

C. All 29 of the emplaced BNINW218 drums that were not in Lot 1 of BNINW218 had been sampled and analyzed prior to the effective date of the permit.

D. The results from these analyses performed prior to the effective date of the permit corroborate the hazardous waste determination, and Section B2-2a of the permit does not require additional sampling after hazardous waste determinations have been made and confirmed for a waste stream.

E. Five emplaced containers from waste stream INW216.001 that had previously been identified by as not traceable to Lot 1 were alleged to have been found, under further investigation, to have been included under a DOE-approved INEEL 3100 m<sup>3</sup> Project waste stream profile.

F. Because the AMWTP contractor is not changing acceptable knowledge determinations (i.e., hazardous waste determinations), it may use the characterization information obtained from Lot 1, including preliminary sampling data, to characterize subsequent lots from this waste stream without obtaining additional sampling data

G. DOE concluded that the waste containers disposed of that were not from Lots 1 of BNINW216 and BNINW218 are adequately characterized pursuant to Permit Attachment B2, Section B2-2a, because additional sampling after hazardous waste determinations have been made and confirmed for a waste stream are not required.

H. DOE concluded, based on sampling data, that these containers do not pose any risk to human health or the environment, but that removal of these containers from the repository would pose substantial risks to workers.

I. DOE concluded that because there is no threat of a spill or release that could endanger human health or the environment, this event did not trigger the twenty-four hour reporting requirements of Permit Condition I.E.13. However, DOE



notified NMED under these requirements “out of an abundance of caution in light of the significant uncertainties surrounding these containers.”

51. On August 10, 2004, AMWTP submitted a corrective action plan in response to CAR 04-033 Revision 1. On August 11, AMWTP revised and resubmitted the corrective action plan incorporating additional comments and clarifications, and identified further remedial corrective actions that had been taken since the July 30, 2004 response to the original CAR 04-033.

52. On August 12, 2004, DOE found the proposed remedial corrective action in the revised corrective action plan for CAR 04-033 to be unacceptable, and stated that verification of corrective actions for CAR 04-033 would be performed during Audit A-04-22 scheduled for August 16 – 20, 2004.

53. Prior to 2004, Respondents disposed of 4 containers in Panel 1 from waste stream INW216.001 that were not traceable to Lot 1 of that waste stream, and were not part of the population subject to random sampling. Panel 1 has since undergone partial closure.

54. Between March 17 and July 10, 2004, Respondents disposed of 74 containers in Panel 2 from waste stream BNINW216 that were overpacked in 27 TDOPs that were not traceable to Lot 1 of that waste stream, and were not part of the population subject to random sampling.

55. Between June 3 and June 17, 2004, Respondents disposed of 29 containers in Panel 2 from waste stream BNINW218 that were overpacked in 7 TDOPs that were not traceable to Lot 1 of that waste stream, and were not part of the population subject to random sampling.

56. Respondents accepted 107 containers from waste streams INW216.001, BNINW216, and BNINW218 for storage and disposal at WIPP without ensuring that the waste

met the appropriate characterization requirements of the WAP specified in Permit Condition II.C.1.

57. Failure to ensure that homogeneous solid waste containers are subject to random selection and sampling may lead to assignment of incorrect total concentrations of hazardous constituents to a waste stream or waste stream lot, failure to identify additional hazardous waste codes associated with the subject waste stream, or failure to identify hazardous waste codes that may be unacceptable for storage or disposal at WIPP.

58. Emplaced containers from waste streams INW216.001, BNINW216, and BNINW218 that are not traceable to Lot 1 of those waste streams pose an uncertain risk to human health and the environment for several reasons, including but not limited to incomplete waste characterization such as failure to perform totals analysis of the concentration of metals, volatile organic compounds, and semi-volatile organic compounds in the waste.

### **CONCLUSIONS OF LAW**

59. Paragraphs 1 through 58 are hereby incorporated by reference.

60. Each Respondent is a “person” as defined in the HWA, Section 74-4.3.K, and HWMR, 20.4.1.101 NMAC (incorporating 40 CFR §260.10).

61. Respondents manage, store, and dispose of hazardous waste as defined in the HWA, Section 74-4-3.I, and HWMR, 20.4.1.101 NMAC (incorporating relevant portions of 40 CFR §260.10).

