Federal Facilities Restoration and Reuse Office (FFRRO)

EPA Enforcement Policy for GOCO Facilities

PDF Version (9 pp, 109K, About PDF)

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Memorandum

SUBJECT: EPA Enforcement Policy for GOCO Facilities

FROM: Gordon Davidson, Director
Office of Federal Facilities Enforcement

TO: Addressees

Attached is the Enforcement Policy for Government-Owned/Contractor-Operated (GOCO) facilities. This Policy will provide the Regional offices with general guidelines to consider when bringing enforcement actions against contractor-operators at Federal facilities.

The Federal Facilities Compliance Strategy, also known as the Yellow Book, contains a section entitled "Contractor and Other Private Party Arrangements Involving Federal Facilities." Federal Facilities Compliance Strategy VI-14, 15 (1988). This section states that it is EPA policy to pursue the full range of its enforcement actions against contractor-operators of government-owned facilities in appropriate circumstances. It also notes that EPA will develop an Agency-wide GOCO Enforcement Policy which will provide criteria to consider in determining appropriate enforcement responses at Federal facilities. This Policy fulfills that Agency commitment.

OFFE greatly appreciates the comments and input received on the draft GOCO Policy from Headquarters and the regional offices. Those comments have been considered carefully and incorporated as appropriate. It is our hope that this GOCO Enforcement Policy will contribute to the positive resolution of ongoing and future disputes regarding contractor-operator status at Federal facilities.

Should you have any questions regarding the Policy, please have your staff contact Davina Pujari at 202 564-4036.

cc:Tad McCall
Robert Van Heuvelen
Linda Breggin
Federal Facilities Coordinators, Regions I-X

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Water Division Directors, Regions I-X

Air Division Directors, Regions I-X

Regional Counsels, Regions I-X

EPA Enforcement Policy for GOCO Facilities

January 7, 1994

MEMORANDUM

SUBJECT: EPA Enforcement Policy for GOCO Facilities

FROM: Steven Herman
Assistant Administrator for Enforcement

TO: Waste Management Division Directors, Regions I-X
Water Division Directors, Regions I-X
Air Division Directors, Regions I-X
Regional Counsels, Regions I-X

EPA ENFORCEMENT POLICY FOR PRIVATE CONTRACTOR OPERATORS AT GOVERNMENT-OWNED/CONTRACTOR-OPERATED (GOCO) FACILITIES

I. General GOCO Enforcement Response Policy

Where EPA has the authority under a given statute to initiate an enforcement action against an owner or an operator at a facility, and the contractor (or subcontractor) fits the statutory or regulatory definition of an operator, EPA may exercise its discretion to pursue enforcement against the Federal agency, the contractor-operator, or both. While Federal owners are ultimately responsible for compliance with environmental requirements, EPA supports enforcement actions against government contractors for violations at Federal facilities where appropriate.

Upon the initiation of an enforcement action against a contractor, EPA will treat the contractor the same as it treats all other private parties that are subject to environmental laws and regulations. Thus, in most instances, EPA has the option to issue a compliance order, issue an order for penalties, or initiate judicial action for injunctive relief and penalties. The Department of Justice has stated in Congressional testimony that while there may be institutional distinctions between Federal agencies and private parties which affect EPA's policy with regard to enforcement against Federal facilities, those distinctions do not apply to government contractors. Thus, the Justice Department does not treat such contractors differently than any other private party for purposes of law enforcement. See Statement of F. Henry Habicht II, Assistant Attorney General Before the Subcomm. on Oversight and Investigations of the House Committee on Energy, 95th Cong., 1st Sess. at 13-14 (1987). Once an enforcement action has been initiated solely against a contractor, Federal owners should be discouraged from engaging in substantive (i.e., beyond requests for general case status) communication with EPA on behalf of the contractor-operator.

II. Permit Applications

Where a contractor at a Federal facility meets the statutory or regulatory definition of an operator under the particular environmental statute at issue, the contractor should sign the permit application as an operator as would any other operator at a privately owned facility. For example, the Resource Conservation and Recovery Act (RCRA) requires that hazardous waste permit applications be signed by both the owner and the operator of the permitted facility. EPA has defined "operator" by regulation as "the person responsible for the overall

operation of a facility." See 40 C.F.R. 260.10. The Office of Waste Programs Enforcement (OWPE) of EPA issued guidance in 1987 to clarify application requirements under RCRA. The OWPE guidance states "[w]henever a contractor or contractors at a government-owned facility are responsible or partially responsible for the operation, management or oversight of hazardous waste activities at the facility, a contractor should sign the permit as the operator (s)." See Attachment 1.

The OWPE clarification recognizes that in many cases a Federal facility consists of several separate and distinct units that may be operated by different contractors. Each contractor that operates a unit dealing with hazardous waste management at a Federal facility should be a signatory to the permit application. See In the Matter of: Olin Corporation, Badger Army Ammunition Plant, 1989 RCRA LEXIS 26 (November 22, 1989) (holding that contractors are necessarily subject to being named as co-permittees where they have responsibility for the operation of hazardous waste facilities).

The RCRA analysis applies to permits issued under the other environmental statutes; however, each media should use its own statutory or regulatory definition of operator when determining the appropriate signature requirements. EPA recognizes that in some instances both a Federal agency and its contractors are operators of a facility, and multiple operator signatures on the permit application would be appropriate. Finally, for contractors hired subsequent to the issuance of the permit, the permit should be modified to include the new contractor as an operator of the facility.

III. Identification of Appropriate GOCO Enforcement Responses

In determining the appropriate enforcement response at a particular facility, site-specific factors are of primary importance. In evaluating enforcement response options, EPA should not consider conclusive the language and content of the contract which governs relations between the Federal agency and the contractor. For example, the existence of an indemnification provision within the contract does not control EPA's determination of the appropriate party to be named in an enforcement action. Similarly, the title given to the contractor within the contract is not necessarily indicative of the contractor's operator status for enforcement purposes. Essentially, the contractor should be treated in the same manner as any private violator, and the terms of the government contract should not shield the contractor from liability that would otherwise be imposed under environmental laws and regulations.

There are some common factors which should be considered in the evaluation of which enforcement option to initiate at GOCO facilities. Specific factors affecting EPA enforcement decisions include, but are not limited to: (1) the statutory and regulatory definitions and limitations regarding entities subject to enforcement by EPA under the particular program, (2) the degree of contractor-operator oversight and control over facility operations, (3) the degree of contractor-operator responsibility for management of the particular regulated activity at issue (e.g., waste management, toxic substances management, NPDES discharges), (4) the amount of responsibility for the violation which is attributable to the contractor, and (5) the degree to which compliance has been delayed due to prolonged and inconclusive negotiations between EPA and the Federal agency.

IV. Special Considerations For CERCLA Enforcement Actions

EPA Regional offices should consider carefully the implications of issuing CERCLA orders to government contractors. In some instances, there may be policy considerations which make this enforcement response inappropriate. For example, it may be inappropriate for EPA to pursue the contractor-operator without also pursuing the Federal government. As stated in the Listing Policy for Federal Facilities, it is EPA's belief that "in most situations, it is appropriate to address sites comprehensively under CERCLA pursuant to an enforceable agreement (i.e., an interagency agreement [IAG] under CERCLA section 120) signed by the Federal facility, EPA, and, where possible, the State." 54 Fed. Reg. 10,520 (1989). Because EPA is required by law to enter into 120 interagency agreements with Federal agencies, and because the Federal agency has the lead responsibility for the remediation, as a practical matter EPA's enforcement against contractors at Federal facilities would be in addition to the development and enforcement of these interagency agreements. Thus, noncompliance with the IAG by the Federal agency may be addressed through the assessment of stipulated penalties in parallel to the GOCO enforcement action.

Despite these policy considerations, there is no prohibition in CERCLA restricting EPA's enforcement authority against government contractors. Contractor liability at Federal government facilities is as extensive as it would be for private contractors operating non-government facilities. As implied by the Listing Policy language quoted above, situations may arise when it is appropriate for EPA to proceed against the contractor for investigatory or remedial activities that either parallel or exceed the scope of the IAG. The discretion as to whether or not to proceed against the contractor-operator is vested in the Regional offices, in accordance with the 1992 Guidance on Coordination of Federal Facility Enforcement Actions with the Office of Enforcement.

In determining whether or not it is appropriate to proceed against a contractor, the Region should evaluate the compliance history and cooperation of the Federal facility, the amount of resources the Region would expend ensuring Federal agency compliance and/or contractor-operator compliance and the culpability of the contractor with respect to known releases. When bringing an action against a contractor, the Region should follow the national administrative order and consent decree models developed for enforcement against private parties. Similarly, referrals to the Department of Justice should follow normal procedures.

Where the contractor is a long-term operator at the facility, or if the contractor is believed to have contributed to the contamination problem at the facility, a CERCLA 106 unilateral order may be effective. See Attachment 2. There may be instances where a contractor-operator does not meet these specific criteria. Nevertheless, where the Federal agency fails to comply with the schedules in a CERCLA 120 interagency agreement, EPA retains the discretion to issue a 106 order to the contractor-operator. Since a 106 order to a government contractor will not require concurrence by the Department of Justice, this option is an efficient and streamlined enforcement alternative for EPA. The schedule contained in the contractor enforcement action should seek to accelerate work whenever feasible and should, at a minimum, contain deadlines as rigorous as the IAG. Since EPA has the enforcement discretion to pursue owners or operators by law, it is EPA's policy to utilize that discretion in choosing an enforcement response which most effectively protects human health and the environment.

V. Notice

This guidance and any internal procedures adopted for its implementation are intended solely as guidance for employees of the U.S. Environmental Protection Agency. Such guidance and procedures do not constitute rule making by the Agency and may not be relied upon to create a right or benefit, substantive or procedural, enforceable at law or in equity, by any person. The Agency may take action at variance with this guidance and its internal implementing procedures.

Attachment 1: Determination of Operator at Government-Owned Contractor-Operated (GOCO) Facilities

June 24, 1987

MEMORANDUM

SUBJECT: Determination of Operator at Government-Owned Contractor-Operated (GOCO) Facilities

FROM: Gene K. Lucero, Director
Office of Waste Programs Enforcement

Marcia E. Willard, Director
Office of Solid Waste

TO: Waste Management Division Directors
Regions I - X

The purpose of this memorandum is to clarify who should sign as the operator on permit applications for Government-Owned Contractor-Operated (GOCO) facilities. Earlier guidance (see attached memo) had recommended that the Regional office consider the role of the contractor in the operation of the facility before determining who should sign the permit application. We also noted that in some cases where the contractor's role is less precisely defined, the Region should exercise judgment given the factual situation.

It appears that there is still some confusion regarding signatories for permit applications. Whenever a contractor or contractors at a government-owned facility are responsible or partially responsible for the operation, management or oversight of hazardous waste activities at the facility, they should sign the permit as the operator(s). In some instances both the Federal agency and the contractor(s) are the operators and multiple signatures to that effect would be appropriate. A review of the facility's operating records, contingency plans, personnel training records, and other documents relating to waste management should indicate who the operator(s) are. As a general rule, contractors will meet this test and therefore in most situations should be required to sign the permit application.

If you have any questions please contact Jim Michael, Office of Solid Waste at FTS 382-2231 or Anna Duncan, Office of Waste Programs Enforcement at FTS 382-4829.

Attachment

cc: Bruce Waddle, OSW
Elaine Stanley, OWPE
Chris Grundler, OSWER

Matt Hale, PSPO
Federal Facility Coordinators, Region I-X

Attachment 2: Enforcement Actions at Government-Owned Contractor-Operated Facilities

SEP 8, 1988

MEMORANDUM

SUBJECT: Enforcement Actions at Government-Owned Contractor-Operated Facilities

FROM: Bruce Diamond, Director
Office of Waste Programs Enforcement

TO: Hazardous Waste Management Division Directors
Regions I-X

Regional Counsels
Regions I-X

The purpose of this memorandum is to provide you with copies of three enforcement actions that EPA recently issued to the contract operators of government owned facilities (GOCO). Two of these actions were brought under RCRA Section 3008(a) for violations of RCRA regulatory requirements. The third action is a notification letter for potential liability under CERCLA Section 107. I commend Region V and VI for taking the initiative in issuing these actions as the Assistant Administrator has encouraged in both the January, 1988 guidance and in congressional testimony.

To assist you in determining whether an action against a contractor may be an appropriate means of achieving compliance and cleanup at a Federal facility, I have highlighted the rationale used by Regions V and VI for proceeding against the GOCO in each of three cases.

Case # 1 - GOCO has primary responsibility for hazardous waste management activities

In the case of the Lone Star Army Ammunition Plant, a RCRA Section 3008(a) complaint was issued to the contractor after it was determined that the contractor had practical and contractual responsibility for the hazardous waste management activities at issue. The ability to correct the violations was within the contractor's control. The complaint included a proposed penalty for the violation.

Case #2 - Prolonged and inconclusive negotiations with the Federal Agency

At the Ravenna Army Ammunition Plant, a RCRA Section 3008(a) complaint was issued to the contractor after lengthy correspondence with the Federal Agency failed to resolve the compliance issue. The complaint included a proposed penalty for the violation.

Case # 3 - GOCO is performing the work

At Air Force Plant #4, the contractor was issued a CERCLA notice letter as a potentially responsible party for the performance of a remedial investigation. In this case, the contractor is a long-term operator at the facility; it is believed that the contractor contributed to the

contamination problem at the facility; and the contractor is already performing the remedial investigation at the facility.

The decision on whether to pursue a GOCO enforcement action and the timing of that action will always be made on an individual basis as the facts of each case are unique. However, it is useful to build upon practical experience in an effort to anticipate the problems and issues before they occur.

I encourage you to provide the Federal Facility Hazardous Waste Compliance Office (FFHWCO) within OPWE your ideas and comments on the criteria for pursuing enforcement actions under RCRA and CERCLA at GOCO facilities. As I mentioned, the Assistant Administrator is encouraging these actions and the FFHWCO is developing a policy on when they should be pursued. You should relay to the FFHWCO any issues or problems that you have encountered when considering or pursuing enforcement actions at a GOCO facility.

cc:Ed Reich, OECM
Dick Sanderson, OFA

Not Reported in F.Supp.2d, 2010 WL 2635768 (C.D.Cal.)
(Cite as: 2010 WL 2635768 (C.D.Cal.))

HOnly the Westlaw citation is currently available.

United States District Court,
C.D. California.
AMERICAN INTERNATIONAL SPECIALTY LINES INSURANCE COMPANY, Plaintiff,
v.
UNITED STATES of America, Defendant.

No. CV 09-01734 AHM (RZx).
June 30, 2010.

West KeySummary**Environmental Law 149E**
445(1)

149E Environmental Law
149EIX Hazardous Waste or Materials
149Ek436 Response and Cleanup; Liability
149Ek445 Persons Responsible
149Ek445(1) k. In General. Most Cited Cases

United States government, which contracted with property owner for the production of munitions, ordnance, and material for the military, was liable under CERCLA for cost recovery and contribution as an owner of facilities at which disposal of hazardous substances took place. The government owned the mandrels, grinders, cast and cure assemblies, fixtures and molds, dies and tools that were provided in order to refurbish rocket engines pursuant to property owner's government contracts. This equipment, which constituted "facilities" within the meaning of CERCLA, was a necessary part of the manufacturing process, and disposals of hazardous substances occurred at the government furnished equipment. Comprehensive Environmental Response, Compensation, and Liability Act of 1980, §§ 107(a)(2), 101(9)(A), 42 U.S.C.A. §§ 9607(a)(2), 9601(9)(A).

Floyd P. Bienstock, Steptoe & Johnson LLP, Phoenix, AZ, Kirsten Hicks Spira, Laurence F. Janssen, Michael R. Heimbold, Steptoe & Johnson LLP, Los Angeles, CA, William T. Hassler, Steptoe & Johnson LLP, Washington, DC, for Plaintiff.

