

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION I

IN THE MATTER OF: )

NUCLEAR METALS SUPERFUND )  
SITE )

U.S. EPA

Docket No.

CERCLA 01-2008-0007

Proceedings relating to a settlement )  
agreement under Section 122(d)(3) for action )  
under Section 104(b) of the Comprehensive )  
Environmental Response, Compensation and )  
Liability Act, as amended, 42 U.S.C. )  
§§ 9604(b), 9622(d)(3) )

**AMENDMENT TO ADMINISTRATIVE ORDER BY CONSENT**

**FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

## INTRODUCTION

WHEREAS, on June 13, 2003, the Deputy Director of the United States Environmental Protection Agency (“EPA”) for Region I, Office of Site Remediation and Restoration (“OSRR”), signed an Administrative Order By Consent For Remedial Investigation/Feasibility Study (“RI/FS”) (U.S. EPA Docket No. CERCLA 01-2003-0021) (the “Order” or the “AOC”) for the Nuclear Metals Superfund Site in Concord, MA (the “Site”);

WHEREAS, all initially-capitalized terms used herein, unless defined in this Amendment, shall have the meanings provided in the AOC;

WHEREAS, the AOC requires the Respondents and the Settling Federal Agencies to finance the performance of the Work under the AOC up to a total amount of \$10,000,000, and, in the event that a Revised Cost Estimate, for performance of the Work, exceeds \$10,000,000, to immediately commence negotiations to address the payment of costs for such Revised Cost Estimate;

WHEREAS, pursuant to the AOC, on or about November 10, 2006, the Trustee of the RI/FS Trust Fund submitted to the Respondents, the Settling Federal Agencies, and EPA a Revised Cost Estimate for performance of the Work that exceeded \$10,000,000;

WHEREAS, by letter of June 14, 2006 to counsel for MONY Life Insurance Co. (“MONY”), one of the Respondents under the AOC, EPA stated that, based on current information, it did not consider MONY a potentially responsible party for the Site, and, upon completion of its covenants and responsibilities under the AOC, would not take further steps to hold MONY liable for the cleanup or response costs at the Site;

WHEREAS, without conceding the validity of EPA's determination as to MONY, the Respondents (exclusive of MONY) agree that the AOC should be amended to establish that MONY will no longer be a party to the AOC after it is amended;

WHEREAS, MONY agrees that the AOC should be amended to establish that MONY will no longer be a party to the AOC after it is amended;

WHEREAS, the Respondents (exclusive of MONY) and the Settling Federal Agencies, by this Amendment to Administrative Order By Consent For Remedial Investigation/Feasibility Study (this "Amendment") agree to finance their respective shares of the costs to complete the Work as set forth in the most current Revised Cost Estimate (as specified below), and to immediately commence negotiations to address the payment of costs in the event that any subsequent Revised Cost Estimate for performance of the Work exceeds \$14,000,000;

WHEREAS, Paragraph 98 of the AOC permits the AOC to be modified only upon the written agreement of EPA by signature of the Director, OSRR, each of the Settling Federal Agencies and each of the Respondents;

NOW, THEREFORE, EPA, the Respondents, and the Settling Federal Agencies have agreed to modify the AOC, as follows:

A. In Section I. (DEFINITIONS), Paragraph 1.a. is stricken in its entirety and replaced with the following:

"Respondents" shall mean, as of the effective date of this Amendment, the parties listed in Appendix A, exclusive of MONY Life Insurance Co.

B. In Section V. (FINDINGS OF FACT), references to "Section 105(8)(b)"

and “42 U.S.C. § 9605(8)(b)” in Paragraph 12 are replaced with: “Section 105(8)(B)” and “42 U.S.C. § 9605(8)(B)” respectively.

C. In Section IX. (TRUST FUND; ADDITIONAL PAYMENTS), Paragraph 23 is stricken in its entirety and replaced with the following:

23. (a) Within ten (10) days of the effective date of this Order, the Respondents shall submit to EPA for approval a fully executed trust agreement (the “RI/FS Trust Agreement”) establishing the “Nuclear Metals RI/FS Trust” (hereafter, the “RI/FS Trust Fund”), in substantially the form attached hereto as Appendix D, and shall notify EPA of the identity and qualifications of the trustee. The RI/FS Trust Agreement shall confer upon the trustee powers and authorities required or sufficient to finance the obligations of the Respondents under this Order, including performance of the RI/FS and/or the EE/CA. EPA shall notify the Respondents, in writing, of its approval or disapproval of the proposed RI/FS Trust Agreement, any part thereof, or the proposed trustee. Within thirty (30) days after any disapproval of the RI/FS Trust Agreement, or the proposed trustee, the Respondents shall submit a revised RI/FS Trust Agreement to EPA or shall provide a notice of dispute pursuant to Section XXXII (Dispute Resolution).