62. DOE is the owner and co-operator of a permitted storage and disposal facility as defined in the HWMR, 20.4.1.101 NMAC (incorporating relevant portions of 40 CFR §260.10).

63. WTS is the co-operator of a permitted storage and disposal facility as defined in the HWMR, 20.4.1.101 NMAC (incorporating relevant portions of 40 CFR §260.10).

**STORING AND DISPOSING OF HAZARDOUS WASTE WITHOUT FOLLOWING  
THE WRITTEN WASTE ANALYSIS PLAN**

64. Paragraphs 1 through 63 are hereby incorporated by reference.

65. Permit WAP requirements, such as those referenced in Permit Attachment B2, Section B2-2a that address the statistical selection of containers, apply to either waste streams or, in the event that the entire waste stream is not available for sampling and analysis, to waste stream lots. Permit Attachment B, Section B-1a.

66. If a generator chooses to characterize on a waste stream lot basis, all Permit WAP requirements referring to a “waste stream” apply instead to the “waste stream lot”. Permit Attachment B, Section B-1a.

67. Unless provided for in the Permit, waste characterization results obtained from a waste stream lot are not applicable to the entire waste stream or to other waste stream lots in the same waste stream.

68. Accordingly, when a generator characterizes on a waste stream lot basis, the requirements in Permit Attachment B2, Section B2-2a, Statistical Selection of Containers for Totals Analysis, regarding “random selection and sampling of the waste containers followed by analysis of the waste samples” apply to the waste stream lot and not the entire waste stream if the entire waste stream is not subject to random selection and sampling.

69. Respondents’ assertion in the August 10, 2004 letter that states, “Attachment B2 Section B2-2a allows a site to rely on preliminary samples if it does not intend to establish that a constituent is below the regulatory threshold” is incorrect because it assumes that results obtained from a waste stream lot are applicable to the entire waste stream.

70. Respondents’ assertion in the August 10, 2004 letter that states, “Because the AMWTP contractor is not changing the AK determinations; it may use the characterization

information from Lot 1, including the preliminary sampling data, to characterize subsequent lots from this waste stream” is incorrect because it assumes that results obtained from a waste stream lot are applicable to the entire waste stream or other waste stream lots.

71. Respondents’ assertion in the August 10, 2004 letter that states, “Section B2-2a does not require additional sampling after hazardous waste determinations have been made and confirmed for a waste stream” is incorrect because it assumes that results obtained from a waste stream lot are applicable to the entire waste stream.

72. Referring to the five containers from waste stream INW216.001 disposed of prior to 2004, Respondents’ assertion in the August 10, 2004 letter that states, “...these containers are not part of the problematic population because they were included under an approved INEEL 3,100 m<sup>3</sup> Project waste stream profile” is incorrect. NMED concludes that only one container (IDRF741202870) is traceable to the original lot list, and that the remaining containers were not in the population of containers identified in the original Waste Stream Profile Number INW216.001 and were therefore not included under a DOE-approved waste stream profile.

73. Respondents approved a WSPF for BNINW216 that included containers from the entire waste stream (i.e., containers not within Lot 1) without demonstrating that the preliminary samples, used as a replacement for required random samples to determine mean concentrations and UCL values and to assign hazardous waste codes, had been randomly selected and sampled from the entire waste stream.

74. Respondents violated the HWMR, 20.4.1.500 NMAC (incorporating 40 CFR §264.13(b)), and Permit Condition II.C.1 Waste Analysis Plan by storing and disposing of containers from waste streams INW216.001, BNINW216, and BNINW218 without following the written WAP, including the requirement to ensure that random selection and sampling of

homogeneous solid waste containers within a waste stream lot had been achieved prior to receipt and disposal at WIPP. Respondents failed to follow the written WAP in the following manner:

A. Respondents failed to follow the requirement in Permit Attachment B, Section B-3a(2), Homogeneous Waste Sampling and Analysis, which states, “The waste containers for sampling and analysis are to be selected randomly from the population of containers for the waste stream,” because Respondents failed to demonstrate that random selection and sampling of waste containers had been achieved for any containers outside of Lot 1 of waste streams INW216.001 and INW218.001.