Adam Joshua Katz, Michael C. Augustini, US Department of Justice, Washington, DC, for Defendant.

FINDINGS OF FACT AND CONCLUSIONS OF LAW (LIABILITY PHASE; POST-TRIAL)
A. HOWARD MATZ, District Judge.

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Not Reported in F.Supp.2d, 2010 WL 2635768 (C.D.Cal.)
(Cite as: 2010 WL 2635768 (C.D.Cal.))

I. FINDINGS OF FACT

A. *The Bermite Powder Company and Whittaker Corporation*

*1 1. The site at issue in this litigation is located at 22116 West Soledad Canyon Road in Santa Clarita, California (the "Site"). It covers approximately 996 acres. Revised PreTrial Conference Order (Doc. No. 112-2), § 5 ("PTCO Stip.") # 1. *See* Trial Ex. 291.

2. Perchlorate has been found in the soil and groundwater at the Site. *See* Stip. Fact No. 2.

3. The Bermite Powder Company ("Bermite") acquired the Site in the 1940s. PTCO Chronology at Ex. A (Document No. 112-3).

4. On September 23, 1967, Whittaker Corporation ("Whittaker") acquired Bermite and assumed its operations at the Site. Trial Ex. 1593 (1967 Acquisition Agreement between Bermite and Whittaker, including Schedules) (the "1967 Acquisition Agreement"); PTCO Stip. # 4. Whittaker continued manufacturing large numbers of perchlorate-containing products at the Site for the oil industry through at least 1986. Whittaker's manufacturing activities at the Site ceased in 1987.

5. Perchlorate and solvent waste was created as a result of Whittaker's manufacturing operations at the Site.

6. At all relevant times, Bermite or Whittaker owned all of the land that comprises the Site. The United States at no time owned any of the land at the Site. *See* Luce Depo. (5/12/09) at 54:25-55:7; Tigue Depo. at 237:11-13.

7. Bermite or Whittaker owned and maintained all of the buildings and structures at the Site. Those companies owned all warehouses, laboratories, production buildings, and places where Bermite and Whittaker stored hazardous waste at the Site.

8. Bermite and Whittaker maintained the grounds of the Site.

9. Bermite and Whittaker provided security for and controlled access to the Site.

10. Whittaker and Bermite were responsible for directing, managing, and controlling all day-to-day operations at the Site, including operations related to waste disposal.

11. Whittaker and Bermite developed various operational procedures for handling solvents, materials, and waste at the Site, including in the propellant plant.

12. Whittaker's Safety Department was responsible for handling, storage, and ultimate disposal of all waste, including perchlorate waste, at the Site.

13. Whittaker was responsible for ensuring that its waste disposal practices were in compliance with all applicable local, state, and federal environmental laws and regulations.

14. Whittaker was solely responsible for obtaining and maintaining all permits needed for the Site, including open burn permits and wastewater discharge permits.

15. Following the 1967 Acquisition, Whittaker maintained the Bermite name and operated Bermite as a separate division. Accordingly, Bermite is referred to herein, both before and after the 1967 acquisition as "Bermite."

16. Following World War II, Bermite provided munitions, ordnance and material to the United States military for use in the country's national defense. Declaration of Max Calkins, Document No. 99 ("Calkins Decl."), ¶¶ 13, 18, 20.

*2 17. From 1954 until 1987, in excess of 90 percent of Bermite's production was for the United States Government.

B. *The Military Products at Issue in this Litigation*

18. At trial, AISLIC stipulated that it was abandoning its claim that the United States is liable under CERCLA in connection with any activities at the Site during World War II.

19. The only government contracts or agreements that AISLIC alleged as a basis for the United States' liability date between the late-1960s and the mid-1980s.

20. Beginning in the mid-1960's, Bermite produced for the United States rocket motors for use in Sidewinder and Chaparral missiles. The Chaparral and Sidewinder missiles are closely related. The Sidewinder is used by the Navy, while the Chaparral is used by the Army. The mis-

siles use the same type of propellant (known as N-29 propellant). Calkins Decl., ¶¶ 17-19, 30.

21. Bermite produced GAU-8 ammunition for the military from approximately September 1977 until December 1980. One of the types of ammunition produced was an armor-piercing projectile that contained a depleted uranium core. Calkins Decl. ¶¶ 99-102; 2/24/10 AM Tr. 310:1-9 (Calkins); 3/2/10 PM Tr. 1085:1-1082:19 (Williams).[FN1]

FN1. The Trial Transcript ("Tr") is hereafter cited by date, time (am or pm) and page and line number.

C. Hazardous Substances Used By Bermite in Connection with Production and Refurbishment of Rocket Motors, and Production of GAU-8 Ammunition

1. *Ammonium Perchlorate*

22. Ammonium perchlorate was a major component of N-29 propellant. PTCO Stip # 6. N-29 is composed of approximately 67% perchlorate. Declaration of Robert Zoch Document No. 107 ("Zoch Decl.") ¶ 39.

23. Total use of perchlorate to manufacture Sidewinder and Chaparral rocket motors has been estimated to exceed over 1.4 million pounds of perchlorate. Trial Ex. 6553.

24. Partial records obtained by the Government's retained expert, Dr. Jay Brigham, confirm that Kerr-McGee sold more than 400 tons (800,000 pounds) of ammonium perchlorate to Bermite in the 1970s. Trial Exs. 1343-47, 1349-55.

2. *Volatile Organic Compounds*

25. Bermite used volatile organic compounds ("VOCs"), including trichloroethylene ("TCE"), perchloroethylene (also called tetrachloroethylene or "PCE") and trichloroethane ("TCA"), at various times in its history for degreasing or cleaning Government furnished equipment and machinery and also in making products for the Government. Deposition of Edwin Tigue ("Tigue Depo.") 42:23-43:6, 48:1-20; 49:16-50:1, 58:19-59:10, 83:5-84:8, 85:1-3, 151:15-20.

26. Bermite used TCE until the late 1970's. The United States then authorized Bermite to switch to using PCE after scientific studies demonstrated that TCE had toxic properties. Trial Ex. 1023.0009.

27. In 1982, the United States approved Bermite's use of TCA, a different chlorinated solvent, instead of PCE. Trial Ex. 1001.0018.

28. Among other uses, Bermite employees used VOCs in the propellant plant area to clean equipment, including mandrels, casting and curing assembly, and mixing equipment. Tigue Depo. 42:23-43:9, 48:14-18, 49:16-50:1, 58:19-59:10, 71:4-72:24, 83:5-84:8, 85:1-24, 139:4-8, 140:24-141:12.

*3 29. In addition, the Government required that Bermite use VOCs to clean Sidewinder/Chaparral rocket tubes in the propellant plant area. Tigue Depo. 58:1-59:6; Deposition of Bradley Peach dated February 26, 2009 ("2009 Peach Depo.") 161:21-163:2.

3. *Depleted Uranium*

30. The GAU-8 armor-piercing incendiary projectiles that were test-fired at Bermite contained a depleted uranium ("DU") core. 3/2/10 PM Tr. 1091:3-1091:18 (Williams: "Q. They shot the actual depleted uranium in order to test it at Bermite? A. Correct."); Calkins Decl. ¶ 101.

D. Basic Ordering Agreement for Recycling Rocket Motors and Contracts for the Production of Rocket Motors

1. *Basic Ordering Agreement to Refurbish and Recycle Rocket Motors*

31. In 1975, Bermite entered into a Basic Ordering Agreement (DAAH01-76-A-009) with the United States Army to repair, rebuild, refurbish, and retrofit Chaparral rocket motors (the "1975 BOA"). Trial Ex. 66. The Statement of Work for that Basic Ordering Agreement contemplated that Whittaker would perform one of four general tasks:

a. Modify, repair, rebuild, refurbish and/or retrofit Chaparral rocket motors;

b. Furnish and deliver repair parts;

c. Furnish and deliver modification kits; or

d. Supply technical and logistical services and material required in support of the Chaparral rocket motors.

See Trial Ex. 66 at 0066.18-0066.19. It is not possible to determine what particular task Bermite performed at any given time, absent a specific order, given the different tasks set forth in the Agreement. *See* Trial Day 1, Vol. 2 at 204:19-205:19 (Calkins).

32. One Delivery Order issued under the 1975 BOA has survived. In that Delivery Order, the United States directed Bermite to refurbish 67 Chaparral rocket motors. The United States paid Bermite $1,000 to refurbish each rocket motor. Trial Exs. 67 and 1320.

33. Each Delivery Order issued under the 1975 BOA was a separate contract that incorporated and was subject to the terms of the 1975 BOA. Trial Ex. 66.0025.

34. Circumstantial evidence shows that additional Delivery Orders were issued under the 1975 BOA. Certain surviving records refer to additional Delivery Orders. Trial Ex. 1726. In addition, records maintained by the National Archives reflect that the United States paid Bermite $1,118,000 for work performed under Delivery Orders for the 1975 BOA. Trial Exs. 1320 and 6608; 2/26/10 PM Tr. 815:10-817:5 and 838:6-10 (Brigham); Zoch Decl. ¶ 68. Based on a price of $1,000 per motor, this data implies that Bermite recycled over 1,100 rocket motors for the Army under the 1975 BOA.

35. Bermite removed and disposed of at least some quantities of perchlorate-containing propellant from rocket motors provided it by the Army for recycling. By May 1978, Bermite had generated hazardous waste in connection with the manufacturing of propellant and explosive products, the largest volume of which resulted from "re-loading" Chaparral rocket motors under the 1975 BOA. Trial Ex. 1296.

*4 36. Edwin Tigue, a Whittaker employee who personally oversaw the removal of propellant from rocket motors, testified that the rocket motors that were "hogged out" at the site had not met the specifications and were hogged out on a daily basis by the production department, using water. Tigue Depo, pp. 121-122.

37. Under the 1975 BOA, the Government approved the use of substantial amounts of government-furnished equipment such as casting mandrels needed to load new propellant into recycled rocket motors. Trial Exs. 1209 and 1975. In order to use this equipment to inject new propellant into the rocket motors provided by the Army under the 1975 BOA, Bermite first had to remove the propellant previously contained in the motors. Trial Ex. 67.0003-0008 (Scope of work).

2. Contracts for the Manufacture of New Rocket Motors

38. From 1965-83, the United States issued contracts under which Bermite manufactured and delivered to the Government over 20,000 Chaparral and Sidewinder rocket motors. 2/26/10 PM Tr. 869:12-19 (Brigham); Trial Exs. 98.0001-2 and 6552.0001; Zoch Decl. ¶¶ 40, 55-59, 62. During the same period, Bermite manufactured an additional 2-3,000 rocket motors that were used for test-firing at the Bermite site or that were demilitarized at the site after failing inspection. Zoch Decl. ¶ 62, Calc. 1.

39. Many of the actual contracts between the United States and Bermite for the production of rocket motors have been lost. This is explained at least in part by the fact that Government policy calls for the destruction of contracts after five to seven years. Given this policy, together with the passage of time, many of the contractual documents for the manufacture of rocket motors have been lost. 2/26/10 AM Tr. 716:5-717:9 (Tamada).

40. Eight contracts for the manufacture of Chaparral or Sidewinder rocket motors remain in existence (the "surviving" rocket motor contracts). Trial Ex. 6542.0001 and exhibits cited therein; Zoch Decl. ¶ 42. The earliest of the surviving contracts was issued in 1971. Trial Ex. 6542. An index to the key provisions of the surviving contracts is found at Trial Ex. 6566.

3. Expected Attrition under Rocket Motor Manufacturing Contracts

41. Attrition is "additional materials that are allocated to a rocket motor contract production, but then become scrap or waste because they're not used to manufacture the rocket." 2/25/10 AM Tr. 474:7-9 (Zoch)

42. Each rocket motor manufacturing contract issued to Bermite intentionally provided excess raw materials in order to account for attrition expected to occur under the contract. Calkins Decl. ¶ 47; 2/23/10 PM Tr. 198:19-199:1 and 200:8-12 (Calkins); 2/24/10 AM Tr. 251:2-253:9 (Calkins); 2/25/10 AM 473:25-474:9 (Zoch); Trial. Ex. 1022.0296 (Bill of Material).

43. The excess raw materials were provided to allow for normal losses of materials that routinely occurred in the course of manufacturing rocket motors. These

planned-for losses included losses due to spillage and generation of dust, accumulation of materials on manufacturing equipment, the need to test-fire a given number of rocket motors, and the need to take into account losses from expected rejection of a small but predictable percentage of rocket motors that failed inspection. Calkins Decl. ¶ 47; 2/23/10 PM Tr. 199:6-200:12 (Calkins).

E. *The Title Vesting Clause in the Rocket Motor Manufacturing Contracts*

*5 44. Each of the surviving rocket motor contracts and the Basic Ordering Agreements incorporated the provisions of Armed Services Regulation ("ASPR") section 7-104.35, either by reprinting the language of that section, or by incorporating the terms by explicit reference. Calkins Decl. ¶ 94; Tr. Exs. 6566 (chart demonstrating that each surviving contract incorporated ASPR section 7-104.35) and 6558; 2/26/10 AM Tr. 728:3-729:8 (Tamada) and Trial Ex. 6601(ASPR § 7-104.35); Trial Ex. 1696.0129 and 2/26/10 AM Tr. 725:14-26:3 (Tamada).

45. ASPR Section 7-104.35 is titled "Progress Payments" and is hereafter referred to as the "Progress Payment Section." Trial Ex. 1696.0129 and 2/26/10 AM Tr. 725:14-726:3 (Tamada) and Trial Ex. 6601. Part "D" of the Progress Payment Section, which is incorporated into all of the surviving contracts, is entitled "Title," and is hereafter referred to as the "Title Vesting Clause." Trial Ex. 1696.0129 and 2/26/10 AM Tr. 725:14-728:8 (Tamada); Tr. Exs. 6558; 6566 (chart demonstrating that each surviving contract incorporated ASPR section 7-104.35).

46. The Progress Payment Section is currently codified at Federal Acquisition Regulation ("FAR") Section 52.232 of Title 48 of the Code of Federal Regulations. Although the language of the Progress Payment Section has changed slightly over the years, its terms, including the Vesting Clause, have remained basically unchanged since at least 1971. 2/26/10 AM Tr. 729:18-730:10 (Tamada). *Cf.* Trial Exs. 6601 (1974 ASPR), 1696.0129 (contract containing 1969 ASPR), and FAR 52.232.-16(d) (48 CFR § 52.232.-16(d)).

47. The Progress Payment Section obligated the United States to make interim (i.e., "progress") payments to the contractor for a stated percentage (typically 80%) of certain costs incurred by the contractor in completing the contract. In exchange, the Progress Payment Section provided the United States with certain rights under the contract, including the rights set forth in the Vesting Clause. Trial Ex. 1696.0128-32; 2/24/10 AM Tr. 296:15-298:2 (Calkins).

48. The Vesting Clause contained in all of the contracts provided that title to "all parts, materials, inventories, work in progress, [and] special tooling"-whether acquired before ("theretofore") or after ("thereafter") the date of the contract-shall "forthwith vest in the Government" as soon as the items in question were "allocable or properly chargeable" to the contract. Trial Ex. 1696. 0129 and Trial Ex. 6601 at p. 123; Calkins Decl. ¶¶ 94-95.

49. An item is allocable or properly chargeable within the meaning of the Vesting Clause if it is a charge incurred for the benefit of the contract. 2/26/10 AM Tr. 739:2-740:5 (Tamada). *See also* FAR 31.201-4 (48 CFR) (providing that a cost is allocable where it is incurred for the contract, benefits the contract or is necessary to the overall operation).

50. It is the policy of the Department of Defense that the Title Vesting Clause is interpreted to actually vest title in the United States. 2/26/10 AM Tr. 741:25-742:13 (Tamada) and Trial Ex. 6602 at § 14-202.4c.

*6 51. Bermite sought and received progress payments under all its government contracts, including the Sidewinder and Chaparral rocket motor contracts. 2/24/10 AM Tr. 295:10-21; 296:15-298:7 (Calkins). *See also* Trial Ex. 35 (request for progress payments).