(b) In 2003, the Respondents (then including MONY) secured an estimate of \$8,000,000 as the total costs to perform the Work and to reimburse EPA for Response and Oversight Costs required under this Order. The Respondents (then, including MONY) paid \$160,000 into the RI/FS Trust Fund within thirty (30) days of EPA’s approval of the RI/FS Trust Agreement, or within thirty (30) days after resolution of any dispute regarding the RI/FS Trust Agreement under which the RI/FS Trust Agreement is

approved (hereafter this date is referred to as the “Approval of the RI/FS Trust”), which amount was 2.0% of the then estimated total costs to perform the Work, including estimated costs to reimburse EPA for Response and Oversight Costs, as required under this Order.

(c) Pursuant to Paragraph 30 of the AOC, the Respondents (then including MONY) subsequently paid \$40,000 into the RI/FS Trust Fund within forty-five (45) days of the Trustee’s requests for payment of two Additional Funding Requests, which amount was 2.0% of the then estimated total costs to perform the Work, including estimated costs to reimburse EPA for Response and Oversight Costs, as required under this Order.

(d) The Respondents have now secured a Revised Cost Estimate to complete the Work of \$14,000,000, of which \$4,000,000 is the amount exceeding the \$10,000,000 ceiling in the AOC. The Respondents shall pay \$80,000 into the RI/FS Trust Fund, within 30 days of the effective date of this Amendment, which amount is Respondents’ 2.0% share of the portion of the Revised Cost Estimate amount exceeding \$10,000,000, and which includes the estimated costs to reimburse EPA for Response and Oversight Costs.

D. In Section IX. (TRUST FUND; ADDITIONAL PAYMENTS), clause (c) in Paragraph 26 is stricken and replaced with the following:

(c) any revisions to the revised estimate of the total costs for the Work accompanied by an explanation of any cost increases from \$14,000,000 (“Revised Cost Estimate”);

E. In Section IX. (TRUST FUND; ADDITIONAL PAYMENTS), Paragraph

34 is stricken in its entirety and replaced with the following:

Notwithstanding any other provision of this Order, nothing herein shall be construed to require the United States, on behalf of the Settling Federal Agencies, to make more than \$13,720,000 in total payments to the RI/FS Trust Fund (exclusive of income on Permitted Investments), or to require the Respondents to make more than \$280,000 in total payments to the RI/FS Trust Fund (exclusive of income on Permitted Investments). In the event that the Settling Federal Agencies have presented an objection to an Additional Funding Request that was not resolved during the Informal Resolution Period, the \$13,720,000 ceiling on total Settling Federal Agency payments shall be reduced by the Objection Amount, as those terms are described in Paragraph 32 herein. In the event that any Additional Funding Request asks the Settling Federal Agencies or the Respondents to make additional contributions that would result in total payments exceeding these amounts, the Settling Federal Agencies and the Respondents shall be required to make the portion of those payments that will not exceed a total of \$13,720,000 (as adjusted by any Objection Amount) and \$280,000, respectively, in accordance with Paragraphs 29 through 32 herein. In addition, in the event an Additional Funding Request is presented that exceeds these amounts, the Respondents, EPA, and the Settling Federal Agencies shall immediately commence negotiations to address the payment of costs for the most current Revised Cost Estimate that are not addressed by this Order or any amendment hereto. If such negotiations prove necessary, to the extent that the RI/FS Trust Fund has suffered any unrecovered

losses due to actions of the trustee referenced in Paragraph 31(b) herein, the Settling Federal Agencies will not contend that the Respondents' share of the costs that are the subject of the negotiations should be increased based on allegations that the Respondents were negligent in their selection of the trustee, provided that the selected trustee was approved by EPA pursuant to Paragraphs 23 or 25 of this Order.

F. In Section X. (REIMBURSEMENT OF RESPONSE COSTS BY SETTling FEDERAL AGENCIES), Paragraph 36 is stricken in its entirety and replaced with the following:

36. (a) In 2003, the United States, on behalf of the Settling Federal Agencies, paid \$7,840,000 to the RI/FS Trust Fund, which amount was 98.0% of the then estimated total costs to perform the Work, including estimated costs to reimburse EPA for Response and Oversight Costs required under this Order.

(b) Pursuant to Paragraph 31(a) of the AOC, the Settling Federal Agencies subsequently paid \$1,960,000 into the RI/FS Trust Fund as soon as was reasonably practicable, which at no time was more than forty-five (45) days after receipt of the Trustee's request for payment of two Additional Funding Requests, which amount was 98.0% of the then estimated total costs to perform the Work, including estimated costs to reimburse EPA for Response and Oversight Costs, as required under this Order.

(c) As soon as reasonably practicable, the United States, on behalf of the Settling Federal Agencies, shall pay \$3,920,000 into the RI/FS Trust Fund, which amount is the Settling Federal Agencies' 98.0% share of the amount exceeding \$10,000,000 in the Revised Cost Estimate to perform the remainder of the Work including the estimated

costs to reimburse EPA for Response and Oversight Costs. Payment shall be made in the form of a check, or by Electronic Funds Transfer in accordance with the instructions in Appendix E.

(d) If the payment to the RI/FS Trust Fund required by subparagraph (c) is not made as soon as reasonably practicable, the appropriate EPA Regional Branch Chief may raise any issues relating to payment to the appropriate DOJ Assistant Section Chief for the Environmental Defense Section. In any event, if this payment is not made within 120 days after the effective date of this Amendment, EPA and DOJ have agreed to resolve the issue within 30 days in accordance with a letter agreement dated December 28, 1998.