B. Respondents failed to follow the requirement in Permit Attachment B2, Section B2-a2, Statistical Selection of Containers for Totals Analysis, which states, “Once segregated by waste stream, random selection and sampling of the waste containers followed by analysis of the waste samples shall be performed to ensure that the resulting mean contaminant concentration provides an unbiased representation of the true mean contaminant concentration for each waste stream,” because Respondents failed to demonstrate that random selection and sampling of waste containers had been achieved for any containers outside of Lot 1 of waste streams INW216.001 and INW218.001.

C. Respondents failed to follow the requirement in Permit Attachment B2, Section B2-a2, Statistical Selection of Containers for Totals Analysis, which states, “Waste container samples from the preliminary mean and variance estimates may be counted as part of the total number of calculated required samples” if certain criteria (e.g., random sampling, etc.) are met, by approving WSPFs for BNINW216 and BNINW218 that counted preliminary solid sampling

data collected in support of INW216.001 and INW218.001 as satisfying the required number of samples for waste stream lots other than Lot 1 of waste streams INW216.001 and INW218.001.

D. Respondents failed to follow the requirement in Permit Attachment B, Section B-4b(1)(i), WWIS Description, which states, “The Permittees will review data reported for each container of each shipment prior to providing notification to the shipping generator/storage site that the shipment is acceptable” by certifying for acceptance at WIPP in the WWIS database six containers from waste stream BNINW216 that were not on the approved AMWTP container ID list. This demonstrated a failure by Respondents to review the data reported for each container to ensure that only properly characterized waste was accepted for disposal at WIPP. Although the AMWTP container ID list was later demonstrated to be inaccurate, Respondents failed to identify any improperly certified containers for more than three months after their receipt and emplacement at WIPP.

E. Respondents failed to follow the requirement in Permit Attachment B, Section B-4b(1)(ii), Examination of the Waste Stream Profile Form and Container Data Checks, which states, “The Permittees will be responsible for the verification of completeness and accuracy of the Waste Stream Profile Form (Section B3-12b(1)),” by approving WSPFs for BNINW216 and BNINW218 that contained significantly inaccurate numbers of containers.

## **FAILURE TO SUBMIT A TIMELY WRITTEN NOTICE OF NONCOMPLIANCE**

75. Paragraphs 1 through 74 are hereby incorporated by reference.

76. Respondents provided the initial oral report of noncompliance on July 14, 2004, the same day Respondents claim to have become aware of the circumstances involving noncompliance with the permit.

77. According to 20.4.1.900 NMAC (incorporating 40 CFR §270.30(1)(6)(iii)) and Permit Condition I.E.13.c, Respondents were required to submit a written notice within five (5) calendar days of the time Respondents became aware of the circumstances. The deadline for meeting the five-day requirement was July 19, 2004.

78. Respondents did not file written notice until July 23, 2004, four (4) days after the deadline.

79. Respondents violated the HWMR, 20.4.1.900 NMAC (incorporating 40 CFR §270.30(1)(6)(iii)) and Permit Condition I.E.13.c Written notice by failing to submit a timely written notice of noncompliance with the Secretary.

## **SCHEDULE OF COMPLIANCE**

80. Based upon the foregoing Findings and Conclusions, Respondents are ordered to take the following corrective actions.

A. Within thirty (30) calendar days from receipt of this Order, Respondents shall provide NMED with a plan for removing from Panels 1 and 2 all disposed containers of waste streams INW216.001, BNINW216, and BNINW218 that are not directly traceable to Lot 1 for either waste stream. This plan shall establish a deadline for removing such disposed containers no later than one hundred eighty (180) calendar days from receipt of this order.

B. Within thirty (30) calendar days from receipt of this Order, Respondents shall provide NMED with technical justification demonstrating that all emplaced waste containers from waste streams BNINW216 and BNINW218 pose no elevated risk to human health and the environment, and that these waste containers have otherwise satisfied all other waste characterization requirements of the Permit.