1. *The Government Owned All Work in Progress as a Result of the Title Vesting Clause*

52. During the rocket motor manufacturing process at Bermite, title to all materials "allocable or properly chargeable" to the rocket motor contract vested in the United States. Only after the entire contract was completed and the final payments were made, which could take years, would title to the allocable items not delivered to and accepted by the Government vest in the contractor. Thus, during the entire manufacturing process, the Government was vested with title to all allocable items, whether delivered or not. 2/26/10 AM Tr. 744:3-745:5 (Tamada); Trial Ex. 1696.0130-0131 and Trial Ex. 6601 at p. 123.

53. The Title Vesting Clause on its face applies to all work in progress and all allocable materials, including materials (such as perchlorate) lost to "attrition," testing or rejection of motors during the manufacturing process; it does not on its face exclude waste, or materials that may

become waste. 2/26/10 AM Tr. 744:25-745:13 (Tamada), Trial Ex. 1696.0130-0131 and Ex. 6601.

54. Under the contractual Vesting Clause provision, the United States took title to all rocket motors under production as work in progress. The works in progress included both those rocket motors that ultimately satisfied the Government's manufacturing and testing specifications and those that ultimately failed to satisfy the specifications. Trial. Exs. 1696.0129 and 6601.

2. As a Result of the Title Vesting Clause, The Government Owned All Perchlorate and Solvents Purchased for Use under the Surviving Rocket Motor Contracts

55. Raw materials purchased by Bermite to be used with respect to each surviving rocket motor contract included both ammonium perchlorate and VOCs. Trial Ex. 1022.0296. Ammonium perchlorate was a major constituent of N-29 propellant used in the rocket motors. VOCs were required in order to clean production equipment, including mixers and mandrels as part of the rocket motor manufacturing process. Tigue Depo. 83:5-84:19; 85:1-3; 151:8-14, 47:24-48:23; 138:25-140:22.

56. These raw materials immediately became "allocable or properly chargeable" as soon as the perchlorate or VOCs were purchased, therefore passing title to the Government under the Title Vesting Clause. 2/26/10 AM Tr. 739:2-740:5 (Tamada: "Q. So when in a rocket motor contract, the contractor goes out and buys perchlorate that is required for making that rocket motor. That item then immediately becomes chargeable and allocable to the contract? A. Yes.... Q. I am not asking you about whether you are going to go in and actually grab the perchlorate. What I am asking is the title would vest at that point in the U.S. government, correct? A. Correct.") and Tr. Exs. 6566 and 6602 at § 14-202.4c.

F. *Means of Contamination of the Bermite Site by Perchlorate*

*7 57. N-29 propellant waste (all of which contained perchlorate) caused contamination at the Bermite site by at least the following means: 1) propellant waste collected at the plant was burned in designated burn pits in the Burn Valley, 2) propellant waste dissolved in waste water flowed into impoundments and/or was washed onto the soil around the propellant buildings, and 3) propellant waste was released as the result of test-firings of government-owned rocket motors required under the rocket motor contracts. Zoch Decl. ¶¶ 93-98; Trial Exs. 6553; 6554. In addition, evidence showed that rocket motor production also may have caused perchlorate contamination from air-borne dust it generated, from dust found on the floors of buildings where propellant was handled, and also, theoretically, from dust that may have stuck to the clothing or shoes of workers present in such buildings. 3/2/2010 PM Tr. 1063:20-1064:5 (McLane).

58. Details of how this contamination occurred are set forth in the sections below.

G. *Contamination Resulted From Government Furnished Equipment-"GFE"-Used in Connection with Rocket Motor Manufacturing Contracts*

1. The GFE Provided by the Government

59. The United States does not dispute that government-owned equipment was present at Bermite during all relevant times. 2/25/10 AM Tr. 604:14-25; 1170:7-13 (Zoch).

60. Government policy includes furnishing government-owned equipment to a contractor when the contractor establishes it has a need for such equipment to carry out the contract. 2/26/10 AM Tr. 694:16-21 (Tamada).

61. Government Furnished Equipment (sometimes referred to as "GFE"), included specialized equipment and tooling, which was necessary to manufacture rocket motors economically and in a timely manner. Calkins Decl. ¶¶ 44, 64; 2/24/10 AM Tr. 279:16-19 (Calkins); Trial Ex. 1422. If Bermite had been required to buy the equipment and special tooling for each contract, the United States would have experienced great delays. 2/24/10 AM Tr. 255:3-5 (Calkins).

62. The prices contained in Bermite's bid proposals for rocket motor manufacturing contracts were predicated upon the United States Government authorizing rent-free use of government-owned property. Trial Ex. 1022.0275-79; 2/24/10 AM Tr. 249:9-19, 254:9-16 (Calkins).

63. The United States Government repeatedly authorized the rent-free use of the GFE, which included special tooling and special test equipment for the rocket motor manufacturing contracts. Trial Exs. 944, 1194.0001-4, 1023.0005-8, 1061, 1205, 1208, 1209, and 1728.

64. The United States also authorized the use of GFE on Bermite's subcontracts to manufacture rocket motors.

Trial Exs. 1397 and 1605; Calkins Decl. ¶ 61.

65. Each surviving rocket motor manufacturing contract contained a provision that permitted the United States Government to furnish property to Bermite for the performance of the contract. Trial Exs. 14.0001-0010, 6566; Calkins Decl. ¶ 59.

*8 66. The specialized equipment and tooling furnished by the United States Government included grinders, specially shaped rods known as mandrels, fixtures, jigs and probes, molds, cast and cure assemblies, and plugs. Calkins Decl. ¶¶ 66-68; Trial Exs. 6551 and 503.0001-2.

67. Each piece of GFE was accountable to a current rocket motor contract or a facilities contract. 2/24/10 AM Tr. 267:15-268:20, 275:18-276:7 (Calkins).

68. The Government authorized the transfer of accountability of Government Furnished Equipment from one rocket motor contract to another. Calkins Decl. ¶¶ 62-63; 2/24/10 AM Tr. 289: 7-11 (Calkins); Trial Ex. 942.0001-8; 945; 946; 948; 1001.0491-93; 1023.0002; 1062; 1198; 1488; 1489; 6551.

69. By late 1984, Bermite was no longer manufacturing rocket motors and the United States requested that Bermite return the excess GFE to the United States. The excess GFE included 29 casting mandrels. Trial Ex. 1001.0485; 2/24/10 AM Tr. 290:5-13 (Calkins).

70. In 1985, Bermite identified its excess GFE and requested that the GFE be placed into plant clearance. Trial Ex. 1001.0473-76; 2/24/10 AM Tr. 292:6-19 (Calkins).

71. In January 1986, Bermite purchased the excess GFE, including the casting mandrels, from the United States Government for $4,000. Trial Ex. 1001.0462-66; 2/24/10 AM Tr. 292:24-293:17 (Calkins).

72. There is no evidence that Bermite owned casting mandrels at any time when it was manufacturing Sidewinder or Chaparral rocket motors.

2. The GFE was Used in Connection with the Rocket Motor Contracts

73. Bermite routinely used the GFE that was provided by the United States Government to manufacture rocket motors. Bermite requested the GFE because Bermite needed the special tooling and equipment to manufacture rocket motors. 2/24/10 AM Tr. 263:5-11 and 277:16-23 (Calkins); 2/26/10 AM Tr. 694:16-695:5 (Tamada); Trial Ex. 1629.0091-92.

74. The GFE for the manufacture of rocket motors was heavily used. Some of the government-owned mandrels required Government authorized repairs because the GFE was worn down from years of usage on the rocket motors contracts. Trial Ex. 1730.0001-2; Calkins Decl. ¶ 69. Other GFE similarly was classified as "must replace" or "should replace" due to frequent use. Trial Ex. 933; 2/24/10 AM Tr. 276:15-23 (Calkins).

75. The United States Government repeatedly authorized the transfer, and Bermite's use, of Government Furnished Equipment to manufacture rocket motors. Trial Exs. 942.0001-8, 945, 946; 948, 1023.0002, 1198, 1488, 1489; Calkins Decl. ¶ 69; 2/24/10 AM Tr. 277:7-15 (Calkins).

76. The Government owned and provided at least one Crusher, Multi-Swing Hammer. The Crusher, Multi-Swing Hammer was used to grind perchlorate to specified particle sizes for use in rocket motor manufacturing. Trial Exs. 18.0004, 1532; 503.0001-2, 1629.0091-92; 2/24/10 AM Tr. 272:10-24; 273:18-275:3 (Calkins).

77. The United States concedes that the Crusher, Multi-Swing Hammer was used at Bermite to manufacture Chaparral and Sidewinder rocket motors. 3/3/10 AM Tr. 1186:13-18 (Government Closing).

*9 78. The United States concedes that Government owned mandrels were furnished to Bermite and used to manufacture Chaparral and Sidewinder rocket motors. 3/3/10 AM Tr. 1172:1-5, 1186:10-12 (Government Closing).

79. The mandrels were placed in the rocket motor tubes prior to casting to give form and shape to the propellant in the rocket motor tubes. Tigue Depo. 82:19-25; Calkins Decl. ¶ 67.

80. The cast and cure assemblies were GFE and used to cast propellant into the rocket motor tubes. Trial Exs. 6564 (Propellant pouring photograph); 1629.0257-60; 2/24/10 AM Tr. 320;3-19 (Calkins); Calkins Decl. ¶ 68; Tigue Depo. 84:9-16.

81. Fixtures were GFE and used to hold the casting mandrel to the rocket motor and mandrel assembly. 2/25/10 AM Tr. 501:20-25 (Zoch); Trial Ex. 6551; Zoch Decl. Table 1.

82. Jigs were GFE and were used to guide machine tools or to hold a piece of work in place in the process of perchlorate. 2/25/10 AM Tr. 503:5-10 (Zoch); Trial Ex. 6551; Zoch Decl., ¶¶ 87-92 and Table 1.

83. Compression molds were GFE and were used as a "shape onto which a material could be placed or into which a material could be injected to form an object." 2/25/10 AM Tr. 503:22-25 (Zoch); Trial Ex. 6551; Zoch Decl. Table 1.

84. Compression molds were also used to push down the propellant after casting and curing process. Tigue Depo. 85:4-15.

85. Dies and tools were GFE and were used to shape the ends of the propellant grain in the manufacture of rocket motors. 2/25/10 AM Tr. 519:3-520:4, 520:12-20, 522:20-523:2 (Zoch).

3. *There Were "Disposals" and "Releases to the Environment" of Perchlorate and Solvent Waste at the GFE*

86. Generation, disposal, and release of perchlorate and VOC waste resulted from the use of the specialized government furnished equipment and tooling, including mandrels, cast and cure assemblies, jigs, molds, fixtures, and grinders. 2/25/10 AM Tr. 501:12-502:4, 504:14-18, 518:14-520:20 (Zoch).

87. The manufacture of Sidewinder and Chaparral rocket motors resulted in the generation of 300 pounds of waste propellant per day when the Saugus plant was operating at full capacity. Trial Ex. 168.

88. Grinding of perchlorate was required to be conducted according to Government specification. Tigue Depo. 26:1-27:5, 257:2-260:12 and Trial Ex. 18.

89. Grinders, such as the Government owned and furnished Crusher, Multi-Swing Hammer, were used to grind ammonium perchlorate to Government specified sizes for use in rocket motors. Tigue Depo. 26:9-18, 26:19-27:5; Calkins Decl. ¶ 66; 2/24/10 AM Tr. 272:10-273:2; 273:18-274:2 (Calkins); Trial Ex. 503.0002.

90. The grinders created perchlorate dust, which was collected in either the bag house or fell to the floor. Tigue Depo. 27:6-19, and 127:25-128:22; 3/2/10 AM Tr. 982:21-23 (McLane).

91. Perchlorate dust accumulated on the grinders and the grinders were cleaned with VOCs. 2/25/10 PM Tr. 574:10-575:9 (Zoch).

***10** 92. Perchlorate dust could have blown out of the grinding buildings or been carried outside on the clothing or shoes of Bermite employees.

93. The bag house was a type of vacuum that captured airborne perchlorate dust in the grinding buildings. Tigue Depo. 31:14-24; 2/25/10 AM Tr. 522:10-17 (Zoch).

94. Approximately 150 pounds of ammonium perchlorate dust was collected in the bag house every week. Trial Ex. 281.

95. The bag house was washed out and the waste water from the bag house was placed in a drum and burned in a burn pit. Tigue Depo. 31:4-13; 131:2-17; 2/25/10 AM Tr. 531:25-532:4 (Zoch). The transfer of materials from one vessel to another routinely results in releases of the material transferred. 2/25/10 PM Tr. 562:22-563:4 and 573:15-25 (Zoch). The bag houses were regularly emptied. They were located outside the grinding building. 3/2/10 PM Tr. 1063:17-19 and 1067:8-13 (McLane). Any spills from transferring dust from the bag houses to drums would have occurred on ground outside the grinding building.

96. Bermite employees swept up 2 or 3 pounds perchlorate dust that accumulated on the floor of the grinding building. Tigue Depo. 26:7-18, 28:7-18, and 128:11-22.

97. The remaining perchlorate dust on the walls and floors was washed out from the grinding buildings to the bare ground. Tigue Depo. 27:20-28:6, 31:25-32:17, 47:14-23, 128:24-130:13; 2/25/10 AM Tr. 530:24-531:3 (Zoch); 2/25/10 Tr. 569:5-20 (Zoch); 3/2/10 PM Tr. 1000:7-10 (McLane).

98. Perchlorate that was washed out of the grinding buildings was a release into the environment. 3/2/10 AM Tr. 1000:7-10 (McLane); 3/2/10 PM Tr. 1068:17-19 (McLane).

99. Every week, approximately 30 gallons of water mixed with ammonium perchlorate was washed out of Building 308, a grinding building. Trial Ex. 281.

100. Mixers were used to mix and heat the chemicals to make the propellant for the rocket motors. Tigue Depo. 43:10-45:17.

101. For each batch of 25 rocket motors, Bermite employees used 10 to 15 gallons of a VOC to rinse out remaining perchlorate to clean the mixer. Tigue Depo. 47:24-48:23 and 138:25-140:22.

102. The VOC used to clean the mixers was collected in drums. The collected VOC was a mixture of solvent and perchlorate. Tigue Depo. 148:5-19.

103. Bermite employees used water to wash the perchlorate dust generated from the mixer out of the building and onto the ground. Tigue Depo. 148:5-149:4.

104. Mandrels were placed in the rocket motor tubes prior to casting to give form and shape to the propellant in the rocket motor tubes. Tigue Depo. 82:19-25.

105. Mandrels were removed from the rocket motor tube after cast and cure. Tigue Depo. 83:1-4.

106. The mandrels had a pound or two of propellant on the knob after it was extracted from the cast and cure assembly. Tigue Depo. 83:5-14; 2/25/10 AM Tr. 507:5-17 (Zoch).

107. Bermite employees used a VOC to clean and remove propellant from the mandrels. Tigue Depo. 83:5-84:19, 85:1-3, 151:8-14.

***11** 108. The waste propellant and VOC rags from the mandrels were placed in drums and burned. Tigue Depo. 83:15-18; 2/25/10 AM Tr. 499:11-17, 528:25-529:24 (Zoch).

109. The cast and cure assembly was configured to generate excess propellant. Trial Ex. 1629.0257-58, 1629.0274; Tigue Depo. 84:20-22.

110. The excess propellant from the cast and cure assembly accumulated near the casting spider and on the aft end of the rocket motor. 2/24/10 AM Tr. 285:18-287:13 (Calkins).

111. After the casting process, the excess propellant was scooped off the top of the tube and placed in drums. Tigue Depo. 50:2-19.

112. After the propellant was removed from the cast and cure assemblies, the cast and cure assemblies were cleaned with TCE. Tigue Depo. 84:9-22, and 85:23-24.