G. In Section XI. (ENGAGEMENT OF THE RESPONDENTS' CONTRACTOR; DESIGNATION OF THE RESPONDENTS' PROJECT COORDINATOR), the contact information for the Respondents' Project Coordinator in Paragraph 41 is stricken and replaced with the following:

Bruce R. Thompson  
*de maximis, inc.*  
200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
Tel: 860 298-0541  
Fax: 860 298-0561  
Email: brucet@demaximis.com

H. In Section XII. (DESIGNATION OF GOVERNMENT COORDINATORS), the name of the GSC Contact in Paragraph 42 is stricken and replaced with the following:

Robert Cianciarulo

I. In Section XIII. (PLACE AND MANNER OF NOTICE), the Army contact information in Paragraph 44 is stricken and replaced with the following:

CPT Joshua H. Van Eaton  
U.S. Army Legal Services Agency  
Environmental Law Division  
901 N. Stuart Street, Suite 400  
Arlington, VA 22203

J. In Section XIII. (PLACE AND MANNER OF NOTICE), the contact information for the U.S. Department of Justice, Environmental Defense Section in Paragraph 44 is stricken and replaced with the following:

Peter M. Flynn  
U.S. Department of Justice - ENRD  
Environmental Enforcement Section  
Attention: DJ No. 90-11-2-07237/6  
Ben Franklin Station  
P.O. Box 7611  
Washington, D.C. 20044-7611

K. In Section XIII. (PLACE AND MANNER OF NOTICE), as MONY is not a party to this Amendment, the following information for the representative for MONY in Paragraph 44 is deleted from the list of persons to whom communications with the Respondents shall be directed:

Robert S. Sanoff, Esq.  
Foley Hoag LLP  
155 Seaport Boulevard  
Boston, MA 02210

L. In Section XXIV. (ENDANGERMENT AND EMERGENCY RESPONSE), the first sentence of Paragraph 61 is stricken and replaced with the following:

Upon the occurrence of any event during the Work that causes or threatens any release of hazardous substances, pollutants or contaminants from the Site into the environment or that endangers the public health, welfare, or the environment, the Respondents shall immediately take all appropriate action to prevent, abate or minimize such release or

endangerment; provided, however, that nothing in this Order or the SOW shall require Respondents to operate the existing heating or other existing systems within the building that are listed in subsection d. of Section 2.II.A.1. (SITE MANAGEMENT PLAN) of the SOW, as amended, or to remove and dispose of the containers of hazardous substances that are stored in buildings at the Site as of the effective date of this Order or brought on site by Starmet after the effective date of this Order, including those listed on Attachment 1 (Hazardous Materials/Chemical Inventory List) to the SOW, as amended.

M. In Section XXX (REIMBURSEMENT OF EPA RESPONSE AND OVERSIGHT COSTS), the mailing addresses for submission of payments for EPA Response and Oversight Costs in Paragraph 72 are stricken and replaced with the following:

(For delivery by first class mail)  
U.S. Environmental Protection Agency  
Cincinnati Finance Center  
P.O. Box 979076  
St. Louis, MO 63197-9000

(For delivery by overnight mail)  
U.S. Bank  
1005 Convention Plaza  
Mail Station SL-MO-C2GL  
St. Louis, MO 63101

N. In Section XXXIII (STIPULATED PENALTIES) the mailing address for submission of payments for stipulated penalties in Paragraph 80 is stricken and replaced with the following:

(For delivery by first class mail)  
U.S. Environmental Protection Agency  
Cincinnati Finance Center  
P.O. Box 979076  
St. Louis, MO 63197-9000

(For delivery by overnight mail)  
U.S. Bank  
1005 Convention Plaza  
Mail Station SL-MO-C2GL  
St. Louis, MO 63101

O. In the SOW, Appendix C of the AOC, Section 2.II.A.1. (SITE MANAGEMENT PLAN) thereof, subsection d. is stricken and replaced with the following:

a provision for the security of government and private property on the Site; provided however, that nothing in this Order or the SOW shall require Respondents to operate the following existing systems within the facility buildings: heating system; electrical system (but Respondents shall be required to operate the existing fire alarm system, upon request by EPA); sprinkler system; sonadyne system; air ventilation system; or air conditioning system (and a provision indicating that such security, including operation of the existing fire alarm system, is only to be provided after both of the following have occurred: (a) Starmet abandons the Site or fails to provide such security; and (b) all, or substantially all, of the containers of hazardous substances listed on the attached Hazardous Materials/Chemical Inventory List, Attachment 1 to the SOW, as amended, have been removed from the Site).

P. The Hazardous Materials/Chemical Inventory List, Appendix A to this Amendment, shall be appended to the SOW as Attachment 1 to the SOW.

Q. All other provisions of the AOC, to the extent not superseded by the terms of this Amendment, remain in full force and effect.

R. The undersigned representative for each party to this Amendment certifies

that he or she is fully authorized to enter into the terms and conditions of this Amendment and to execute and legally bind such party to this document.

