



Hercules Aerospace Company
Missiles, Ordnance & Space Group
Allegany Ballistics Laboratory
P.O. Box 210
Rocket Center, WV 26726-0210
(304) 726-5000

March 25, 1994

Nuclear Materials Licensing Section
U. S. Nuclear Regulatory Commission, Region II
101 Marietta Street, NW, Suite 2900
Atlanta, GA 30323-0199

Attention: Mr. Earl Wright

Dear Sir:

Request for Renewal of Materials License No. SUB-1440

Hercules Incorporated at Allegany Ballistics Laboratory currently is licensed to possess 300 kilograms of depleted uranium (DU) for use as shielding material for X-ray equipment and 2200 kilograms of bare metal DU components for assembly into projectiles. License SUB-1440 expires April 30, 1994. The attached license renewal application provides up-to-date information on ABL's current programs, and requests renewal at current authorized quantities.

The 105 mm projectile project conducted for the U. S. Army Armament Research Development and Engineering Command (ARDEC) (Dover, NJ) was ended without entering a low rate production phase. Design and development of a 120mm projectile was begun, however all projectile assembly activities were stopped in the spring of 1991. Subsequent DU activities involved only inventory, storage, and packaging for shipment. The last DU projectiles were shipped in November, 1993. At the present time ABL has no DU on plant associated with projectiles.

The 120mm projectile project is now in Phase III Development. This phase consists of approximately 78 units; [(8) in 1994, (34) in 1995, and (36) in 1996]. Receipt of approximately 8 DU projectiles is anticipated during 1994. At the completion of Phase III, follow-on effort is anticipated to consist of approximately 100 units per year for 3 years.

A license renewal fee of \$1,300.00 is enclosed.

If you have any questions concerning this request, please contact Mr. Clyde Hitt at 304-726-5553.

Sincerely,

J. F. Hixon
Vice President and General Manager

CRHitt:DULICAPL.394

Attachment

(6-93)
10 CFR 30, 32, 33
34, 35, 36, 39 and 40

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 9 HOURS. SUBMITTAL OF THE APPLICATION IS NECESSARY TO DETERMINE THAT THE APPLICANT IS QUALIFIED AND THAT ADEQUATE PROCEDURES EXIST TO PROTECT THE PUBLIC HEALTH AND SAFETY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0120), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19408-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION II
101 MARIETTA STREET, NW, SUITE 2900
ATLANTA, GA 30323-0199

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, IL 60137-5927

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 78011-8064

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

RADIOACTIVE MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION V
1450 MARIA LANE
WALNUT CREEK, CA 94596-5368

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

A. NEW LICENSE

B. AMENDMENT TO LICENSE NUMBER _____

C. RENEWAL OF LICENSE NUMBER SUB-1440

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code)

Hercules Incorporated
Allegany Ballistics Laboratory
P.O. Box 210
Rocket Center, WV 26726

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Allegany Ballistics Laboratory
West Virginia State Rt. 956 at the Potomac River
Rocket Center (Mineral County), WV

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Clyde R. Hitt, Jr.

TELEPHONE NUMBER
304/726-5553

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.	6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. 2
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.	8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.
9. FACILITIES AND EQUIPMENT.	10. RADIATION SAFETY PROGRAM.
11. WASTE MANAGEMENT.	12. LICENSEE FEES (See 10 CFR 170 and Section 170.31) FEE CATEGORY <u>2.C</u> AMOUNT ENCLOSED <u>\$1,300</u>
13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39 AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF. WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.	

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE: John F. Hixon, Vice-Pres. & General Manager

SIGNATURE: *[Signature]*

DATE: 3/25/94

FOR NRC USE ONLY

TYPE OF FEE <u>Ren</u>	FEE LOG <u>APR 2 II</u>	FEE CATEGORY <u>2B 2C</u>	AMOUNT RECEIVED <u>\$ 1300/1160</u>	CHECK NUMBER <u>06033408</u>	COMMENTS
APPROVED BY <i>[Signature]</i>	DATE <u>5/18/94</u>				

5. Radioactive Material

A. For X-ray head shielding.

- ✓ a. Element and Mass Number - Depleted Uranium 99.9% U238.
- b. Chemical and/or physical Form - Metallic Uranium (Cadmium Plated).
- c. Maximum Amount 300 kilograms.

B. Component for Projectile Assembly.

- a. Element and Mass Number - Depleted Uranium 99.8% U238.
- b. Chemical and/or Physical Form - Finished metal parts.
- c. Maximum Amount - 2200 kilograms.

6. Purposes for which material will be used

- A. For shielding in commercial X-ray equipment (One Varian Linatron 200 A and two Linatron 400's).
- B. For use in the assembly of military projectiles.