113. The casting pot and chandelier were also cleaned with TCE. Tigue Depo. 49:16-22.

114. Compression molds generated excess propellant. After the excess propellant was removed, the compression molds were cleaned with TCE. Tigue Depo. 85:16-24; 2/25/10 AM Tr. 511:20-512:8 (Zoch).

115. Perchlorate dust and waste was generated from sanding out the rocket motor tubes. The dust and waste were placed in a drum for disposal. Tigue Depo. 53:16-22.

116. A pound or two of propellant remained on the jigs after their use in Building 317, the final assembly building, and was washed into the 317 impoundment. 2/25/10 AM Tr. 503:17-21, 508:5-510:6 (Zoch).

4. *There Is Contamination Around The Buildings Where GFE Was Used and Where Waste from GFE Was Burned*

117. Perchlorate grinding occurred in Buildings 308, 313, and 314. 3/2/10 PM Tr. 1062:23-1063:5, 1071:18-1072:17 (McLane).

118. Perchlorate stained the ground around the grinding buildings. Tigue Depo. 158:2-159:10.

119. Significant levels of perchlorate and VOC contamination exist around these buildings. Trial Exs. 6539A and 3044 (McLane August 2009 Report) at 30.

120. Drums filled with perchlorate waste and solvent waste were taken to Burn Valley and burned. Tigue Depo. 30:15-31:13, 50:12-24, 83:10-18, and 84:23-25.

121. Significant levels of perchlorate and VOC contamination exist in Burn Valley. Trial Ex. 6539A; Trial Ex. 3044 (McLane August 2009 Report) at 13; Trial Ex.

3045 (McLane December 2009 Report) at 20.

122. Casting and curing of rocket motors occurred in Buildings 306 and 307.3/2/10 PM Tr. 1073:18-24 (McLane).

123. Soils near Buildings 306 and 307 are heavily contaminated with perchlorate. Trial Ex. 6539A; 3/2/10 PM Tr.1073:22-1074:9 (McLane).

H. *Contamination Resulted From the "Hogging Out" Procedures Used on Recycled and New Rockets*

1. *Bermite Hogged Out Rocket Motors Owned by the Government under the Recycling Contracts*

124. Pursuant to Delivery Orders issued under the 1975 BOA for refurbishing and recycling rocket motors, the United States sent its rocket motors to Bermite to have the propellant removed from the rocket motor tube and to have more propellant cast into the rocket motor. Trial Ex. 66.

***12** 125. The United States owned the Chaparral rocket motors that the Army Missile Command took from its inventory and sent to Bermite for repairing, refurbishing, and recycling. 2/23/10 AM Tr. 92:10-1 (Government Opening); 2009 Moore Depo. 227:4-228:4; Calkins Decl. ¶ 76; Trial Ex. 66; Deposition of Jay Brigham 96:8-16; 98:15-25 ("Brigham Depo."); 2/25/10 PM Tr. 588:20-589:1 (Zoch).

126. The surviving Delivery Order for the 1975 BOA contained a government-authored Scope of Work that provided for the removal of old propellant from the rocket motor tubes. Trial Ex. 67.

127. In the Scope of Work, the Government stated that the "most suitable" method for the removal of propellant was "the use of high pressure (approximately 3,000 psi) water." Trial Ex. 67. Bermite in fact used high pressure water to remove perchlorate from rocket motors that were hogged out. Tigue Depo. 64:1-65:2, and 67:14-25.

128. The method for removing propellant waste generated perchlorate waste. 2009 Moore Depo. 233:13-20; Tamada Depo. 74:19-25; Tigue Depo. 63:2-65:22.

129. The United States issued multiple Delivery Orders under the Basic Ordering Agreement with a total value of approximately $1.1 million. Trial Exs. 1320, 1726, and 6608.

130. Approximately 1,100 Chaparral rocket motors were hogged out under the 1975 Basic Ordering Agreement. Trial Ex. 67; Zoch Decl. ¶ 68.

131. Each rocket motor contained approximately 50 pounds of perchlorate. Trial Ex. 1171.0001.

132. The refurbishing of Chaparral rocket motors resulted in the intentional disposal of approximately 55,000 pounds of perchlorate, assuming that approximately 1,100 motors were hogged out. Trial Exs. 67 and 6554.

133. The United States owned the rocket motors and the propellant contained within them prior to removal from the refurbished rocket motors. Moore Depo. 227:4-228:4; Trial Ex. 66; 2/23/10 AM Tr. 92:10-13 (Government Opening).

134. The United States owned the perchlorate in the rocket motors, including that from the hog-out process. 2/25/10 PM Tr. 588:20-589:1 (Zoch).

135. The United States Government authorized the transfer and use of Government Furnished Equipment used in the manufacture of rocket motors, including mandrels and the cast and cure assemblies, for use on the 1975 BOA to refurbish and recycle rocket motors. Trial Exs. 1209 and 1975.

2. *Bermite Hogged Out Rejected New Rocket Motors Which Were Government Owned by Virtue of the Vesting Clause*

136. The final assembly process for rocket motors required an x-ray to ensure that no air bubbles were trapped in the propellant mix. PTCO Stip. # 7.

137. Under applicable contracts and regulations, Bermite was required to remove, or "hog-out" propellant from rockets that failed to satisfy specifications. Tigue Depo. 52:25-53:2, and 61:15-63:1; Calkins Decl. ¶ 83; 2/25/10 PM Tr. 590:14-23 (Zoch).

138. A conservative estimate of one percent of rocket motors failed to satisfy the United States Government's specifications. Between approximately 101 (testimony) and 238 (declaration) rocket motors were required to be hogged-out after propellant was loaded into the rocket

motor tube. Zoch Decl. Calc. 1 (p. 11), ¶ 61; 2/25/10 PM Tr. 591:2-592:9 (Zoch).

***13** 139. The propellant contained within and removed from the rejected rocket motors was material owned by the United States under the Progress Payment provisions. Trial Exs. 1696.0129-132 and 6558.

140. The United States intended that Bermite dispose of propellant hogged-out of new rocket motors that failed to meet specifications. Trial Exs. 6566, 61.0162; Calkins Decl. ¶ 77.

141. The disposal of perchlorate from rejected, in-progress rocket motors was an expected consequence of the contracts that the United States entered into with Bermite.

3. There Were "Disposals" and "Releases to the Environment" of Perchlorate and Solvent Waste as a Result of the Hog Outs

142. Bermite employees performed hog-outs under a metal lean-to over a concrete slab. The lean-to had no walls and was open to the environment. Tigue Depo. 63:2-12; Ferrett Depo. 72:11-73:2; Pierson Depo. 79:10-14; Trial Ex. 670.

143. The United States Government advised Bermite that using high-pressure water (3,000 psi) was the most suitable method to remove propellant from the rocket motors. Trial Ex. 67.0007.

144. After Bermite soaked the rocket motors in oakite, Bermite employees used high pressure water to remove the propellant from the Government's rocket motors. Tigue Depo. 64:1-65:2; 67:14-25.

145. Perchlorate is highly soluble in water. 2/25/10 PM Tr. 596:21-597 (Zoch).

146. Water containing perchlorate from the hog-out process flowed across the ground from the hog-out area and collected in the 317 impoundment. 2002 Peach Depo. 87:13-89:24; Tigue Depo. 65:12-15; 2/25/10 PM Tr. 597:13-22 (Zoch).

147. A cement incliner or gutter allowed water to drain from the hog-out area to the pond. Tigue Depo. 65:17-22; 2009 Peach Depo. 98:3-98:18, 99:11-15, and 100:24-101:7.

148. Initially, the 317 sump was not lined. Bermite lined the 317 sump after the law changed in the late 1970's. 2/25/10 PM Tr. 597:23-598:5 (Zoch). Water contained in the impoundment could seep into soils below the impoundment, along with any perchlorate dissolved in the water. 2/25/10 PM Tr. 598:19-599:16 (Zoch).

149. The 317 impoundment overflowed when it rained and the water containing perchlorate ran onto the ground. 2/23/10 AM Tr. 120:8-14 (Government Opening); 2/25/10 PM Tr. 598:11-599:16 (Zoch).

150. During the hog-out process, some propellant was released to the environment when splatters occurred or when propellant fell to the ground and escaped the hog out pad. Tigue Depo. 204:20-25, 206:19-208:17, 209:20-23, and 210:25-212:19.

151. Propellant from the hog out was collected, placed in a drum and burned. Tigue Depo. 205:1-7.

152. In 1983, the sump was replaced with the tank farm, which was built over the former 317 sump. Pierson Depo. 81:14-82:4 and Trial Ex. 670.

4. There Is Contamination Around The Area Where Hog Outs Occurred

153. Perchlorate contamination occurred near the hog-out area and the 317 impoundment. Trial Exs. 6539A and 3044 (McLane August 2009 Report) at 30; 2/25/10 PM Tr. 598:11-22 (Zoch). 2/23/10 PM Tr. 83:5-13 (Government concedes impoundment 317 "is one of the most heavily contaminated areas for both perchlorate and volatile organic compounds ...")

I. Contamination Resulted From Burning of Hazardous Waste in the Burn Valley

***14** 154. Bermite burned perchlorate waste in a designated burn area in the Burn Valley. 2009 Peach 77:5-15. This burning included much of the solid perchlorate or propellant waste disposed at GFE and subsequently drummed, as discussed above. Tigue Depo. 30:15-31:13; 50:12-24; 83:10-18; 84:23-25; 205:1-7.

155. Burning of perchlorate-containing propellant waste occurred in the Burn Valley over many years. Bermite began using this area to burn propellant waste prior to 1974. Trial Ex. 3044 (McLane August 2009 Report) at 44-45.

156. Some of the highest perchlorate soil concentrations at the site have been reported in the Burn Valley. Trial Ex. 3044 (McLane August 2009 Report) at 13.

157. During the years 1974-80, Bermite did not burn propellant waste on-site due to permit limitations on open burning. During these years, Bermite instead sought alternative sites for disposal of its propellant and other waste, and obtained permission from Fort Irwin Military Reservation ("Fort Irwin") in Ft. Irwin, CA to burn and detonate waste at its range from 1974 to 1980. PTCO Stip. # 8. (Contamination of the site nevertheless continued to occur during these years due to releases of liquid waste, possible releases from drums and test-firing of rocket motors.)

158. Bermite was unable to use Fort Irwin for disposal of its waste (including its perchlorate-containing waste) for approximately one year during this period. Trial Ex. 272 (April 22, 1980 Letter from Defense Logistics Agency to Commander Naval Air Sys. Command).

159. By 1980, Bermite was storing as much as 100,000 pounds of propellant at its plant. Trial Ex. 108. Much of the build up of waste was attributable to waste unloaded from Chaparral rocket motors sent to Bermite by the Army under the 1975 BOA. Trial Ex. 1296.

160. During the period of December 1980 to March 1981, Bermite, with the permission of local authorities, burned approximately 50,000 pounds of perchlorate-containing propellant (equivalent to approximately 34,000 pounds of pure perchlorate) in the burn area. Trial Ex. 1108; Zoch Decl. ¶ 101.

J. *Contamination Resulted From Mandated Static Testing of New Rocket Motors*

161. The Government mandated the testing of the Sidewinder and Chaparral missiles and observed their testing. Deposition of Robert Little ("Little Depo.") 114:9-15.

162. The United States Government owned the rocket motors, including the propellant that was tested under the progress payment/title vesting provision in the rocket motor contracts. Trial Ex. 6558.

163. Bermite conducted its rocket motor static test fire near Building 353. Trial Ex. 6539A; 2/24/10 AM Tr. 300:8-12 (Calkins); 3/2/10 PM Tr. 1061:12-21 (McLane).

164. Bermite test-fired approximately 950 rocket motors under specification set forth in the companies' contracts with the United States. Zoch Decl. ¶ 60.

165. The rocket motors in question contained approximately 47,000 pounds of perchlorate. Much of this perchlorate was burned as part of the test-firing. Trial Ex. 6553.

***15** 166. The rocket motors were locked in and exhaust came out of the rocket motors. 2/24/10 AM Tr. 300:14-18; 321:2-10 (Calkins); Tr. Ex. 6564.

167. Perchlorate contamination exists in the test-fire area. Trial Ex. 3044 (McLane August 2009 Report) at 26.

K. *Contamination Resulted From the Manufacture/Testing of the GAU-8 PGU-14 Armor Piercing Incendiary Ammunition*

1. *The Honeywell Subcontract for PGU-14 Ammunition*

168. During the late 1970s, Bermite entered into a subcontract with Honeywell to manufacture and test ammunition for the GAU-8 gun for the United States Air Force. Calkins Decl. ¶¶ 99-102.

169. Bermite manufactured the ignitor mix, IB-52, for the following GAU8 ammunition: target practice ("TP"), high explosive incendiary and PGU-14.2/24/10 AM Tr. 317:24-319:20 (Calkins). PGU-14 refers to armor piercing incendiary (API) 30mm ammunition used by the Air Force's GAU-8 gun. Calkins Decl. ¶¶ 99-102; 2/24/10 AM Tr. 310:1-9 (Calkins), 3/2/10 PM Tr. 1085:1-1092:19 (Williams).

170. The PGU-14 projectiles contained at their core a depleted uranium rod made from a raw uranium substance known as UF_4 or UF_6 (hereafter, "raw depleted uranium"). Williams Decl. ¶ 5; 3/2/10 PM Tr. 1090:18-1091:18 (Williams).

171. Bermite was responsible for loading, assembling and packing the GAU-8 ammunition, including for the PGU-14. 3/2/10 PM Tr. 1091:3-1092:25 (Williams).

2. *The Government Furnished the Depleted Uranium and Test Barrel For the PGU-14*

172. The Air Force furnished Honeywell with Government owned raw depleted uranium which was placed inside the core of the PGU-14 projectile. Williams Decl. ¶¶ 5, 8-9 (Government supplied raw uranium UF_4 or UF_6). 3/2/10 PM Tr. 1085:20-1086:4 (Williams: Government owned depleted uranium at time it furnished it to contractor); Tr. Ex. 6613 § 3. 1.1 (Honeywell Specification re GAU14 listing raw uranium UF_4 as "Government Furnished Items");

173. The PGU-14 core or "penetrator" was one of the component pieces that was provided to Bermite for final assembly. 3/2/10 PM Tr. 1088:21-1091:2 (Williams) and Tr. Ex 845.0043; Williams Decl. ¶ 7 ("Whittaker-Bermite received pre-encapsulated DU projectiles manufactured by Honeywell.").

174. Because Bermite was responsible for the final assembly of all of the PGU-14 component pieces, Bermite was responsible for testing the PGU-14. The Government required testing of the ammunition at the site. 2/23/10 PM Tr. at 212:12-19 (Calkins). Testing was accomplished by actually shooting the PGU-14 projectiles. 3/2/10 PM Tr. 1091:3-1091:18 (Williams); Calkins Decl. ¶ 101.

175. Bermite was supplied with a government-owned 30mm cannon (known as a "barrel") and a test fixture upon which to mount the barrel in order to perform required testing of the PGU-14. Calkins Decl. ¶ 101; 2/23/10 PM Tr. 215:13-218:3 (Calkins); 2/24/10 AM Tr. 304:3-20 (Calkins); Trial Ex. 592.0004 (1977 specification for the IB-52 pellets used for the 30mm GAU-8 ammunition, provided that the test barrel and fixture would be "Government furnished items").

3. There were "Disposals" and "Releases to the Environment" of Depleted Uranium as a Result of the Test Firing of the PGU-14 Ammunition

***16** 176. The testing of the PGU-14 ammunition was accomplished by shooting the PGU-14 projectiles (that contained the depleted uranium core) at the Bermite facility. 3/2/10 PM Tr. 1091:3-18 (Williams: "Q. They shot the actual depleted uranium in order to test it at Bermite? A. Correct."); Calkins Decl. ¶ 101; 2/24/10 AM Tr. 302:1-18 (Calkins).