S. This Amendment shall be effective five (5) days after this Amendment is signed by the Director, OSRR.

**Amendment to Administrative Order by Consent  
EPA Docket No. CERCLA 01-2008-0007  
Nuclear Metals Superfund Site, Concord, MA**

---

**IT IS SO AGREED AND ORDERED BY:**

---

James T. Owens, III  
Director, Office of Site Remediation  
& Restoration  
U.S. EPA Region I

---

Date

---

Audrey Zucker  
Senior Enforcement Counsel  
U.S. EPA Region I

---

Date

**Amendment to Administrative Order by Consent  
EPA Docket No. CERCLA 01-2008-0007  
Nuclear Metals Superfund Site, Concord, MA**

---

**IT IS SO AGREED,**

Name of Respondent:

\_\_\_\_\_

By:

\_\_\_\_\_

Title:

\_\_\_\_\_

Date:

\_\_\_\_\_

**Amendment to Administrative Order by Consent  
EPA Docket No. CERCLA 01-2008-0007  
Nuclear Metals Superfund Site, Concord, MA**

---

**IT IS SO AGREED,**

Name of Settling Federal Agency:

\_\_\_\_\_

By:

\_\_\_\_\_

Title:

\_\_\_\_\_

Date:

\_\_\_\_\_

**STATEMENT OF WORK  
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY  
NUCLEAR METALS SUPERFUND SITE**

Attachment 1  
Hazardous Materials/Chemical Inventory List

Appendix A  
Amendment to Administrative Order By Consent  
For Remedial Investigation/Feasibility Study

Hazardous Materials / Concerns for the Nuclear Metals Site North Concord, Massachusetts  
TDD:07-06-0006 TASK:0309-00

Building/Room No.	QTY	Size/Type	Product Name/Desc.	Volume/Type of Product	Comments
A-145	1	Compressed gas cylinder	Compressed Air	Rear of room near A-145A [Unknown]	[Collect/segregate cylinders to a central area.
	1	Cylinder	Argon Ultra High Purity	Bench between MET-2 and Met-3 hoods [Unknown]	[Collect/segregate cylinders to a central area.
A-145A	2	500g amber glass	Phosphorus Pentoxide	Bench to left of MET-2 hood Powder	[Dangerous when wet, collect and segregate to one storage area.
	1	1Kg steel can	Calcium carbide CaC <sub>2</sub>	Benchtop Metalurgical Grade	[Dangerous when wet, collect and segregate to one storage area.
	1	1-gallon poly	Ethyl alcohol, 200 proof (Anhydrous ethanol)	Under lab sink 1 gallon.	Collect/segregate flammables if not in flammable cabinet
	1	1-gallon poly	Epoxide	1 gallon.	Collect/segregate flammables if not in flammable cabinet
	1	1/2-gallon poly	Epoxide	1/2 gallon.	Collect/segregate flammables if not in flammable cabinet
	1	metal can	Acetone 100%	Full	Collect/segregate flammables if not in flammable cabinet
	1	500mL glass amber	Methanol, Absolute		Collect/segregate flammables if not in flammable cabinet
	1	2.5-gallon poly	"n-Propanol"		Collect/segregate flammables if not in flammable cabinet
	1	1-gallon poly	De-natured (Proprietary solvent, anhydrous)		Collect/segregate flammables if not in flammable cabinet
	1	1L poly bottle	n-Propanol		Collect/segregate flammables if not in flammable cabinet
	1	1-gallon poly	Acetone 100%		Collect/segregate flammables if not in flammable cabinet
	A-145A	1	100g amber glass	Titanium Carbide	Wall cabinet 3rd shelf left Powder
1		50g poly	Zirconium Carbide	Powder	Flammable Solid, Collect/segregate metal powders
1		25g clear poly	Titanium Powder	Powder	Flammable Solid, Collect/segregate metal powders