C. Within thirty (30) calendar days from receipt of this Order, Respondents shall provide NMED with original documentation from the INEEL 3100 m<sup>3</sup> Project identifying the population of waste containers available for random selection and homogeneous solid sampling for Lot 1 from waste streams INW216.01 and INW218.001. Respondents shall also provide an electronic spreadsheet containing the current status of each container within these populations (e.g., shipped by Bechtel under the 3100 m<sup>3</sup> Project and emplaced; characterized by Bechtel, shipped by AMWTP, and emplaced; characterized and shipped by AMWTP and emplaced; in storage at INEEL; etc.) and, as appropriate, provide container traceability from the original container ID to the current container ID. NMED presumes that this information will definitively identify all containers eligible for acceptance at WIPP under NMED's approval of the AMWTP Audit Report A-03-05. If Respondents believe that NMED's presumption is incorrect, they shall provide sufficient additional information that will allow NMED to definitively identify all containers eligible for acceptance at WIPP.

D. Within thirty (30) calendar days from receipt of this Order, Respondents shall provide NMED with a plan for providing members of the public with access to all query and reporting functions of the Characterization, Certification, Shipping, and Inventory modules of the WWIS database.



E. Within thirty (30) calendar days from receipt of this Order, Respondents shall provide NMED with revised procedures or other evidence documenting imposition of additional controls in the WWIS review and approval process to ensure that approved container lists for waste streams BNINW216, BNINW218, and any future waste streams with container limitations are evaluated prior to certification of containers or shipments for acceptance at WIPP.

F. Within five (5) calendar days from receipt by Respondents of any correspondence from AMWTP regarding current or future CARs associated with waste streams BNINW216 or BNINW218, Respondents shall provide such information to NMED. Furthermore, Respondents shall copy NMED on any correspondence originating from Respondents regarding current or future CARs associated with waste streams BNINW216 or BNINW218.

### **CIVIL PENALTY**

81. The HWA, Section 74-4-10(C)(1), authorizes the Secretary to assess a civil penalty of not more than twenty five thousand dollars (\$25,000) for each day of continued noncompliance with the HWA, HWMR, and this Order. As set forth in the attached civil penalty calculation, the Secretary assesses a civil penalty of two million, three hundred ninety-seven thousand, four hundred fifty dollars (\$2,397,450) for the violations described above. The Secretary reserves the right to recalculate this civil penalty based on evidence of additional violations and continued noncompliance with the HWA and HWMR.

### **NOTICE OF OPPORTUNITY TO ANSWER AND REQUEST A HEARING**

82. Respondents may request a hearing pursuant to the HWA, Section 74-4-10.H, and NMED's Adjudicatory Procedures, 20.1.5.200 NMAC, by filing a written request for hearing

with the hearing clerk no later than thirty (30) calendar days from receipt of this Order. The request for hearing shall include an answer which:

- A. admits or denies each alleged finding of fact. Any alleged finding of fact that is not specifically denied shall be deemed to be admitted. Respondents may assert that they have no knowledge of any alleged finding of fact, and such finding shall be deemed to be denied;
- B. asserts any affirmative defenses upon which Respondents intend to rely. Any affirmative defense not asserted in the answer, except an affirmative defense asserting lack of subject matter jurisdiction, shall be deemed to be waived;
- C. has been signed under oath or affirmation that the information contained therein is true and correct to the best of the signatory's knowledge; and
- D. has attached a copy of this Order.

Respondents shall send their Answer and Request for Hearing, if any, to the hearing clerk at the following address:

Hearing Clerk  
New Mexico Environment Department  
P.O. Box 26110  
1190 St Francis Drive  
Santa Fe, New Mexico 87502-6110

Upon Respondents' request, the NMED Secretary shall hold a hearing. The hearing shall be governed by NMED's Adjudicatory Procedures, 20.1.5 NMAC (copy attached).

### **FINALITY OF ORDER**

83. This Order shall become final unless Respondents file an Answer and Request for Hearing as specified above. Respondents' failure to file an Answer and Request for Hearing shall constitute an admission of the alleged findings of fact in this Order and a waiver of Respondents' right to a hearing under the HWA, Section 74-4-10.

### **SETTLEMENT CONFERENCE**

84. Respondents may confer with NMED concerning settlement at any time, but such conference or request for a conference shall not extend or waive the deadline for filing an Answer and Request for Hearing as specified above. Respondents may confer regarding settlement as an alternative to, or simultaneously with, a hearing on this Order. Respondents may appear pro se or through counsel at any settlement conference.