177. Bermite employees mounted the barrel to the test fixture and fired rounds of the PGU-14 into a bullet catch as required under applicable contracts and subcontracts. Calkins Decl. ¶ 102; Calkins Decl. ¶ 101; 2/24/10 AM Tr. 302:1-18 (Calkins).

178. Subsequent investigation revealed the presence of radioactive depleted uranium in the area of the bullet catch. The remaining depleted uranium consists of shards of shattered rounds fired from the 30 mm barrel supplied by the Government. Trial Ex. 595.

L. Bermite's Waste Disposal Practices Were Mandated by the Government, and Subject to Government Inspection and Supervision

1. The Government Understood that Bermite's Contracts with the Government Resulted in the Creation and Disposal of Hazardous Waste

179. In April 1980, the Government acknowledged that Bermite was generating large amounts of waste material during manufacturing processes for the Government, that much of the waste was from Government-furnished explosive materials and that finding a way to dispose of the waste was a potentially serious problem. Trial Ex. 272.

2. Government Mandated Disposal Procedures

180. Bermite was required to comply with the Department of Defense Contractors' Safety Manual for Ammunition, Explosives and Related Dangerous Materials DOD 4145.26M ("DOD Safety Manual") with respect to all contracts Bermite entered into with the United States Military. 2/26/10 AM Tr. 717:13-719:9 (Tamada); Calkins Decl. ¶ 93.

181. The surviving rocket motor contracts either expressly stated that Bermite "shall comply with DOD 4145.26M" or incorporated ASPR 7-104.79(a) by reference. ASPR 7-104.79(a) mandated that a contractor "shall comply" with the DOD Safety Manual. King Depo. 73:7-75:5; 2/26/10 AM Tr. 717:13-719:9 (Tamada); Calkins Decl., ¶ 93; Trial Ex. 6600 (ASPR 7-104.79(a)). Trial Ex. 1047.0020 (contract stating Bermite shall comply with DOD 4145.26M). Contracts incorporating ASPR 7-104.79(a) by reference: Trial Exs. 1696.0045-46, 14.0031, 66.0037, 1237.0040, 92.0059, 1241.0058, 1694.0067, and Ex. 1423.0024.

182. The 1968 DOD Safety Manual was in effect from 1968 until 1986. 2/26/10 AM Tr. 719:11-21(Tamada) and 3/2/10 AM Tr. 923:20-22 (Wright).

183. Provisions in the DOD Safety Manual preceded

by the words "shall" or "must" were mandatory; the contractor did not have any choice about compliance. 2/26/10 AM Tr. 721:24-722:4 (Tamada).

184. Provisions in the DOD Safety Manual preceded by the words "may" or "should" were recommendations. However, a contractor could choose not to comply only if the contractor made a record of the deviation and furnished a record of the deviation to the Administrative Contracting Officer (ACO). 3/2/10 AM Tr. 913:7-23 (Wright) and Trial Ex. 61.0006.

*17 185. The United States Government required the destruction of waste explosives by specified means because such materials implicated national defense and the Government could not allow such materials to "fall into the wrong hands." 3/2/10 AM Tr. 916:17-23 (Wright: "you don't want those energetic items to fall into the wrong hands."). The disposal (by destruction) of excess N-29 propellant was required by the Government in order to "demilitarize" the propellant. 3/2/10 AM Tr. 921:18-922:23 (Wright).

186. Section 1503 of the DOD Safety Manual authorized destruction by only four methods: dumping at sea, detonation, neutralization or burning. 3/2/10 AM Tr. 916:24-917:8 (Wright) and Tr. Ex. 61.0162.

187. From 1968 through 1986, Bermite's only viable option for complying with the DOD destruction requirement with respect to its excess or waste propellant was through burning because dumping at sea was no longer permitted (3/2/10 AM Tr. 917:20-918:2 (Wright)), neutralization was not effective (3/2/10 AM Tr. 920:4-921:20(Wright)), and detonation was not permitted in California (Tr. Ex. 185; King Depo. 73:4-6).

188. With respect to the burning of waste, the 1968 DOD manual contained numerous provisions mandating how the contractor could conduct burnings (e.g., not in containers or on concrete, with fire equipment readily available), where the contractor could conduct burns (e.g., minimum distances from buildings, prevailing winds must blow sparks in specified direction) and when the burns could occur (non-windy days and not within 24 hours unless the burn area is soaked with water). The contractor did not have the discretion to deviate from such mandates. 3/2/10 AM Tr. 925:11-931:6 (Wright). Trial Ex. 61.0162-0167.

189. The 1968 DOD Safety Manual mandated that contractors use "sumps, settling bed or leaching pits" to avoid contamination to local streams. Trial Ex. 61.0159.

190. The 1968 DOD Safety Manual provided that contractors working with water soluble explosives should sweep their floors and then wash them down with a "sufficient volume [of water] to assure complete dissolution of the material." Trial Ex. 61.0159-61.0160.

3. *The DCAS Enforced the Government Mandated Disposal Procedures*

191. From at least 1968 to 1986, the Defense Contractor's Administrative Services, known as the "DCAS," was the arm of the United States Government charged with ensuring that contractors complied with the DOD Safety Manual. 2/26/10 AM Tr. 719:22-720:3 (Tamada: ensuring compliance with the DOD Manual was one of DCAS' "primary responsibilities"); King Depo. 29:2-25, 43:3-46:5.

192. DCAS maintained an office at the Site, and oversaw operations on every shift, including when Bermite employees were working overtime. Calkins Decl. ¶¶ 87-88.

193. There were always at least three DCAS inspectors deployed at the Bermite Site, and sometimes as many as ten to twelve. Calkins Decl. ¶ 88.

194. DCAS inspectors inspected Bermite's burn pit to ensure compliance with all DOD Safety Manual requirements. King Depo. 18:15-20:12, 52:14-54:11, 72:1-14; 2/26/10 AM Tr. 722:13-21 (Tamada).

*18 195. DCAS inspectors inspected the hog-out area where propellant was removed from the motor casings. 2/26/10 AM Tr. 722:22-723:2 (Tamada)., King Depo. 72:15-24.

196. DCAS inspected Bermite facilities to ensure that different types of wastes were segregated properly and placed in appropriate containers by Bermite employees. King Depo. 50:5-52:10.

197. DCAS inspectors conducted surveys at Bermite to ensure that Bermite was in compliance with the requirements of the DOD Safety Manual. King Depo. 32:23-33:1, 43:3-46:5 and Trial Exs. 61, 125, and 148.

198. DCAS conducted safety surveys of Bermite in

1982 and 1983, which included review of disposal of explosive wastes, inspections of the burn area and hog-out area, and review of Bermite's permits, including those for burning operations. King Depo. 52:14-54:11, 61:2-73:3, 81:3-87:6, 105:13-107:21 and Trial Ex. 148.

M. ***AISLIC Has Incurred Necessary Response Costs As a Result of the Releases***

199. The Site was closed in approximately 1987. PTCO Ex. A Chronology (Document No. 112-3), p. 7.

200. On November 21, 1994, Whittaker and the California Department of Toxic Substances Control ("DTSC") entered into a Consent Order related to contamination at the Site. PTCO Stip. # 14.

201. On November 29, 2000, Castaic Lake Water Agency ("CLWA") and several water companies filed suit against Whittaker and others seeking cost recovery under CERCLA, the HSAA, and tort theories in an action titled *Castaic Lake Water Agency, et al. v. Whittaker Corp., et. al.*, Case Number CV-00-12613 AHM (the "CLWA litigation"). PTCO Stip. # 11.

202. In the CLWA litigation, this Court held that Whittaker was a responsible party under CERCLA and liable for the perchlorate contamination in the water companies' wells. PTCO Stip. # 12.

203. AISLIC issued a policy to Whittaker Corporation ("Whittaker") identified as Pollution Legal Liability Select/Cleanup Cost Cap Policy No. PLS 267-9186 (the "Policy"). Trial Ex. 353 (the Policy).

204. To remediate perchlorate and VOC contamination at the Bermite Site, AILSIC has incurred response costs that are necessary and consistent with the National Contingency Plan. 2/24/10 PM Tr. 404:21-405:15 (on p. 405: 9-11 Government concedes only minor expenditures as to certain specific costs are disputed by Government; Government does not dispute otherwise).

II. CONCLUSIONS OF LAW

A. ***Jurisdiction***

205. This Court has exclusive jurisdiction over this action for response and reimbursement costs pursuant to Section 113(b) of CERCLA, 42 U.S.C. § 9613(b).

206. Because the Court has found in the *Castaic Lake Water Agency* case, and AISLIC does not dispute, that Whittaker is a responsible party under Section 107(a), AISLIC is a contribution plaintiff under Section 113(f)(1), which provides that, "[a]ny person may seek contribution from any other person who is liable or potentially liable under section 9607(a) of this title, during or following any civil action under section 9606 of this title or under section 9607(a) of this title." 42 U.S.C. § 9613(f)(1).

***19** 207. This Court has jurisdiction over AISLIC's request for declaratory judgment pursuant to the Declaratory Judgment Act, 28 U.S.C. § 2201 and Section 113(g)(2) of CERCLA, 42 U.S.C. § 9613(g) (2).

208. This Court has venue pursuant to Section 113(b) of CERCLA, 42 U.S.C. § 9613(b) because the Defendant Untied States may be found in this judicial district, and because the releases or threatened releases of hazardous substances occurred in this district.

B. ***Elements for Cost Recovery and Contribution Claims***

209. AISLIC, which seeks only contribution from the United States (not joint and several liability), has asserted claims for cost recovery and contribution under CERCLA §§ 107(a) and 113(f), 42 U.S.C. §§ 9607(a) and 9613(f). In order to prevail on these claims, AISLIC must prove:

(1) that the contaminants of concern are hazardous substances;

(2) that there has been a release or threatened release of hazardous substances at a facility;

(3) that the release or threatened release has caused AISLIC to incur (or to reimburse others who have incurred) necessary response costs consistent with the National Contingency Plan ("NCP"); and

(4) that the United States falls within one of the classes of persons subject to CERCLA liability, *i.e.*, it owned a facility at which hazardous substances were disposed of at the time of disposal or it arranged for the disposal of certain hazardous substances, or both. *Castaic Lake Water Agency v. Whittaker Corp.*, 272 F.Supp.2d 1053, 1059 (C.D.Cal.2003), citing *Carson Harbor Vill., Ltd. v. Unocal Corp.*, 270 F.3d 863, 870-71 (9th Cir.2001); *Steadfast Ins. Co. v. United States*, No. CV 06-4686, at 1 (C.D.Cal. Oct. 2, 2009) (Order denying AISLIC's motion for partial summary judgment).

210. A right of contribution exists only in favor of a party that has paid more than its share of a common liability. *See* United States v. Atlantic Research Corp., 551 U.S. 128, 127 S.Ct. 2331, 2338, 168 L.Ed.2d 28 (2007) ("a PRP's right to contribution under § 113(f)(1) is contingent upon an inequitable distribution of liability among liable parties"); Sun Co. v. Browning-Ferris, Inc., 124 F.3d 1187, 1194 (10th Cir.1997) ("PRPs ... may recover from other PRPs that portion of their cleanup costs which exceeds their pro rata share.").

211. The Defendant United States of America is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21). FMC Corp. v. U.S. Dep't of Commerce, 786 F.Supp. 471, 485 (E.D.Pa.1992), *aff'd*, 29 F.3d 833, 840 (3d Cir.1994).

212. The parties have stipulated that AISLIC has incurred at least some necessary costs consistent with the national consistency plan. *See* Trial Day 6 at 1136:4-7. The Court bifurcated liability and allocation issues for trial, and this Order does not address the extent to which AISLIC's response costs are necessary or consistent with the National Consistency Plan, which are issues in dispute.

C. *Standard of Proof*

*20 213. "In situations like the present case, the type of evidence, be it direct or circumstantial, and its quality, is to some degree impeded by the passage of time and the lack of business records reflecting the day-to-day operations of the industries then present at the ... Site. The available evidence of who did what at the relevant site is often dependent on inference." Niagara Mohawk Power Corp. v. Chevron USA, Inc., 596 F.3d 112, 131 (2d Cir.2010). For that reason, "[w]hen determining CERCLA liability, 'there is nothing objectionable in basing findings solely on circumstantial evidence, especially where the passage of time has made direct evidence difficult or impossible to obtain.' " *Id., quoting* Franklin County Convention Facilities Auth. v. Am. Premier Underwriters, Inc., 240 F.3d 534, 547 (6th Cir.2001).

D. *Hazardous Substances*

214. The statute defines the term "hazardous substance" to mean, among other things, "any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title," and "any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C. § 6921]...." 42 U.S.C. § 9601(14)(B), (C).

215. The parties have agreed that the following are hazardous substances within the meaning of 42 U.S.C. § 9601(14):

- perchlorate, including ammonium perchlorate and potassium perchlorate;
- trichloroethylene (TCE);
- perchloroethylene (PCE);
- trichloroethane (TCA); and
- depleted uranium (DU).

Stipulation Regarding Alleged Hazardous Substances filed February 12, 2010 (Document No. 115, filed 2/12/10).

E. *Release*

216. The second element of liability for a cost response or contribution claim is a release or threatened release of hazardous substances from a facility. CERCLA § 107(a)(4), 42 U.S.C. § 9607(a)(4). The term "release" is broadly defined as "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment...." 42 U.S.C. § 9601(22).

217. Perchlorate and certain VOCs (at least oakite and TCE) were released at various parts of the Bermite site, including (among others) the hog-out area and impoundment, the burn area and various manufacturing areas and equipment.

218. DU was released in the area where 30 mm armor-piercing, incendiary ammunition for use in the GAU-8 cannon was test-fired.

F. *Owner Liability*

219. The defendant must fall within a class of persons subject to CERCLA liability. One such class consists of owners at the time of disposal of hazardous substances.

220. An owner includes "any person who at the time of disposal of any hazardous substance owned ... any facility at which such hazardous substances were disposed

of." 42 U.S.C. § 9607(a)(2). Thus, in order to establish this claim, there must be a(1) a "facility" (2) owned by the United States; (3) at which "disposal" occurred.

1. *Definition of Facility*

***21** 221. CERCLA defines a "facility" as "(A) any building, structure, installation, equipment, pipe or pipeline ..., well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located...." 42 U.S.C. § 9601(9). The term "facility" has been broadly construed. *Uniroyal Chem. Co. v. Deltech Corp.*, 160 F.3d 238, 245 (5th Cir.1998) ("it is apparent that facility is defined in the broadest possible terms").

222. There may be several "facilities" at a site for purposes of CERCLA, including separately owned "equipment" within a larger facility. *Elf Atochem N. Am. Inc. v. United States*, 868 F.Supp. 707, 709-10 (E.D.Pa.1994) (machines used to make DDT owned by the Government and leased to plaintiff were "facilities"); *FMC Corp. v. U.S. Dep't of Commerce*, 786 F.Supp. at 486 (factory was a facility and installations, equipment, pipes and pipelines owned by the Government were also facilities at which there had been a disposal); *see also Atchison, Topeka & Santa Fe Ry. Co. v. Brown & Bryant, Inc.*, 1995 WL 866395 (E.D.Cal. Nov.15, 1995) (railcars were separate facilities from property).

2. *Definition of Owner*

223. CERCLA gives no definition of "owner." *Long Beach Unified School Distr. v. Dorothy B. Godwin California Living Trust*, 32 F.3d 1364, 1368 (9th Cir.1994). Instead, courts read CERCLA as incorporating common law definitions of its terms. *Id.* Thus, this Court looks to California law to determine whether a party is an "owner." *City of Grass Valley v. Newmont Mining Corp.*, 2007 WL 4287603 at *4 (E.D.Cal. Dec.4, 2007).

224. Under CERCLA, "an owner of equipment necessary to the operation of the [factory] line is no less an 'owner' than a part-owner of land." *United States v. Saporito*, 684 F.Supp.2d 1043, 1057 (N.D.Ill.2010).