A-146	1	500g poly	Magnesium Chips 99.99% (Water Reactive)	Wall cabinet 3rd shelf - right Chips	[Dangerous when wet, collect and segregate to one storage area.
	1	5-lb metal can	Aluminum Powder	Wall cabinet 2nd shelf left Powder	Flammable Solid, Collect/segregate metal powders
A-145A	1	500g amber glass	Phosphorus Pentoxide (water reactive)	Wall cabinet 2nd shelf right Powder/Solid	[Dangerous when wet, collect and segregate to one storage area.
	2	250g amber glass	Copper Powder	Powder	Flammable Solid, Collect/segregate metal powders
A-145A	1	500g poly	Nickel Powder 99.99%	Wall cabinet (bottom) 1st shelf right Powder	Flammable Solid, Collect/segregate metal powders
	2	2Kg poly	"Copper powder"	Powder	Flammable Solid, Collect/segregate metal powders
A-147	50-75	4-lb poly containers	Tungsten Powder, 99%	Powder	Flammable Solid, Collect/segregate metal powders
	4	30-gallon metal drums	Ti, Nb, Be, Mg, Cr carbide powders	Various	Flammable Solid, Collect/segregate metal powders
A-150	2	Cylinders	Ti powder	Full	Flammable Solid, Collect/segregate metal powders
	1	30-gallon metal drums	Argon, Hydrogen	Full	Flammable Solid, Collect/segregate metal powders
A-154	1	5-gallon metal pail	Ti PREP powder	1/2 full	Flammable Solid, Collect/segregate metal powders
	1	Cylinder	Metal powder	1/2 full	Flammable Solid, Collect/segregate metal powders
A-155	1	Plastic box	Argon	Unknown	Collect/segregate cylinders to a central area.
	1	250g amber glass	Beryllium pellets	Partially full	Hazardous/Toxic Metal - Collect/segregate
A-160	num.	Poly bags	Titanium	3/4 full	Flammable Solid, Collect/segregate metal powders
	2	Electroboite cylinders	Metal powders	Partially full	Flammable Solid, Collect/segregate metal powders
A-162	1	Electroboite cylinder	Silicon tetrafluoride	Unknown	Toxic, corrosive, fluoride gas storage cabinet
	1	(7g) Cylinder	Tungsten hexafluoride	Unknown	Fluoride gas storage cabinet
	1	Electroboite cylinder	Boron trifluoride	Unknown	Fluoride gas storage cabinet
	1	Electroboite cylinder	Hydrogen fluoride	Unknown	Fluoride gas storage cabinet
	1	Cylinder	Germanium tetrafluoride	Unknown	Collect/segregate cylinders to a central area.
	1	Cylinder	Nitrogen	Unknown	Collect/segregate cylinders to a central area.
	1	Active lab bench	Helium	Unknown	Collect/segregate cylinders to a central area.
	5	Aerosol cans	Metal powders, other sm. Containers	Various	Flammable Solid, Collect/segregate metal powders
	3	Aerosol cans	Enamel	Unknown	Collect/segregate flammables if not in flammable cabinet
	4oz poly	Furniture polish	Unknown	Unknown	Collect/segregate flammables if not in flammable cabinet
	6	small misc. poly bottles	Various metal powders	Unknown	Flammable Solid, Collect/segregate metal powders
	1	55-gallon poly drum	Flammable materials	Partially full	Collect/segregate flammables if not in flammable cabinet
A-220	1	12" x 15" poly bag	"Beryllium Waste Water"	Along window/back wall Liquid	Hazardous/Toxic Metal - Collect/segregate
	3	5-gal poly pail	Bagged Beryllium Trash	Solid	Hazardous/Toxic Metal - Collect/segregate
A-220	1	3" cylinder, 3-4" diam	Unlabelled	empty?	Collect/segregate cylinders to a central area.
	2	2 cylinder, 3-4" diam	unlabelled	unknown	Collect/segregate cylinders to a central area.