7. Individuals responsible for Radiation Safety Program and their training and experience.

Allegany Ballistics Laboratory has an established radiation safety program for all operations involving X-ray equipment and depleted uranium components. This program is overseen by the following persons.

David A. Hulburt - Safety/Environmental Manager

Mr. Hulburt has BS and MS degrees in Chemical Engineering and has over 16 years of industrial safety related experience. He served 2 years active duty with the US Army Chemical Corps where he received training in radiation effects and safety matters. During the past year and one-half he has been responsible for the administration of the Safety Program for the total facility.

Clyde R. Hitt, Jr. - Quality Assurance Engineer and Radiation Safety Engineer.

Mr. Hitt has a BSChE degree and 30 years experience in solid propellant rocket motor design development and inspection. During the past 8 years he has been responsible for the Radiation Safety program at ABL.

Randall N. Lancaster - X-ray Area Supervisor

Mr. Lancaster has a BA in Business Administration and 16 years experience in X-ray at

Hercules/ABL. He is a Level III Radiographer and has been supervisor for 12 years. He has helped oversee the ABL DU Radiation Safety program since its beginning in 1986.

Floyd Johnson - Quality Assurance Engineer and Radiation Safety

Mr. Johnson has BSME and AS Nuclear Engineering degrees and has 7 years experience in Quality Assurance Engineering. He is available to provide backup and support to the DU Radiation Safety program.

Supervision of the DU assembly operation will be by Paul K. Amtower, Lucian Herriott, Louis A. Bascelli, or David F. James (resumes below) with Technical support and Health Physics monitoring by David A. Hulburt, Clyde R. Hitt, Jr., Randall N. Lancaster, and Floyd Johnson. The assembly operation will be performed in a building dedicated to the DU storage, assembly and packaging operation.

Paul K. Amtower - Operations Division Manager

Mr. Amtower has a BS in education and has 28 years of industrial experience which includes Quality Control and Manufacturing supervisory experience.

He has served on the plant EPA committee and Hercules Aerospace Standards committee and has supervised all projectile assembly operations including DU assembly.

Lucian Herriott - Operations Superintendent

Mr. Herriott has a MSME in Mechanical Engineering and 13 years of industrial experience which includes engineering, program management and manufacturing supervisory experience.

Louis A Bascelli - Supervisor

Mr. Bascelli has 15 years of rocket motor manufacturing, equipment function and building design experience. He also has 13 years of manufacturing supervisory experience in mix/cast, chamber preparation and final assembly operations.

David F. James - Shift Supervisor

Mr. James has 15 years of manufacturing experience in which the last 6 years dealt directly with on-line handling of the DU components. He has extensive experience in final assembly operations dealing directly with these materials.

8. Training for individuals working in or frequenting restricted areas.
 - A. Training is provided X-ray operators in accordance with West Virginia and MIL-STD-410 requirements.
 - B. Individuals working with depleted uranium at Hercules/ABL receive instructions as required by Section 19.12 of Part 19 of Title 10 CFR. Those instructions are to ensure that all individuals working in or frequenting a restricted area are aware of:
 - 1) the presence and location of radioactive material and radiation levels within the restricted area,

- 2) the health problems associated with exposure to such radioactive material (Reference NRC Regulatory Guide 8.29),
- 3) the precautions or procedures to minimize exposure,
- 4) the purpose and functions of protective devices,
- 5) the applicable provisions of the Commission regulations and license and need for observing them,
- 6) the workers responsibility to report promptly to the licensee any condition which may lead to or cause a violation of the Commissions regulations, license, or unnecessary exposure to radiation,
- 7) the appropriate response to unusual occurrences which may involve exposure to radiation or radioactive material,
- 8) the radiation exposure report which workers may request pursuant to Section 19.13 of Part 19, Title 10 CFR.
- 9) female workers and those who may supervise or work with them are given specific instruction about prenatal exposure risks to the developing embryo and fetus (Reference NRC Regulatory Guide 8.13).

9. Facilities and Equipment

Allegany Ballistics Laboratory (ABL) is a Navy owned (NavSeaSysCom) facility operated by Hercules Incorporated under a lease-hold arrangement. The facility is physically located at Rocket Center, West Virginia in Mineral County on West Virginia State Route 956 at the Potomac River. The nearest West Virginia community of any size is Ridgeley, West Virginia (Zip Code 26753). ABL is primarily a research development and production facility for solid propellant rocket motors, for defense and space applications.

A. X-ray Facilities

ABL operates X-ray radiation machines remotely in shielded room facilities. ABL does not perform any radiographic operations using sealed source material.