3. *Definition of Disposal*

225. In order for an owner of facilities to be liable, there must be a disposal of hazardous substance at or from those facilities. *See* 42 U.S.C. § 9607(a).

226. The term "disposal" is defined broadly under the statute to mean "the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters." 42 U.S.C. § 9601(29) (incorporating the definition of the term set forth in Section 1004 of the Solid Waste Disposal Act, 42 U.S.C. § 6903(3)); *Castaic Lake*, 272 F.Supp.2d at 1069.

227. A disposal can take place at facilities that are "equipment." *Elf Atochem*, 868 F.Supp. at 711 ("this disposal is a disposal at a facility"); *see also Webster's Third New International Dictionary* at 136 (1981 ed.) ("at" is "used as a function word to indicate presence in, on or near").

***22** 228. Disposal does not require immediate exposure to the environment. *Elf Atochem*, 868 F.Supp. at 711; *Reading Co. v. City of Philadelphia*, 823 F.Supp. 1218, 1236 (E.D.Pa.1993); *BCW Associates, Ltd. v. Occidental Chem. Corp.*, 1988 WL 102641 (E.D.Pa. Sept.29, 1988); *Emhart Industries, Inc. v. Duracell Int'l, Inc.*, 665 F.Supp. 549, 574 (M.D.Tenn.1987).

229. Thus, where excess chemicals were piped from a US-owned machine inside a building to a non-US owned waste pond outside the building, the court reasoned: "The precise question at bar is whether the United States disposed of waste when it discharged hazardous materials from its equipment or whether there was no disposal until the materials entered the waste pond." *Elf Atochem*, 868 F.Supp. at 710. The court concluded, "[W]hen each of the waste streams left the United States' equipment it was being sent to the pipes as a means of getting rid of it, transferring it, throwing it out; in other words, disposing of it. We hold that this disposal is a disposal at a facility under § 9607." *Id.* at 711.

230. "The statute does not on its face provide that a release into the environment must be 'direct.' " *Lincoln Properties, Ltd., v. Higgins*, 1993 WL 217429 at *19-20 (E.D.Cal. Jan.21, 1993) ("there is no authority in the case law for the proposition that a release into the soil or ground water must be 'direct.' "); *Differential Dev.-1994, Ltd.*, 470 F.Supp.2d at 748; *Elf Atochem*, 868 F.Supp. at 712.

231. Thus, "[t]he cases have made clear that deposit-

ing or discharging a hazardous substance into a sewer, a container or other 'facility' from which the substance subsequently leaks or spills is a 'disposal' of hazardous substances that will subject the depositor or discharger to liability...." *Differential Dev.-1994, Ltd. v. Harkrider Distrib. Co.*, 470 F.Supp.2d 727, 748 (S.D.Tex.2007). Materials that are spilled onto the floor during the manufacturing process are also disposed of. *Amland Properties Corp. v. Aluminum Co. of America*, 711 F.Supp. 784, 792 (D.N.J.1989).

232. During trial, the Government cited two cases on these issues. 3/3/10 AM Tr. 1165:24-25; 1166:2-3 (Government Closing). The first case on which the Government relies, *Mead v. United States*, 1994 WL 733567 (S.D.Ohio Jan.14, 1994), reasons that "there is no evidence of a release directly from Government-owned facilities." *Mead* has been cited only once on this issue-by a case that disagreed with it. *Elf Atochem*, 868 F.Supp. at 712 (other cases "more persuasive than *Mead*"). In any event, there were releases from the government-owned facilities here.

233. The second case cited by the Government at trial, *ACC Chemical Co. v. Halliburton Co.*, 932 F.Supp. 233 (S.D.Iowa 1995), held that a truck used to pump hazardous materials is not a "facility" within the meaning of CERCLA. This is inconsistent with *Elf Atochem* and other cases that have held that equipment used in manufacturing can be a "facility" under CERCLA. *United States v. Saporito*, 684 F.Supp.2d 1043, 1057-58 (N.D.Ill.2010); *FMC Corp. v. United States Dep't of Commerce*, 786 F.Supp. at 478, 486 (E.D.Pa.1992), *aff'd* 29 F.3d 842 (3d Cir.1994).

4. *Disposal at Government Furnished Equipment*

*23 234. The mandrels, grinding machines, cast and cure assemblies, fixtures and molds, dies and tools and other items used by Bermite in the manufacture and refurbishment of rocket engines are "facilities" because they are "equipment." 42 U.S.C. § 9601(9)(A).

235. The Government owned the mandrels, grinders, cast and cure assemblies, fixtures and molds, dies and tools that were provided to Whittaker as Government Furnished Equipment ("GFE").

236. The Government Furnished Equipment was used in the manufacture or refurbishment of rocket engines pursuant to Whittaker's contracts with the Government. Whittaker made its contracts conditional on the provision of the Government Furnished Equipment. A witness called by the Government stated at trial that the Government would not furnish property in the first place unless the contractor established a need for it in order to carry out the provisions of the contract. 2/26/10 AM Tr. 694:16-695:5 (Tamada). From this it is reasonable to infer that Whittaker used the GFE in its manufacturing processes.

237. "The [plaintiff] need not present evidence showing that any specific piece of equipment [the defendant] owned was responsible for specific releases of hazardous chemicals or specific cleanup costs." *United States v. Saporito*, 684 F.Supp.2d at 1056. It is enough that the components owned by the defendant were "a necessary part" of the manufacturing process. *Id.*

238. The Government Furnished Equipment was a necessary part of the process of manufacturing motor engines. 2/24/10 AM Tr. 279:16-19 (Calkins: "Q. Basically, you are saying Bermite couldn't make rocket motors without the government-furnished equipment; is that right? A. Yes. That's right."). The process relied on the grinders, mandrels, cast and cure assembly and other items supplied as GFE. These specialized items of equipment were supplied by the Government based on the assertion that they were necessary for the manufacture of rocket engines.

239. There were disposals of hazardous substances at the GFE. There were disposals of perchlorate at the GFE when excess perchlorate was discharged into the air, deposited on the floor, washed out of buildings, removed to the baghouse, or placed in drums for burning as waste. In each case, the perchlorate became waste to be discarded when it left the GFE.

240. Similarly, there were disposals of hazardous substances at the GFE when certain Volatile Organic Compounds were used to remove perchlorate and then placed in drums for burning. If there was leakage, this would have been a disposal. *Cf. Differential Dev.-1994, Ltd. v. Harkrider Distrib. Co.*, 470 F.Supp.2d 727, 748 (S.D.Tex.2007).

241. The disposal of the hazardous substances at the GFE led immediately or eventually to a "release" within the meaning of 42 U.S.C. §§ 9601(22) and 9607. The widespread perchlorate contamination shown in Exhibit 6539A supports the conclusion that releases of perchlorate occurred at the Bermite site. The "presence of haz-

ardous substances at the sites at issue .... supports a conclusion that releases have occurred on the sites." *American Nat'l Bank & Trust Co. v. Harcros Chems., Inc.*, 997 F.Supp. 994, 998 ((N.D.Ill.1998). The contamination surrounding the buildings where the GFE was used and at the burn pit confirms that there were releases of these materials.

***24** 242. Because the GFE was a necessary part of the manufacturing process and disposals of hazardous substances occurred at the GFE, the Government is liable as an owner based upon its ownership of this equipment.

5. Rocket Motors As Facilities

243. Rocket engines can be "facilities," because they are "equipment." 42 U.S.C. § 9601(9)(A). Equipment is defined as "the set of articles or physical resources serving to equip a person or thing...." *Merriam-Webster's Collegiate Dictionary* 392 (10th ed.2001). A rocket engine serves to equip a rocket, and hence is "equipment."

244. Rocket engines also can be "facilities" because they serve as "storage containers" for the perchlorate until the propellant is either removed during manufacture (or recycling) or burned during launch of the rocket. 42 U.S.C. § 9601(9)(A). "Storage" means a "space or a place for storing." *Merriam Webster's Collegiate Dictionary* 1156 (10th ed.2001). A "container" is "one that contains: *esp.* a receptacle (as a box or jar) for holding goods." *Id.* at 249. A rocket engine functions as a place for storing the propellant until it is burned.

245. The term "facility" has been "broadly construed by the courts." *California v. Blech*, 976 F.2d 525, 527 n. 1 (9th Cir.1992) (citation and internal quotes omitted). "[I]n order to show that an area is a 'facility,' the plaintiff need only show that a hazardous substance under CERCLA is placed there or has otherwise come to be located there." *Id.* (citation and internal quotations omitted).

246. Thus, the Court concludes that at the site at issue here a rocket engine containing a hazardous substance was a "facility" within the meaning of CERCLA.

6. Government Ownership of Rocket Motors

247. The United States owned the rocket engines brought to Bermite for refurbishment and recycling pursuant to the Basic Ordering Agreements entered into in 1975 and 1982.

248. The United States also owned the new rocket engines in the process of assembly.

249. Under the Title Vesting clause in the Progress Payment Section in each contract, the United States held absolute title to the materials, inventory, work in process, special tooling and nondurable tools used in the manufacturing of rocket engines. This included the rocket engines under assembly, which were "inventory" or "work in process."

250. Through this Title Vesting Clause, the Government obtained absolute title to-and hence ownership of-the rocket motors under assembly. *Northrop Grumman Corp. v. County of Los Angeles*, 134 Cal.App.4th 424, 433, 36 Cal.Rptr.3d 71 (Ct.App.2d Dist.2005), *cert. denied*, 549 U.S. 817, 127 S.Ct. 79, 166 L.Ed.2d 29 (2006).

251. The United States has suggested that the Title Vesting Clause may give the United States only a security interest in the inventory. However, in other cases, the United States has consistently argued that such provisions vest the Government with ownership. In a thorough opinion, the Seventh Circuit adopts a literal reading of the Title Vesting Clause. *In re American Pouch Foods*, 769 F.2d 1190 (7th Cir.1985), *cert denied*, 475 U.S. 1082, 106 S.Ct. 1459, 89 L.Ed.2d 716 (1986).

***25** 252. A host of bankruptcy courts have taken the same view. *In re Economy Cab and Tool Co.*, 47 B.R. 708 (Bankr.D.Minn.1985); *In re Reynolds Mfg. Co.*, 68 B.R. 219 (Bankr.W.D.Pa.1986); *In re Wincom*, 76 B.R. 1 (Bankr.Mass.1987).

253. Most recently, the California Court of Appeals has held that the State of California could not collect *ad valorem* taxes on the materials used on a government contract because they were owned by the federal government: "We disagree with the County's interpretation. Title means title. Title does not mean lien. Because the County cannot tax property owned by the United States, it must refund the taxes paid by the contractor on property allocated to the performance of its military contracts." *Northrop Grumman Corp.*, 134 Cal.App.4th at 428, 36 Cal.Rptr.3d 71.

254. "A literal reading of the title-vesting provisions is particularly compelling in the context of military contracts, when the contracted-for goods are needed for national defense." *Id.* at 433, 36 Cal.Rptr.3d 71 (internal citations omitted). "A literal reading of the title-vesting

clause affords the federal government protection from detrimental protracted litigation over war material because absolute title is superior to the interests claimed by secured creditors of bankruptcy trustees." *Id.*

255. The Government points out that there is a 1982 decision of the Court of Claims that gives the United States only a security interest in the property. 3/3/10 AM Tr. 1189:24-25 (Government Closing citing *Marine Midland Bank v. United States*, 231 Ct.Cl. 496, 687 F.2d 395, 399 (Ct.Cl.1982)). "*Marine Midland* is squarely the minority view on title-vesting clauses and is unlikely to be followed outside the Federal Court of Claims' jurisdiction." M. Sainsbury, *Seeking One Rule to Bind Them: Unifying the Interpretation and Treatment of the "Title-Vesting" Language of the Progress Payments Clause*, 32 PUB. CONTRACT. L.J. 327, 389 (2003).

256. Criminal cases concerning the theft of government property are not apposite, because they rely on the rule of lenity to hold that, where there is any disagreement in the underlying case law, the criminal defendant will be held not to be on notice of a crime. *See* *United States v. Hartec Enterprises, Inc.*, 967 F.2d 130, 133 (5th Cir.1992) (invoking rule of lenity).

257. The Government claims that *Northrop Grumman* relied on a 1997 statutory amendment. 3/3/10 AM Tr. 1191:8-10 (Government Closing citing the National Defense Authorization Act for Fiscal Year 1998); *see* 10 U.S.C. § 2307(h). However, the *Northrup Grumman* case addressed tax years 1987 through 1995-prior to the adoption of the 1997 amendment. The case does not identify any change in the law: Congress merely "underscored the title-passing effect of fixed price contracts by adding supportive language" in the 1997 amendment. 134 Cal.App.4th at 432, 36 Cal.Rptr.3d 71. The legislative history shows that Congress believed it was confirming an existing interpretation. *See* M. Sainsbury, *supra*, 32 PUB. CONTRACT. L.J. at 387, quoting S.Rep. No. 105-29, § 812 at 302 (1997) (amendment is intended "to clarify what has been the usual practice with regard to federal agencies' interpretation").

*26 258. In light of the Title Vesting Clause incorporated in each of the Whittaker contracts for rocket motor manufacture, the Government owned the rocket motors under assembly, prior to delivery.

7. Disposal of Hazardous Substances From the Rocket Motors

259. The hogging out of the rocket motors undergoing refurbishment constituted a disposal of a hazardous substance from facilities owned by the Government because it involved "the discharge, deposit, injection, dumping, spilling, leaking, or placing of" excess perchlorate "into or on any land or water" with the risk that it would enter the environment. 42 U.S.C. § 6903(3).

260. When a portion of the new rocket motors under assembly was rejected for failure to meet specifications, the hogging out of those rejected motors constituted a disposal of a hazardous substance from a government-owned facility because it involved "the discharge, deposit, injection, dumping, spilling, leaking, or placing of" excess perchlorate "into or on any land or water" with the risk that it would enter the environment. *Id.*

261. "The cases have made clear that depositing or discharging a hazardous substance into a sewer, a container, or other 'facility" from which the substance subsequently leaks or spills is a 'disposal' of hazardous substances that will subject the depositor or discharger to liability as a PRP." *Differential Dev.-1994, Ltd. v. Harkrider Distb. Co.*, 470 F.Supp.2d 727, 748 (S.D.Tex.2007).

262. When new rocket motors were test-fired, this constituted a disposal of a hazardous substance (perchlorate) from government-owned facilities, because it involved "discharge" or "injection" so that a hazardous substance "may enter the environment or be emitted into the air or discharged into any waters...." 42 U.S.C. § 6903(3).

263. The Government has cited *Miami-Dade County v. United States*, 345 F.Supp.2d 1319 (S.D.Fla.2004), as an example of a case where the disposal did not occur at the equipment. In that case, "no hazardous substances were disposed of or placed in the aircraft engines, parts, or containers." *Id.* at 1340. In this case, by contrast, the perchlorate was placed in the rocket motors and disposed of at those facilities, whether through hogging out, test-firing or other processes during manufacture.

8. Disposal at Government-Owned Cannon

264. The United States owned the GAU-8 cannon and its test fixture.

265. GAU-8 cannon and the test fixture upon which it was mounted were "facilities" because they were "equipment." 42 U.S.C. § 9601(9)(A).

266. When the GAU-8 fired 30MM rounds of API, the dispersal of the Depleted Uranium shells into the air and dirt constituted a disposal from a government-owned facility. 42 U.S.C. § 6903(3).

9. *Conclusion on Owner Liability*

267. Liability under CERCLA is strict. Pursuant to Section 107(a)(2) any person who owned a facility at a time when hazardous substances were disposed of there may be held liable if a release or threatened release occurs. *United States v. Monsanto Co.*, 858 F.2d 160, 168 (4th Cir.1988).