Hazardous Materials / Concerns for the Nuclear Metals Site North Concord, Massachusetts  
TDD:07-06-0006 TASK:0309-00

Building/Room No.	QTY.	Size/Type	Product Name/Desc.	Volume/Type of Product	Comments
A-220	2	500g poly	Magnesium turnings/chips	Granules	Flammables Cabinet next to hood Chem-2  Flammables cabinet under hood Chem-1  Base cabinet under hood Chem-1  Bench near hood Chem-1  Laboratory  Cabinet labeled "Inorganics" behind lab door [2nd (middle) shelf]  Cabinet labeled "Inorganics" behind lab door [1st (bottom) shelf]
	1	1 gal metal can	"Magnesium powder UN1869"	powder	
	1	1 lb cylinder	Propane	Gas	
	1	100g amber glass	Sodium Spheres (in oil)	chunks	
	2	500g amber glass	Phosphorus Powder Red Amorphous	Powder under nitrogen	
	1	cylinder	Compressed Air	Lab	
	1	1L amber glass	Acetonitrile	Liquid	
	1	500mL amber glass	Diethyl Ether	Liquid	
	2	500mL amber glass	Methyl Ethyl Ketone	Liquid	
	1	1L amber glass	Toluene	Liquid	
	1	1L amber glass	1-Butanol	Liquid	
	1	1Kg amber glass	Boron Fluoride Ether	Liquid	
	3	1L amber glass	Methanol	Liquid	
	1	1-gallon metal can	Super 77 Adhesive	Liquid	
	1	500mL amber glass	Carbon Disulfide	Liquid	
1	1-gallon poly	"n-Propyl Alcohol, used"	Liquid		
mult.		poly bottles and bags			
A-223	1	cylinder	Argon, Compressed	Gas	
	1	2oz poly bag	"Tungsten Powder"	Beads	
	1	1/2-lb poly	Molybdenum Powder	Powder	
	3	100g poly	Tantalum Powder, 99.8% (25ppm Nb)	Powder	
	1	100g poly	Tungsten Powder	Powder	
	1	10g poly	"Ni"	Powder	
	3	500g poly	PT2 Titanium Powder	Powder	
	1	1kg amber poly	Niobium Powder	Powder	
	1	2-lb poly	Molybdenum Powder	Powder	
	1	100g poly	"Molybdenum Powder"	Powder	
	1	500g amber glass	Niobium	Powder	
	2	500g poly	Niobium	Powder	
	1	100g poly	"Magnesium" (water reactive)	Powder	
	2	500g poly	Titanium Powder	Powder	
	1	400g poly	"Niobium"	Powder	
1	200g poly	Tin Powder	Powder		
1	3-lb metal paint can	Al Powder, uncoated. Could form explosive air mixture if released.	Powder		
3	1-qt paint can	Al Powder, uncoated. Could form explosive air mixture if released.	Powder		
1	3-lb paint can	"ZIRC" water reactive	Powder		
1	1-qt (10-lb) paint can	Copper Powder	Powder		
1	1-qt metal	Mg Granules water reactive	Powder		
1	25g amber glass	Antimony Powder	Powder		
4	5pc clear glass	Antimony Powder	Powder		
A-224	1	2lb cylinder	Hydrogen	Unknown	
	1	Cylinder	Helium	Unknown	
	1	Cylinder	Argon	Unknown	
	1	Cylinder	Nitrogen	Unknown	
A-224A	1	1-lb/1qt metal	Activated Carbon	Granules	
	2	500g amber glass	Phosphorous Pentoxide	Powder	
	1	32oz poly	Hydrochloric acid	> 1/2 full	
	1	1L poly	Sulfuric Acid H <sub>2</sub> SO <sub>4</sub>	Full	
	1	10lb	Hydrofluoric Acid HF residual	1/4 Full	
	1	7lb glass	Nitric Acid	2/3 full	
	1	6lb. Glass	Hydrochloric HCl		
	1	14oz	Propane cylinder		
	1	500mL amber glass	Methyl-ethyl Ketone	1/2 full	
	A-225	1	1-lb/1qt metal	Activated Carbon	Granules
2		500g amber glass	Phosphorous Pentoxide	Powder	
1		32oz poly	Hydrochloric acid	> 1/2 full	
1		1L poly	Sulfuric Acid H <sub>2</sub> SO <sub>4</sub>	Full	
1		10lb	Hydrofluoric Acid HF residual	1/4 Full	
1		7lb glass	Nitric Acid	2/3 full	
1		6lb. Glass	Hydrochloric HCl		
1		14oz	Propane cylinder		
1		500mL amber glass	Methyl-ethyl Ketone	1/2 full	
1		500mL amber glass	Methyl-ethyl Ketone	1/2 full	