The Secretary shall approve any settlement through a stipulated final order pursuant to the conditions set forth in NMED's Adjudicatory Procedures, 20.1.5.601 NMAC. A stipulated final order shall be final, shall resolve all issues raised in this Order, shall bind all parties to this Order, and shall not be appealable.

To confer regarding settlement, contact:

James Bearzi  
Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
(505) 428-2500

### **TERMINATION**

85. Compliance with this Order does not relieve Respondents of their obligation to comply with all applicable laws and regulations. This Order shall terminate upon Respondents'

certification of compliance with this Order and NMED's approval of such certification, or upon the NMED Secretary's approval of a stipulated final order.

 For  
**CHARLES LUNDSTROM, DIRECTOR**  
**WATER AND WASTE MANAGEMENT DIVISION**

DATE: 8/31/04

**CERTIFICATE OF SERVICE**

I certify that on August 31, 2004, I caused this Order to be sent by facsimile and first class mail, certified mail-return receipt requested, to:

R. Paul Detwiler  
Carlsbad Field Office  
U.S. Department of Energy  
P.O. Box 3090  
Carlsbad, NM 88221  
Facsimile: (505) 234-7027

Steve Warren  
Washington TRU Solutions LLC  
P.O. Box 2078  
Carlsbad, NM 88220  
Facsimile: (505) 234-8988

Chuck F. Noble  
Chuck Noble

# 1

## PENALTY CALCULATION WORKSHEET

Facility: Waste Isolation Pilot Plant

Date violation observed: July 14, 2004

Citation/Violation: 40 CFR §264.13(b)), Permit Condition II.C.1 - storing and disposing of streams INW216.001, BNINW216, and BNINW218 without following the written WAP. Drums disposed of for greater than or equal to 15 days.

Location: WIPP

### PENALTY AMOUNT:

1.	Gravity based penalty from matrix .....	\$	2,000
	(a) Potential for harm .....		Moderate
	(b) Extent of deviation .....		Minor
	(c) Number of counts .....		107
2.	Multiple count adjustment (multiply line 1 by number of counts) .....	\$	214,000
3.	Multiday penalty from matrix .....	\$	1,000
4.	Days of noncompliance (or other appropriate number) .....		1498
5.	Multiday adjustment (multiply line 4 minus 1 by line 3) .....	\$	1,498,000
6.	Add line 2 and line 5 .....	\$	1,712,000
7.	Percent increase/decrease for good faith .....		0%
8.	Percent increase for willfulness/negligence .....		15%
9.	Percent increase for history of noncompliance .....		25%
10.	Total percentage (add lines 7 through 9) .....		40%
11.	Multiply line 6 by line 10 .....	\$	684,800
12.	Economic benefit penalty .....	\$	-
13.	Add lines 6, 11, and 12 for total penalty amount for this violation .....	\$	2,396,800

**#1 NARRATIVE EXPLANATION OF AMOUNTS SELECTED**

1. Gravity Based Penalty

(a). Potential for harm: Moderate

Although the violation poses a relatively low risk of exposure, the failure to follow a written waste analysis plan (WAP) may have a significant adverse effect on statutory and/or regulatory purposes for implementing the permitted RCRA program.

(b). Extent of Deviation: Minor

Because the waste drums were characterized by using RTR, VE and/or HSG, the extent of deviation from the Permit WAP is minor. The Respondents deviated somewhat from the regulatory or statutory requirements, but most of the requirements were met.

(c). Multiple Counts: 107

As of August 31, 2004, 107 drums of TRU mixed waste have been disposed of at the WIPP facility without following the written WAP.

2. Multiday Penalty:

From the multi-day penalties matrix, a multi-day penalty is discretionary for the moderate/minor category. NMED believes that some multi-day penalty is needed for this violation given the significant effect on the RCRA program and the number of counts.

3. Good Faith:

There is no increase or decrease in the penalty due to good faith. The Respondents acted in good faith by notifying NMED promptly of the violation and enacting measures to remedy it before NMED detection. No downward adjustment is made since the Respondents only came into compliance with the regulations when they responded to the situation.