*27 268. An owner of facilities at which a disposal of hazardous substances occurs is liable under CERCLA regardless of whether it had any control over the disposal activities. *Lincoln Props., Ltd. v. Higgins*, 823 F.Supp. 1528, 1533 (E.D.Cal.1992) (citing *United States v. A & N Cleaners and Launderers*, 788 F.Supp. 1317, 1332 (S.D.N.Y.1992)).

269. Disposals of hazardous substances took place at various facilities owned by the United States. It is therefore liable as an owner under 42 U.S.C. § 9607(a)(2).

G. *Arranger Liability*

1. *Definition of Arranger*

270. The second pertinent class of persons potentially liable under the statute-arrangers-encompasses "any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances." 42 U.S.C. § 9607(a)(3).

271. "[W]hether an entity is an arranger requires a fact-intensive inquiry that looks beyond the parties' characterization of the transaction as a 'disposal' or a 'sale' and seeks to discern whether the arrangement was one Congress intended to fall within the scope of CERCLA's strict-liability provisions." *Burlington N. & Santa Fe Ry. Co. v. United States*, ---U.S. ----, ----, 129 S.Ct. 1870, 1879, 173 L.Ed.2d 812 (2009). "[T]he court must 'consider the totality of the circumstances ... to determine whether the facts [are] within CERCLA's remedial scheme.' " *Steadfast*, Oct. 2, 2009, Order at 7, *quoting Coeur D'Alene Tribe v. Asarco, Inc.*, 280 F.Supp.2d 1094, 1131 (D.Idaho 2003).

272. A party will qualify as an arranger when either the person "(1) own[s] or possess[es] waste and arrange[s] for its disposal, or (2)[has] the authority to control and to exercise some actual control over the disposal of the waste." *Steadfast*, Oct. 2, 2009 Order at 8; *Coeur D'Alene Tribe*, 280 F.Supp.2d at 1132; *Basic Management Inc. v. United States*, 569 F.Supp.2d 1106, 1116 (D.Nev.2008).

2. *Continuous Ownership Not Required for Arranger*

273. An owner of a hazardous substance who arranges for its disposal by another party may be held liable as an arranger. 42 U.S.C. § 9607(a)(3).

274. Continuous ownership of the hazardous substance during the process of disposal is not required for arranger liability. For example, a person who enters into a sale-and thereby gives up ownership-"with the intention that at least a portion of the product be disposed of during the transfer process" may be held liable as an arranger. *Burlington N. & Santa Fe Ry. v. United States*, 129 S.Ct. at 1880.

275. The Ninth Circuit has specifically held that continued ownership is not required for arranger liability. *Catellus Dev. Corp. v. United States*, 34 F.3d 748 (9th Cir.1994).

*28 276. The Ninth Circuit has recently reaffirmed *Catellus*. *See California Dep't of Toxic Substances Control v. Alco Pacific, Inc.*, 508 F.3d 930, 935-36 (9th Cir.2007).

3. *Arranger Liability Based on Ownership of Perchlorate*

277. When the Government delivered rocket engines to the Bermite plant for refurbishing and recycling, the Government owned the rocket engines and the perchlorate within them.

278. Through its Basic Ordering Agreement, the United States required Bermite to hog-out the original propellant from the engines undergoing refurbishment. The United States intended that perchlorate be removed from the engines and discarded as waste. Thus, the United States arranged for the disposal of the perchlorate in the recycled engines. *Burlington N. & Santa Fe Ry. v. United States*, 129 S.Ct. at 1880.

279. By virtue of the title-vesting provisions in its contracts for the manufacture of new rocket engines, the United States owned the "materials" allocated to the contracts. Once perchlorate was purchased and allocated to one of the rocket motor contracts, the United States held absolute title to and an ownership interest in this "material."

280. Further, pursuant to the title-vesting provisions of the contracts for new rocket engines, the United States owned the "work in process" and "inventory" allocable to each contract and hence owned the rocket engines prior to delivery. Once the perchlorate was inserted within one of these engines, the United States owned the perchlorate.

281. The United States required that any rocket engine that did not meet the specifications in its contracts be rejected and that any perchlorate within it be "hogged out" and disposed of. Thus, the United States arranged for the disposal of the perchlorate that it owned in the rejected rocket engines.

282. The United States required that Whittaker test-fire certain of the rocket engines. The United States intended that any perchlorate not burned through the firing be disposed of through other means. Thus, the United States arranged through the disposal of perchlorate through test-firing.

283. The United States contends that it is not liable as an arranger because it did not own the perchlorate once it became waste. The United States has not pointed to any clause in the title-vesting provisions that excepts "waste" from Government ownership. 2/26/10 AM Tr. 745: 6-13 (Tamada). The courts favor a literal interpretation of the title-vesting language. *See, e.g.,* Northrop Grumman Corp., 134 Cal.App.4th at 433, 36 Cal.Rptr.3d 71.

284. In any event, CERCLA does not require continued ownership for arranger liability. Catellus Dev. Corp. v. United States, 34 F.3d at 752. In *Catellus,* the Ninth Circuit held the initial owner of the defunct batteries liable as an arranger even though that firm sold the batteries to a buyer and did not control the "eventual disposition of their remnants." *Id.* "We expressly rejected [the defendant's] argument that it could not be held liable as an arranger under CERCLA because it did not control the eventual disposition of the batteries' remnants." California Dep't of Toxic Substances Control v. ALCO Pacific, Inc., 508 F.3d 930, 935 (9th Cir.2007), *citing* Catellus, 34 F.3d at 752.

***29** 285. A person delivering raw materials should not be permitted to escape liability by arguing that he owns only the chemical ultimately produced in a process, but not its discarded waste. *See* Levin Metals Corp. v. Parr-Richmond Terminal Co., 781 F.Supp. 1448 (N.D.Cal.1991).

286. Here, the United States similarly owned the materials at the outset, continued to own them during the manufacturing process, and received the finished product, all with knowledge that processing would lead to hazardous wastes. These facts distinguish this case from *Burlington N. & Santa Fe Ry. v. United States, supra,* where the defendant was a seller of a useful product who completely gave up ownership of the chemicals to the site operator. In that case, the question was whether "Congress intended to impose liability on entities ... when they engage in legitimate sales of hazardous substances knowing that some disposal may occur as a collateral consequence of the sale itself." 129 S.Ct. at 1879-80. In this case, by contrast, the Government did not sell its interests or any product. It instead was a purchaser that acquired the rocket engines and perchlorate before the disposal of the excess and retained that ownership interest through delivery of the finished product just as in the processing cases discussed above.

287. The Government's argument-that it is not liable because it did not own the perchlorate after it became "waste"-would create a loophole in the statute that could be exploited by other polluters, who could easily contract for a shift in ownership. The Ninth Circuit has stated in addressing the scope of the transporter provision: "We hesitate to endorse a statutory interpretation that would leave a gaping and illogical hole in the statute's coverage...." Pakootas v. Teck Cominco Metals, Ltd., 452 F.3d 1066, 1081 (9th Cir.2006).

288. The United States is liable as an arranger because it intentionally arranged for the disposal of a hazardous substance, regardless of whether the United States continued to own the "waste" during the process of disposal.

4. Arranger Liability Based on Ownership of Volatile Organic Compounds

289. The United States also owned certain Volatile Organic Compounds (VOCs) used in the manufacturing process, because they were "materials" allocable to the

contracts.

290. The United States required that VOCs that became mixed with perchlorate be disposed of at the site. To the extent there were such VOCs, the United States arranged for their disposal and is liable as an arranger.

5. *Arranger Liability Based on Ownership of Depleted Uranium*

291. The raw uranium provided by the Government to Honeywell for use in manufacturing the GAU-14 was Government Furnished Property. ASPR § 13-101.1 and FAR 45.101.

292. As a result, the United States owned the depleted uranium within the projectiles tested at Bermite.

293. The United States arranged for the test firing of the PGU-14, which contained the depleted uranium, and hence arranged for the "discharge" of the depleted uranium into the air or "deposit" into the ground. The United States therefore arranged for the disposal of the depleted uranium.

6. *Arranger Liability Based on All Circumstances*

***30** 294. In deciding whether to impose arranger liability, a court may consider the "totality of the circumstances." *Steadfast,* Oct. 2, 2009, Order at 7 (citing Coeur D'Alene Tribe v. Asarco, Inc., 280 F.Supp.2d at 1131). This may include both elements of ownership and control.

295. For example, arranger liability may be imposed on defendants where another company "is performing a process on products owned by defendants for defendants' benefit and at their direction" and defendants are aware that waste products inherent in the process will need to be disposed of. *Aceto Agric. Chems. Corp.,* 872 F.2d at 1379. *See* California v. Verticare, 1993 WL 245544 (N.D.Cal. Mar.1,1993); Levin Metals Corp. v. Parr-Richmond Terminal Co., 781 F.Supp. at 1452.

296. The United States mandated the use of certain equipment, materials, and methods; owned the hazardous "materials" once they were allocated to the contract; owned the works in process; knew that the manufacturing process generated waste materials; directed aspects of the method of disposal of those materials and had the right to supervise the disposal process on site.

297. Based on the totality of circumstances, including the "ownership" and "control" elements in combination with each other, the United States is liable as an arranger in this case.

H. *Necessary Response Costs*

298. A CERCLA plaintiff must also show that the release or threatened released has caused the plaintiff to bear or reimburse "necessary costs of response ... consistent with the national contingency plan ("NCP")." CERCLA § 107(a)(4)(B), 42 U.S.C. § 9607(a)(4)(B). The Government has agreed that AISLIC has been forced at bear at least some costs fitting that description.

299. "The traditional tort concept of causation plays little or no role in the liability scheme." Niagara Mohawk Power Corp. v. Chevron USA Inc., 596 F.3d at 131.

300. "In the case of an actual release, the plaintiff need only prove that the defendant's hazardous materials were deposited at the site, that there was a release at the site, and that the release caused it to incur response costs. It need not show that defendant's waste was the source of the release or that defendant's waste caused it to incur response costs." Carson Harbor Village Ltd. v. Unocal Corp., 287 F.Supp.2d 1118, 1186 (C.D.Cal.2003). *See also* Santa Clara Valley Water Dist. v. Olin Corp., 655 F.Supp.2d 1048, 1057 (N.D.Cal.2009) ("Cases within the Ninth Circuit support the conclusion that a CERCLA *prima facie* case requires a plaintiff to show that a release caused the incurrence of some response costs but it does not require that the release cause all of the recoverable response costs.").

III. CONCLUSION

301. The United States is liable under 42 U.S.C. § 9607(a)(2) as an owner of facilities at which disposal of hazardous substances took place and under 42 U.S.C. § 9607(a)(3) as a person who arranged for disposal of hazardous substances.

***31** 302. The questions of quantity of necessary response costs and allocation of damages among the parties are reserved for future proceedings.

A. *Proviso*

The Court recognizes that some of the above listed Findings of Fact may also be Conclusions of Law. Similarly, some of the Conclusions of Law may also be Findings of Fact.

C.D.Cal.,2010.
American Intern. Specialty Lines Ins. Co. v. U.S.
Not Reported in F.Supp.2d, 2010 WL 2635768 (C.D.Cal.)

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IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF IDAHO

NU-WEST MINING INC., and NU-WEST INDUSTRIES INC. Plaintiffs, v. UNITED STATES OF AMERICA Defendant.	Case No. 4:CV 09-431-BLW **MEMORANDUM DECISION AND ORDER**

INTRODUCTION

The Court has before it a motion for partial summary judgment filed by plaintiffs Nu-West Mining Inc. and Nu-West Industries Inc. (hereinafter Nu-West). The Court heard oral argument on January 25, 2011, and took the motion under advisement. For the reasons expressed below, the Court will grant the motion.

FACTUAL BACKGROUND

Plaintiff Nu-West seeks to impose on the defendant Government the costs of cleaning up selenium contamination at four mine sites in the Caribou-Targhee National Forest. This suit is brought under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675. Nu-West's motion for partial summary asks the Court to find the Government liable under certain provisions of CERCLA, but leaves issues of the Government's defenses and damages to

later litigation.

In 1949, after determining that lands in the Caribou National Forest had phosphate deposits large enough to warrant mining, the Government began awarding mining leases through a competitive bidding process. Through these leases, the Government authorized the Lessees to mine phosphate ore at the Mine Sites. The four mines that arose from these leases – and are the focus of this lawsuit – are the South Maybe Canyon Mine, the North Maybe Mine, the Champ Mine and Champ Mine Extension, and the Mountain Fuel Mine.

The leases ran for twenty years, and the Government retained the authority to terminate the leases "whenever the lessee fails to comply with any of the provisions of this chapter, of the lease, or of the general regulations promulgated under this chapter and in force at the date of the lease." *See* 30 U.S.C. § 188(a). In addition to the lands covered by mining leases, the United States issued to the Mine Site Lessees a number of Special Use Permits ("SUPs") so that waste rock dumps could be constructed on National Forest lands adjacent to the leased lands.

From at least 1965 to the present, the Government has monitored environmental conditions at the Mine Sites, including water quality sampling and other hydrology studies. The Government also required the Lessees to allow mine inspections to ensure, among other things, that the Lessee was properly disposing of mining waste and paying a full royalty to the Government. The Government reserved for itself all of its property rights in the Mine Sites, except that it granted to the Lessees the limited right to mine for

phosphate, phosphate rock, and related minerals. The Government required the Lessees to prospect diligently and to meet certain ore production requirements, and also to pay a royalty fee.

Before any mining could begin, the Government required the Lessees to obtain its approval of plans for mining, waste disposal, and reclamation. The United States conditioned its approval of mine plans on requiring the Lessees to perform specific reclamation activities at the Mine Sites, including locating, designing, and shaping waste rock dumps, covering waste dumps with a layer of middle waste shale as a growth medium, and planting specific seed mixtures on the waste dumps.

The four mines operated from roughly the 1960s to the 1990s. Each of the mine sites is contaminated with a hazardous substance known as selenium. A naturally occurring chemical element, selenium is found in a rock layer between phosphate ore zones. This rock layer is known as "middle waste shale," and it was hauled out of the mines in the process of digging through the first phosphate ore zone to get to the second.

The middle waste shale was placed on top of every waste rock dump constructed at all four of the mine sites. It was intended to promote revegetation on the dumps, but the selenium leached into the environment. Waste dumps associated with the South Maybe Canyon Mine and North Maybe Mine were placed over water sources. These dumps were known as cross valley fill (CVF) dumps because they filled the valley side-to-side and covered stream beds at the valley bottom. The CVF dumps had a rock drain – known as a french drain – that allowed water to flow underneath the dump, and were covered

with middle waste shale. The selenium leached from the middle waste shale down through the french drain and into the flowing water beneath.

The four mines are all currently leased to Nu-West. When the selenium contamination was discovered in the late 1990s, Nu-West entered into Administrative Orders of Consent with the Government to remediate the sites. Nu-West claims to have spent $10 million to date on those remediation efforts, and seeks to recoup those costs in this CERCLA action.

Nu-West's motion for partial summary asks the Court to find that the Government is an owner, arranger, and operator of the waste disposal sites as those terms are defined by CERCLA and its associated case law. The motion does not seek to resolve issues about the Government's defenses listed under CERCLA or any damage issues, and the Court has accordingly not addressed those issues in this decision.

SUMMARY JUDGMENT – GOVERNING STANDARD

One of the principal purposes of the summary judgment "is to isolate and dispose of factually unsupported claims . . . ." *Celotex Corp. v. Catrett*, 477 U.S. 317, 323-24 (1986). It is "not a disfavored procedural shortcut," but is instead the "principal tool[ ] by which factually insufficient claims or defenses [can] be isolated and prevented from going to trial with the attendant unwarranted consumption of public and private resources." *Id.* at 327. "[T]he mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact." *Anderson v. Liberty Lobby, Inc.*, 477

U.S. 242, 247-48 (1986).