Depleted uranium is used as shielding material in three Varian Associates linear accelerators, a Linatron 200A and two Linatron 400's. The amount of depleted uranium used in the Linatron 200A is approximately 40 pounds and that in the Linatron 400 is approximately 90 pounds. This material is obtained from natural uranium as a by-product of the gaseous diffusion process to extract U-235 for weapons production. The U-235 content has been reduced from the normal 0.7% to less than 0.2%. Therefore, the material is greater than 99.8% U-238. There is no information available as to the time of separation for the individual pieces used except that it could have been from 6 to 30 years ago. All pieces of depleted uranium used in the Linatron 200A and Linatron 400 are cadmium plated to prevent oxidation and are steel stamped with the impression, "Caution Radioactive Material - Depleted Uranium." This material presents no significant hazard and many licenses have been granted by both State and Federal agencies of the former AEC for this use. This DU for shielding could be licensed under a General License.

ABL has one L200A and two L400s on plant and in operation.

Allegany Ballistics Laboratory uses both film badges and dosimeters for X-ray personnel exposure monitoring along with other controls as follow:

1) X-Ray Radiation Monitoring

a. Film Badges

- (1) All operating personnel wear film badges sensitive to X-ray, Beta and Gamma radiation.
- (2) Film badge service is currently with Siemens, Health Physics Services, in Hoffman Estates, Illinois.
- (3) Film badges are sent to Siemens weekly. If high exposure occurs, notification is received by telegram, otherwise a routine report is mailed.
- (4) Film badge records are maintained by X-ray supervisor.

b. Pocket Dosimeter (0-200 milliroentgen range)

- (1) All operating personnel wear dosimeters.
- (2) All visitors wear dosimeters.
- (3) Dosimeter records are maintained by area supervisor.

c. Area Monitoring

- (1) Survey meters are used by supervision to monitor area on a periodic basis. Survey meters are Victoreen Model 450P or equivalent, and the meters are calibrated by the supplier on a routine schedule.

9. B. Manufacture of Projectiles Containing a DU Component.

During 1986-87, Hercules/ABL conducted a design and feasibility demonstration program of a projectile containing a DU component. In support of this program Hercules/ABL obtained NRC license authorization to handle solid DU components. A radiation controlled area was established and operated in accordance with NRC requirements.

Hercules/ABL was selected by U.S. Army, Armament Research Development & Engineering Command (ARDEC) (Dover, NJ) for the Full Scale Engineering Development (FSED) of a 105mm projectile and also the feasibility demonstration of a 120mm projectile. The 105 mm projectile project was ended without entering a low rate production phase. All project assembly activities(both 105 mm and 120 mm) were stopped in the spring of 1991. Subsequent DU activities involved only inventory, storage, and packaging for shipment. The last of the DU projectiles were shipped off plant in November, 1993. Therefore at the present time ABL has no DU (associated with projectiles) on plant. The radiation controlled area has been closed and released for other operations. A radiation controlled area will be established in another building prior to receiving any more DU. ABL is planning to receive a small quantity of DU later in 1994 after the release of funding by ARDEC. This DU will be part of Phase III Development of the 120 mm projectile

project. This phase consists of Approximately 78 units: [(8) in 1994, (34) in 1995, and (36) in 1996]. The EMD Phase is scheduled to commence at the completion of Phase III, and is anticipated to consist of quantities of 100 per year for 3 years.

The DU components required for all ABL efforts are machined to the required dimensions by a subcontractor at a facility that has been approved by the NRC for such a machining operation. Consequently, Hercules personnel only handle the DU configuration; no machining (drilling, sanding, etc.) of the DU is performed at the Hercules facility.

The DU component is received, surveyed, stored and then assembled in a radiation controlled area. The original ABL process assembled the DU component with inert rocket motor components. This assembly completely enclosed the DU component in such a manner as to assure external radiation was below 0.2 mR/Hr. The assembly was labeled with "Caution - Radioactive Material" and processed thru normal solid propellant manufacturing buildings and operations. These operations included bond line adhesive application, solid propellant casting and curing, X-ray inspection, and propellant igniter assembly installation. The propellant assembly with DU component was crated for shipment in the radiation controlled DU Receiving/Assembly Room.

The current design and process allows the propellant to be manufactured in the projectile first and then the DU component along with other components is assembled into the final assembly. If this assembly must be x-rayed or processed in another building, it is enclosed in such a manner as to assure external radiation is at or below 0.2 mR/Hr. The unit is labeled "Caution - Radioactive Material. The DU Assembly is crated for shipment in the radiation controlled area. This process greatly reduced the extent to which DU is moved about the plant.