Hazardous Materials / Concerns for the Nuclear Metals Site North Concord, Massachusetts  
TDD:07-06-0006 TASK:0309-00

DRAFT

Building/Room No.	QTY.	Size/Type	Product Name/ Desc.	Volume/Type of Product	Comments
A-225	1	1-gallon poly	Acetone 100%	1/4 full	Collect/segregate flammables if not in flammable cabinet
	1	500mL amber glass	Ethanol 200 proof	1" liquid	Collect/segregate flammables if not in flammable cabinet
	1	2L metal can	2-Propanol	1" liquid	Collect/segregate flammables if not in flammable cabinet
	1	metal can	"gasoline"	<1/4 full	Collect/segregate flammables if not in flammable cabinet
	3	metal safety cans	Unlabeled	Empty	Collect/segregate flammables if not in flammable cabinet
	7	Metal canisters	1, 1-gallon, 2, 2.5-gallon Prep Powder	Empty	Collect/segregate flammables if not in flammable cabinet
	3	Cylinders	Argon	Powder	Flammable Solid, Collect/segregate metal powders
	2	1pt Paint cans	Powdered metal	Powder	Collect/segregate cylinders to a central area.
	12	Plastic containers	Powdered metal	Powder	Flammable Solid, Collect/segregate metal powders
			<b>Steel bucket near cabinet and water pipes</b>		
B-1	1	4L poly	Magnesium chips "Mg"	Solid	Dangerous when wet, collect and segregate to one storage area.
	1	Cylinder	75% Argon, 25% carbon dioxide	Unknown	Store room/equipment maintenance area
	1	Cylinder	Cold gas argon & oxygen	Unknown	Collect/segregate cylinders to a central area.
	1	Cylinder	Oxygen	Unknown	Collect/segregate cylinders to a central area.
	1	Cylinder	Acetylene	Unknown	Collect/segregate cylinders to a central area.
1st Floor stairs	12	30-minute SCBA air bottles		Full	Collect/segregate cylinders to a central area.
C-1 acid cage	6	7-lb clear glass	Nitric acid	Full	Collect/segregate Acids/Bases
	2	6-lb clear glass	Hydrochloric acid	Full	Collect/segregate Acids/Bases
	13	10-lb clear glass	Hydrofluoric acid, 49%	Full	Collect/segregate Acids/Bases
	1	7-lb clear glass	Nitric acid	1/2 full	Collect/segregate Acids/Bases
	2	5-pt clear glass	Sulfuric acid	Full	Collect/segregate Acids/Bases
C-102A	1	Cylinder	Argon	Unknown	Laundry area
C-111	2	Cylinders	Argon	Unknown	Collect/segregate cylinders to a central area.
C-116	1	Cylinder	Oxygen (1%), helium (balance)	Unknown	Collect/segregate cylinders to a central area.
C-117	1	Cylinder	Nitrogen	Unknown	Collect/segregate cylinders to a central area.
	10	1-gallon paint cans	Rustoleum	Unknown	Foundry
	2	1-gallon plastic container	Acetone	Flammable cabinet	Flammable cabinet
	1	1-gallon	Oil	1/2 full	Flammable cabinet
	2	Cylinders	Argon	Residual	Flammable cabinet
	1	Cylinder	Nitrogen	Unknown	Collect/segregate cylinders to a central area.
C218	1	5-gallon pail	High-flash mastic remover	Full	Collect/segregate cylinders to a central area.
D-102	40	55-gallon metal drums (36), 5-gallon metal pails (4)	Metal shavings, neodymium	Full	Collect/segregate flammables if not in flammable cabinet
D-103	1	55-gallon poly drum	White crystallized solid	Residual	Flammable Solid, Collect/segregate metal powders
	1	Cylinder	Argon	Unknown	Foundry
D-104	1	16oz metal canister			Collect/segregate cylinders to a central area.
D-106A	2	55-gallon metal drum	MAPP gas	Empty	Are there PCB capacitors in machinery?
E-106	1	Cylinder	Beryllium product	Full	Hazardous/Toxic Metal - Collect/segregate
E-108	2	Cylinder	Helium	Unknown	Collect/segregate cylinders to a central area.
E-110	2	55-gallon metal drums	Nitrogen	Unknown	Collect/segregate cylinders to a central area.
E-116	4	Wooden boxes (approx. 54 ft. <sup>3</sup> )	Beryllium waste	Unknown	Hazardous/Toxic Metal - Collect/segregate
	2	1 gallon metal cans	Unknown	Full	May contain filter press waste - Hazardous/Toxic Metal - Collect/segregate
	2	1-gallon metal cans	Methanol	Unknown	Flammable cabinet
	1	1-pt paint can	Acetone	Unknown	Flammable cabinet
	1	1-gallon	High solids epoxy primer	Partially full	Flammable cabinet
	2	Spray bottles	High solids epoxy primer	Partially full	Flammable cabinet
	3	1-gallon	Isopropanol	1/2 full	Flammable cabinet
	2	1-gallon poly	Ethanol, 200 proof	Full	Flammable cabinet
	~25	Spray cans	Isopropanol	1/4 Full	UN 1219, flammable cabinet
	1	1-gallon metal can	Lubricants & aerosols	Unknown	Flammable cabinet
	1	250mL metal can	Mineral oil	Partially full	Flammable cabinet
E-117	1	Cylinder	Magnus vanishing oil	Partially full	Flammable cabinet
	~20	Poly bags, 4x6 or 8x8	Compressed nitrogen	Unknown	Collect/segregate cylinders to a central area.
	1	100mL poly bottle	Beryllium product	Unknown	Hazardous/Toxic Metal - Collect/segregate - Collect/segregate
	1	10-lb poly	"Alcohol"	<1/4 full	Collect/segregate flammables if not in flammable cabinet
E-120	1	10-lb poly	Hydrofluoric acid, 49%	Full	UN 1750, liquid, expired, blue cabinet

Hazardous Materials / Concerns for the Nuclear Metals Site North Concord, Massachusetts  
TDD:07-06-0006 TASK:0309-00