The evidence must be viewed in the light most favorable to the non-moving party, *id.* at 255, and the Court must not make credibility findings. *Id.* The moving party bears the initial burden of demonstrating the absence of a genuine issue of material fact. *Devereaux v. Abbey*, 263 F.3d 1070, 1076 (9th Cir. 2001)(en banc). To carry this burden, the moving party need not introduce any affirmative evidence (such as affidavits or deposition excerpts) but may simply point out the absence of evidence to support the nonmoving party's case. *Fairbank v. Wunderman Cato Johnson,* 212 F.3d 528, 532 (9th Cir.2000).

This shifts the burden to the non-moving party to produce evidence sufficient to support a jury verdict in her favor. *Id.* at 256-57. The non-moving party must go beyond the pleadings and show "by her affidavits, or by the depositions, answers to interrogatories, or admissions on file" that a genuine issue of material fact exists. *Celotex,* 477 U.S. at 324.

Only admissible evidence may be considered in ruling on a motion for summary judgment. *Orr v. Bank of America,* 285 F.3d 764, 773 (9th Cir.2002); *see also* Fed.R.Civ.P. 56(e). In order to preserve a hearsay objection, "a party must either move to strike the affidavit or otherwise lodge an objection with the district court." *Pfingston v. Ronan Engineering Co.,* 284 F.3d 999, 1003 (9th Cir. 2002). In the absence of objection, the Court may consider hearsay evidence. *Skillsky v. Lucky Stores, Inc.,* 893 F.2d 1088, 1094 (9th Cir. 1990).

ANALYSIS

CERCLA Liability Standards

CERCLA "generally imposes strict liability on owners and operators of facilities at which hazardous substances were disposed." *Carson Harbor Village, Ltd. v. Unocal Corp.*, 270 F.3d 863, 870 (9th Cir. 2001) (en banc). To achieve that end, CERCLA "authorizes private parties to institute civil actions to recover the costs involved in the cleanup of hazardous wastes from those responsible for their creation." *Id.*

To prevail in this CERCLA cost recovery action, Nu-West has the burden of proving the following elements: (1) the site on which the hazardous substances are contained is a "facility" under CERCLA's definition of that term, 42 U.S.C. § 9601(9); (2) a "release" or "threatened release" of any "hazardous substance" from the facility has occurred, 42 U.S.C. § 9607(a)(4); (3) such "release" or "threatened release" has caused the plaintiff to incur response costs that were "necessary" and "consistent with the national contingency plan," 42 U.S.C. §§ 9607(a)(4) and (a)(4)(B); and (4) the defendant is within one of four classes of persons subject to the liability provisions of CERCLA, 42 U.S.C. § 9607(a). *Carson Harbor,* 270 F.3d at 870-71. The Government does not dispute that Nu-West has established the first three elements. Thus, the only issue for resolving this motion is whether the Government is a "potentially responsible party" (PRP) under the fourth element.

An entity is labeled a PRP pursuant to § 9607(a) if it falls into any of the following four categories: (1) the current owners or operators of a facility where hazardous

substances were disposed of; (2) those who owned or operated such a facility at the time of a disposal; (3) those who arranged for the disposal of hazardous substances at such a facility; and (4) those who transported hazardous substances at such a facility.

The Government has admitted being an "owner" for purposes of CERCLA liability under 42 U.S.C. § 9607(a)(1) and (2). *See Defendant's Response Brief (Dkt. 49)* at p. 1. Nu-West seeks summary judgment that the Government is also an "arranger" and an "operator."

Arranger Liability

Because CERCLA does not specifically define what it means to "arrange for" disposal of a hazardous substance, the Supreme Court interpreted the phrase to mean someone who "takes intentional steps to dispose of a hazardous substance." *See Burlington Northern and Santa Fe Ry. Co. v. U.S.*, 129 S.Ct. 1870, 1879 (2009). An entity is an arranger if it has "direct involvement in arrangements for the disposal of waste." *U.S. v. Shell Oil Co.*, 294 F.3d 1045, 1055 (9th Cir. 2002). Elements to consider include whether the entity (1) owns the hazardous substance; (2) had the authority to control the disposal of that substance; and (3) exercised some actual control over the disposal of that substance. *Id.* at 1055-60.

The undisputed facts show that all three elements are present here, along with the intent element required by *Burlington Northern*. The Government owned the source of

the hazardous selenium, the middle waste shale.[1] At all times, the Government had the authority to control the disposal of the mining waste on the land it owned in the Caribou-Targhee National Forest – no mining or waste disposal could occur without its approval. Finally, the Government exercised actual control over the disposal – and showed its intent that the disposal take place – by requiring its lessees to cover the outer surface of the waste dumps with a layer of middle waste shale. For example, the Approval Stipulations governing the Lessee's mining activities state that "as a condition to the approval" of mining, the reclamation areas "will be . . . covered with a minimum of 5 feet of middle waste shale." *Exhibit 90* at N-W0100400. This was required at all four mine sites. Thus, the Government fits all the criteria listed above for arranger liability.

The Government's expert, Timothy LeCain, concluded that "[a]t all four mines sites, the Lessees chose to use middle waste shale, which was readily available as it was a primary component of the waste rock dumps" and that the Government "preferred the use of topsoil." *See Declaration of LeCain* at p. 6, ¶¶ 32, 35. LeCain asserts that "[t]he 'requirement' that the Lessees use middle waste shale as a vegetation substrate was nothing more than the requirement that the Lessees honor their promise to revegetate using middle waste shale." *Id.* at ¶ 35.

Assuming, without deciding, that LeCain is correct, it makes no difference to the

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[1] The Government states in its briefing that it "assume[s] without conceding that the United States owns" the middle waste shale. *See Response Brief (Dkt. 49)* at p. 16. The Government has admitted being an owner under CERCLA's PRP provision, and has produced nothing to indicate that it did not own the middle waste shale. Accordingly, the Court found above that it is undisputed that the Government owns the middle waste shale.

liability provisions of CERCLA. The Government cites no authority holding that arranger liability depends on who originated the disposal method. Whoever devised the idea of using middle waste shale to cover the dumps, the Government's own documents show that it required this disposal as a condition of mining approval. That is sufficient for arranger liability.

The Government argues that in engaging in the conduct described above, it was acting in a purely regulatory role, taking actions "aimed only at *mitigating* the environmental harm caused by private parties' actions . . . ." *See Response Brief (Dkt. 49)* at p. 15 (emphasis in original). This argument, however, has been rejected in this Circuit. *Shell Oil*, 294 F.3d at 1052-54. That case began its analysis by citing CERCLA's waiver provision – at 42 U.S.C. § 9620(a)(1) – and finding that it contained "an unambiguous waiver of the sovereign immunity of the Government." *Id.* at 1052. In *Shell Oil*, the Government argued that this waiver does not apply when the Government acts in a governmental capacity, akin to their argument here that they cannot be liable for purely regulatory activity. The Circuit found no support for that argument in CERCLA or the case law, noting that the Government has repeatedly been held liable under CERCLA for acts that "cannot possibly be characterized as 'nongovernmental.'" *Id.* at 1053. For example, the Circuit noted, private parties do not operate military bases and yet the Government has been found liable for the cleanup of hazardous wastes at military facilities. *Id.* Rejecting the "governmental" defense, the Circuit held that CERCLA's waiver of sovereign immunity is coextensive with the scope of liability imposed by

CERCLA – if CERCLA "provides for liability then § 9620(a)(1) waives sovereign immunity to that liability." *Id.* at 1053.

Shell Oil's rejection of the "governmental" defense applies with equal strength to the "regulatory" defense raised here. Congress could have easily included a regulatory exception to the broad waiver of sovereign immunity contained in CERCLA but did not do so.

As discussed above, the undisputed facts show that the Government was an arranger under 42 U.S.C. § 9607(a)(3). Under *Shell Oil*, the Government has waived its sovereign immunity to the full extent of its liability as an arranger. Accordingly, the Court will grant Nu-West's motion for partial summary judgment to this extent it seeks to impose arranger liability on the Government.

Operator Liability

To be an "operator" under CERCLA, one "must manage, direct, or conduct operations specifically related to pollution, that is, operations having to do with leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations." *U.S. v Bestfoods*, 524 U.S. 31, 66-67 (1998). CERCLA operator liability "attaches if the defendant had authority to control the cause of the contamination at the time the hazardous substances were released into the environment" and actually exercised such control. *Kaiser Aluminum & Chem. Corp. v. Catellus Dev. Corp.*, 976 F. 2d 1338, 1341-42 (9th Cir. 1992); *see also Coeur D'Alene Tribe*, 280 F. Supp. 2d at 1126 (applying *Bestfoods* and *Catellus*, focusing on the "requirement of control over the cause

of the contamination").

In this case, the record shows conclusively that the Government was managing the design and location of the waste dumps for the four mines. For example, in 1972, Forest Service Engineer H.C. Ames, speaking of the South Maybe Canyon Mine, stated that "I also designed for consideration a dump in the head of Maybe Canyon." *See Exhibit 22.* Early on, it appeared that the Lessee intended to put most of the waste in a dump in Maybe Canyon, a proposal that appealed to the federal agencies because it was "virtually out of sight . . . ." *See Exhibit 30.* But when the Lessee proposed to put two waste dumps just below the ridge line between Maybe Canyon and Dry Valley, in a highly visible location, the Forest Service's Bill Paller expressed his strong disagreement by telling the Lessee "you'll do it our way or not at all." *Id.; see also Kross Deposition* at 62-71, 146. In 1975, officials from the Forest Service and the Geological Survey met, without the Lessees, to discuss at length the waste dump designs and locations. *See Exhibit 36.* At that meeting, the Forest Service expressed disagreement with the Lessee's plan for a dump within South Maybe Canyon and so "began a complicated redesign of the dump." *Id.* As a result of that meeting, and a meeting the next day, the District Mining Supervisor noted that the Lessee "will be requested to redesign the South Maybe Canyon Dump." *Id.* In 1977, the Forest Service told the Lessee that "we'd like to see the following steps taken" regarding the drain in the waste dump, and included 14 detailed proposals. *See Exhibit 46.* In 1978, the District Mining Supervisor stated that the ridge-line waste dumps proposal had been revised due to soil instability and "scenic vista

problems," and that the new valley locations were "in the Government's best interest." *See Exhibit 52.*

In addition, it is undisputed that the Government regularly inspected the mines to ensure compliance with the mining plans and waste disposal guidelines. For example, during an inspection of the North Maybe Mine, Forest Service officials met with the Lessee and "it was decided" that there "would be no more dumping on the lower level of the waste dump," among other decisions affecting the waste dump. *See Exhibit 71.* As another example, in 1979 during an inspection regarding the South Maybe Canyon Mine, Ed Connors of the Forest Service stated that "high priority" needs to be given to a section of the french drain in the waste dump, and directed the mining contractor to "bulldoze chert from the high drain northward into the gap area, and possibly from the lower blanket southward into the gap area." *See Exhibit 62.* Connors also "indicated strongly that he feel [sic] that the chert French drain should go in at the 7120 foot level and built [sic] north." *Id.* On July 18, 1979, with regard to the same mine, the Forest Service told the Lessee that the waste dump "concept and the dump itself . . . [is] in some jeopardy." *See Exhibit 61.* The Forest Service had observed cracks in the french drain, and was concerned with both actual and threatened landslides in the waste dump area which "occurred due to a lack of supervision on the part of the operation." *Id.* Based on this inspection, the Forest Service directed the Lessee to take four specific actions with regard to the waste dump, including "fill with chert the v-shaped slot between the chert drain [in the waste dump] and the original ground to the east." *Id.*

The documents show that this level of Government involvement occurred at all four mine sites. The Government does not dispute this evidence but argues that "[w]here the United States suggested modifications in light of requirements imposed by law and the Lessees' leases, permits and mine plans, it did so as a regulator to ensure compliance with those provisions." *See Response Brief (Dkt. 49)* at p. 17.[2] However, the Court has already discussed the Circuit's rejection of this "regulator" defense in *Shell Oil*. As to the Government's claim that it was merely making "suggestions" rather than orders, the difference is irrelevant. Either way, the Government was actively involved in the design and location of the waste dumps, and in ensuring that the waste dumps complied with the mining plans and environmental rules. That is sufficient, as a matter of law, for operator liability. *Bestfoods*, 524 U.S. at 66-67 (holding that operator liability attaches if the entity is managing or directing "operations having to do with leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations").

Moreover, the "suggestions" of a federal agency with final approval authority over

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[2] In a briefing footnote, the Government complains generally about Nu-West relying on documents containing hearsay within hearsay, and identifies as an example a document written by a Lessee employee recalling statements of a Forest Service official. The Court did not rely on that document, however. In recounting the actions of the Government above, the Court has relied almost entirely on numerous documents written by Government employees. Their statements are not hearsay. *See Fed.R.Evid. 801(d)(2)*. The Government does not specifically object to any of their own documents relied upon by the Court. The Court does rely on a statement by a Lessee's employee, Arel Bowles. The Court used the statement to establish what action Bowles took, not to establish the statements or conduct of any Government official. There cannot be any hearsay objection to using Bowles's deposition testimony to establish his own conduct. The Court also relied on the deposition testimony of Burton Kross, a non-governmental employee who testified about a statement he heard made by the Forest Service's Bill Paller. Paller's statement is not hearsay under Rule of Evidence 801(d)(2).

a mining operation carry some weight. Arel Bowles, an employee of a Lessee for thirty years, testified that "[i]f the Forest Service Representative said he wanted something, that's the way it was. And when a federal agency did an official inspection and they saw something they wanted done differently, we did it that way." *See Bowles Deposition* at p. 68.

Looking over the same Government conduct that the Court cites above, the Government's expert LeCain reaches this conclusion:

> In general, the role of federal employees inspecting mines was limited to ensuring that the Applicable Requirements were being met. Whether this can be called "supervision" or "direction" is a matter of semantics. In one sense, the inspectors supervised, i.e., watched over the operations. But these inspectors did not direct the day to day activities of the mine. Moreover, the federal inspectors "directed" or "controlled" only to the extent that the Lessees were violating, or were in danger of violating, the Applicable Requirements. As long as the Lessees' operations were not in violation, there was no direction or control to be given or exercised.

See LeCain Declaration (Dkt. 51) at p. 4, ¶ 20. But LeCain's opinion that the Government simply "watched over the operations" is conclusively refuted by the Government's own documents cited above. The Government was a very active participant in designing and locating the waste dumps, in inspecting mining operations, and in ensuring compliance with all rules and plans. As discussed above, even if the Government's directions could be called "suggestions," those suggestions often got instant results. When the Government's directions met resistence from the Lessee, and negotiations resulted in some compromise, the Government was still actively managing the disposal of hazardous waste through the negotiation process.

The undisputed facts show that the Government was an operator under 42 U.S.C. § 9607(a)(3). Under *Shell Oil*, the Government has waived its sovereign immunity to the full extent of its liability as an operator. Accordingly, the Court will grant Nu-West's motion for partial summary judgment on both the arranger and operator liability issues.

Conclusion

This decision awards only a partial summary judgment because it merely resolves particular issues relating to liability. The Court did not consider any damage issues, and did not consider the defenses set forth at 42 U.S.C. § 9607(b) or the issues raised any of the subsections that follow. Because this decision deals only with issues related to liability, it is narrow in scope and has no precedential value for the next phase of this litigation beyond its finding that the Government is an owner, operator and arranger for purposes of 42 U.S.C. § 9607(a).

ORDER

In accordance with the Memorandum Decision set forth above,

NOW THEREFORE IT IS HEREBY ORDERED, that Nu-West's motion for partial summary judgment (docket no. 35) is GRANTED.

IT IS FURTHER ORDERED, that the defendant United States is deemed an owner, operator, and arranger for purposes of 42 U.S.C. § 9607(a) with regard to the CERCLA clean up costs sought in this case associated with the South Maybe Canyon Mine, the North Maybe Mine, the Champ Mine and Champ Mine Extension, and the Mountain Fuel Mine.

DATED: **March 4, 2011**

Honorable B. Lynn Winmill
Chief U. S. District Judge