4. Negligence:

The policy indicates an increase of 15% for substantial negligence and 25% for probably willful. Respondents received 107 inappropriate drums over an extended time frame. Respondents knew of the legal requirements, had control over the events constituting the violation by virtue of certifying each container for disposal, but apparently took inadequate precautions to preclude the acceptance of inappropriate drums. An increase of 15% is deemed appropriate.

5. History of Noncompliance:

The Respondents have a substantial history of violations with the regulations. The enforcement actions are CO 99-04, CO 99-05, CO 01-08, and RCRA violations noted during NMED WIPP inspections during 1998 and 1999, resulting in letters of violation. The policy indicates an increase of 25% if there is a substantial history of noncompliance with any regulation(s).

6. Economic Benefit (considered negligible if less than \$2500):

NMED is not aware that the Respondents gained any economic benefit from storing and disposing the 107 drums.



# 2

## PENALTY CALCULATION WORKSHEET

Facility: Waste Isolation Pilot Plant

Date violation observed: July 23, 2004

Citation/Violation: 40 CFR §270.30(1)(6)(iii), Permit Condition I.E.13.c - failure of Permittees to file written notice of noncompliance within five (5) calendar days of the time that the Permittees became aware of the circumstances.

Location: WIPP

### PENALTY AMOUNT:

1.	Gravity based penalty from matrix .....	\$	500
	(a) Potential for harm .....		Minor
	(b) Extent of deviation .....		Minor
	(c) Number of counts .....		1
2.	Multiple count adjustment (multiply line 1 by number of counts) .....	\$	500
3.	Multiday penalty from matrix .....	\$	100
4.	Days of noncompliance (or other appropriate number) .....		1
5.	Multiday adjustment (multiply line 4 minus 1 by line 3) .....	\$	-
6.	Add line 2 and line 5 .....	\$	500
7.	Percent increase/decrease for good faith .....		0%
8.	Percent increase for willfulness/negligence .....		5%
9.	Percent increase for history of noncompliance .....		25%
10.	Total percentage (add lines 7 through 9) .....		30%
11.	Multiply line 6 by line 10 .....	\$	150
12.	Economic benefit penalty .....	\$	-
13.	Add lines 6, 11, and 12 for total penalty amount for this violation .....	\$	650

**#2 NARRATIVE EXPLANATION OF AMOUNTS SELECTED**

1. Gravity Based Penalty

(a). Potential for harm: Minor

The Respondents provided an initial oral report in a timely fashion, but failed to file a written notice of noncompliance within five (5) calendar days with NMED after they became aware of the circumstances. The violation did not increase the potential for harm to human health and the environment because of the oral notice and the fact that Respondents stopped shipments from the generator site when the violation was discovered. As a result of these factors, the violation is believed to have a small adverse effect on statutory purposes and/or procedures for implementing the RCRA program. Therefore, the potential for harm is deemed minor.

(b) Extent of Deviation: Minor

Because the notification was received by NMED four (4) calendar days late, the extent of deviation from the Permit is deemed minor. Further, the Respondents did orally notify NMED on time as required in the permit.

(c) Multiple Counts: none

There is only one (1) count of failure to file a written notice.

2. Multiday Penalty:

From the multi-day penalties matrix, a multi-day penalty is discretionary for the minor/minor category. NMED believes that no multi-day penalty is needed for this violation given the minor effect on the RCRA program.

3. Good Faith:

There were no good faith efforts by the Respondents beyond legal requirements and no lack of good faith. Therefore, no adjustment will be made.

4. Negligence:

The Respondents were negligent in not providing the written report in a timely manner. The report was in the control of the Respondents and they knew or should have known of the requirement. The negligence was minor. The policy indicates an increase of 5% for minor negligence. Therefore, an increase of 5% is deemed appropriate.

5. History of Noncompliance:

The policy indicates an increase of 25% if there is a substantial history of noncompliance with any regulation(s). WIPP has a substantial history of violations with the regulations.

The enforcement actions are CO 99-04, CO 99-05, CO 01-08, and RCRA violations noted during NMED WIPP inspections during 1998 and 1999, resulting in letters of violation.

6. Economic Benefit (considered negligible if less than \$2500):

NMED is not aware that the Respondents gained any economic benefit from failing to file a written notice of noncompliance to NMED.