Building/Room No.	QTY.	Size/Type	Product Name/ Desc.	Volume/Type of Product	Comments
E-121	1	Poly tank (V-400), 2500-gallon.	Acid solution	Unknown	WWTP-in use
	1	Poly tank, 50-gallon.	Sulfuric acid solution	Unknown	WWTP-in use
	1	Metal tank, 30 gallon.	Unknown caustic solution		WWTP-in use
	1	2-gallon poly container	Hydrochloric acid		WWTP-in use
	1	Poly tank (V-404), 2500-gallon.	Acid solution	1/2 full	WWTP-in use
	1	Poly tank, 140-gallon.	50% Caustic soda solution	Unknown	WWTP-in use
	1	Poly tank, 140-gallon.	Hydrogen peroxide	1/3 full	WWTP-in use
	<10	Glass containers, <1L	WWTP lab chemicals	Residual	WWTP-in use
	1	Rectangular metal case	"Acid oil"		Chemicals include ammonium hydroxide
	1	Poly tank, 2500-gallon.	Clear well water	Unknown	WWTP-in use, probes soaking in liquids in bottom
E-121A	1	Poly tank, 2500-gallon.	Feed tank	Unknown	Sonodyne-in use
	1	Metal tank, 1000-gallon.	Caustic solution, sulfuric acid & other materials	Unknown	Sonodyne-in use
	2	Metal tank, 2100-gallon.	Caustic solution, sulfuric acid & other materials	Unknown	Sonodyne-in use
	1	Metal tank, 1000-gallon.	Caustic solution, sulfuric acid & other materials	Unknown	Sonodyne-in use
	2	55-gallon poly drums	Sulfuric acid	Full	Sonodyne-in use
	1	1-gallon poly	Butcher's bust-up	Full	Collect/segregate Acids/Bases
	3	55-gallon poly drum	Butcher's bust-up	1/2 full	Collect/segregate Acids/Bases
	1	Poly tank, ~60-gallon.	Unknown dark liquid	Possibly empty	Collect/segregate Acids/Bases
	2	Metal tank, ~20-ft tall, 2000-gallon	Acid split tank, brown liquid	~100 gallon, left	Identify unknowns
	1	Poly tank, 50-gallon	Coolant	Unknown	Collect/segregate Acids/Bases
E-125	1	Poly tank, 50-gallon	Sulfuric acid solution	1/8 full	1 tank=dirty coolant, 1 tank=clean coolant
	1	55-gallon poly drum	Caustic soda	3/4 full	Collect/segregate Acids/Bases
	1	Metal vessel, ~10L	"Liquid Nitrogen"	unknown	Collect/segregate Acids/Bases
	2	Cylinder	Compressed helium	Partially full	Collect/segregate cylinders to a central area.
	2	55-gallon metal drums	Beryllium waste	Unknown	Collect/segregate cylinders to a central area.
	128	55-gallon metal drums	Beryllium waste	Unknown	Hazardous/Toxic Metal - Collect/segregate
	38	Wooden boxes (approx. 54 ft. <sup>3</sup> )	Filter press waste	Full	Hazardous/Toxic Metal - Collect/segregate
	3	30-gallon metal drums	Beryllium waste	Full	Hazardous/Toxic Metal - Collect/segregate
	3	Cylinder	Methane (10%), Argon (90%)	Empty	Collect/segregate cylinders to a central area.
	3	Cylinder	Methane (10%), Argon (90%)	Empty	Collect/segregate cylinders to a central area.
Acid house	1	Cylinder, 100-gallon	Liquid Petroleum	Empty	Collect/segregate cylinders to a central area.
	1	Cylinder	Compressed oxygen	Full	Collect/segregate cylinders to a central area.
	~50	Cylinder	Fluorescent bulbs	Used	Trash compacting/handling area
	1	55-gallon metal drum	UN 2912, radioactive LSA	Unknown	Collect/segregate radioactive material
	1	55-gallon metal drum	"MEK"	Partially full	Collect/segregate flammables if not in flammable cabinet
	num.	Cardboard boxes	Glass and poly jars of material	Full	Identify unknowns
	2	Metal paint can	Paint	Full	Collect/segregate flammables if not in flammable cabinet
	2	Metal vats, ~10,000-gallon.	NA	Empty	Located in lower room of acid house
	4	30-gallon poly drum	Light-colored liquid	1/2-2/3 full	Custody seal by GZA/Identify unknowns
	~10	Cylinder	Argon	Unknown	Collect/segregate cylinders to a central area.
Tank house 1	3	Black garbage bags	Unknown	Full, very heavy	Possibly trash, sampling supplies, and/or used PPE
	3	5-gallon metal pail	Unknown	Full, very heavy	Marked as radioactive excepted package
	1	Cylinder	Oxygen	Unknown	Collect/segregate cylinders to a central area.
	5	Cylinders	Rare gases and oxygen mixture	Unknown	Collect/segregate cylinders to a central area.
	10	Cylinders	Nitrogen	Unknown	Collect/segregate cylinders to a central area.
	1	Cylinder	Nitrogen, helium, oxygen	Unknown	Collect/segregate cylinders to a central area.
	4	Cylinders	Helium	Unknown	Collect/segregate cylinders to a central area.
	1	Cylinder	75% Argon, 25% carbon dioxide	Unknown	Collect/segregate cylinders to a central area.
	4	Cylinders	Argon	Unknown	Collect/segregate cylinders to a central area.
	1	Cylinder	Carbon monoxide	Unknown	Collect/segregate cylinders to a central area.
Tank house 1	1	3-foot cylinder	Nitrogen	Unknown	Collect/segregate cylinders to a central area.
	1	3-foot cylinder	2% methane balance in air	Unknown	Collect/segregate cylinders to a central area.
	1	2-foot cylinder	Silicon tetrafluoride	Unknown	Collect/segregate cylinders to a central area.
	2	Cylinders	UN 1956 compressed gas	Unknown	Collect/segregate cylinders to a central area.

Building/Room No.	QTY.	Size/Type	Product Name/ Desc.	Volume/Type of Product	Comments
Tank house 2	28	Propane cylinder	Propane	Unknown	Collect/segregate cylinders to a central area.
	7	Cylinders	Acetylene	Unknown	Collect/segregate cylinders to a central area.
	1	5-gallon metal pail	2-Propanol	Empty	Collect/segregate flammables if not in flammable cabinet
	1	4L poly	Methyl alcohol	~1L	Flammable gas cabinet
	2	4L poly	Acetone	1/2 full	Flammable gas cabinet
	2	4L poly	Acetone	1/3 full	Flammable gas cabinet
	2	4L poly	Acetone	Full	Flammable gas cabinet
	1	4L poly	Unknown solid material	Partially full	Acetone label with handwritten note "Used once for F05", flammable gas cabinet
	1	4L poly	Unknown dark liquid	3/4 full	Acetone label, flammable gas cabinet
	1	4L poly	Methyl alcohol	~2 inches	Flammable gas cabinet
	3	4L poly	Acetone	Full	Flammable gas cabinet
	3	4L poly	Methanol	Full	Flammable gas cabinet
	8	5L poly		Full	Flammable gas cabinet