The basic controls for processing an assembly containing DU outside of a controlled radiation area are; (1) Bare DU surface is not exposed outside of a radiation controlled area, and (2) Any DU assembly moved outside of a radiation controlled area shall be ; enclosed to assure bare DU is covered and external radiation levels are not above 0.2 mR/Hr, properly labeled and verified free of contamination.

Receiving and shipping radiation surveys are performed in accordance with NRC regulations. Area radiation and contamination surveys are performed on periodic basis. The length of time between surveys is determined by the level of work performed in the restricted area and the results of past surveys. Active radiation controlled areas are normally surveyed on a weekly basis. Previous surveys showed that normally occupied work areas were less than 2 mR/hr. and no contamination was found.

All individuals handling bare DU in the restricted area wear both Film Badges and TLD Rings. Visitors will not be required to wear monitoring devices. The maximum lifetime exposure on DU film badges is 60 mR. deep dose, and on TLD rings the maximum annual accumulated exposure is 80 mR.

The frequency of surveys and extent of personnel monitoring will be adjusted within NRC limits based on the level and type of work and the results of radiation surveys.

1) DU Radiation Monitoring Equipment

a. Film Badges and TLD Rings

- (1) All film badges and TLD rings are sensitive to X-ray, Beta and Gamma radiation.

- (2) Film badge and TLD ring service is currently with Siemens, Health Physics Services in Hoffman Estates, Illinois.
- (3) Film badges and TLD rings are sent to Siemens monthly. If high exposure occurs, notification is received by telegram, otherwise a routine report is mailed.
- (4) Film badge and TLD ring records are maintained by the x-ray supervisor for the Radiation Safety Engineer.

b. Radiation Detection Instruments

- (1) Geiger-Mueller (GM) Survey Meter
ABL uses Ludlum GM Meters, Model 3 with Pancake Probe No. 44-99 or equivalent. This instrument is very effective in detecting low level beta-gamma radiation and contamination. The instrument has been calibrated for the detection and measurement of depleted uranium dose rates. The probe window is 1.5 to 2 mg/cm² mica. The instrument is very sensitive and can measure dose rates as low as 0.1 mR/hr and is primarily used as a personnel frisker.
- (2) Alpha and Beta-Gamma Scaler

ABL uses Ludlum Scaler, Model 1000 with Alpha Detector Model No. 43-9 or 43-10 and Beta-Gamma Probe Model No. 44-9 or other equivalent equipment. This instrumentation is capable of detecting radioactive contamination by measuring either alpha or beta-gamma radiation. The instrumentation can detect contamination levels as little as 200 disintegrations per minute (dpm) and is primarily used to measure contamination on air and swipe samples. It also serves as a back-up for the GM Survey meter.
- (3) These DU radiation detection devices are calibrated at 12 month intervals by the supplier or another approved calibration laboratory.

2) Fire Fighting Equipment

a. Survivair - Model 9838 - Self-Contained Breathing Apparatus (SCBA)

Units will be used by firemen if amounts of depleted uranium are involved in a fire. These units are of the pressure demand type which is particularly effective in preventing the inhalation of radioactive material because there is always a slight pressure within the facepiece. These SCBA units being self-contained (provided with its own air supply) permit the necessary mobility for fire fighting.

10. Radiation Safety Program

Hercules/ABL manages an effective radiological safety program through the implementation of a management plan that involves facility design, operating procedures and self-examination inspections. Each operation involving potential radiological hazards is reviewed by the Plant Process Control Board (PPCB) which consists of the Plant Manager and Operating Division Managers. The PPCB ascertains that the recommended operation is in conformance with Hercules Aerospace Propulsion Standards.

Each operation is performed by a Unit Operating Procedure (UOP) which provides step by step direction. The UOP's are prepared by Process Engineering or cognizant operating supervision and approved by Engineering, Quality Control, Safety, and Operation Management. The responsibility for ensuring that these procedures are rigorously followed resides with Manufacturing Supervision and Management.

A Radiation Protection Committee is maintained at Hercules/ABL which as a minimum consists of the following membership:

- Safety Department Representative, Chairman
- Radiation Safety Engineer
- X-Ray Department Representative
- Medical Department Representative

It is the responsibility of the Radiation Protection Committee to ensure that the operations involving potential radiological hazards are controlled to the applicable standards and that the procedures in use are adequate to meet these standards. This Committee acts on all incidents or near incidents involving a radiological hazard to assess personnel or property harm or risk and to alter procedures to avoid recurrences.

The Radiation Safety Engineer is responsible for the Radiological Safety Program. He is to take action as necessary to ensure that the program provides for the health and safety of the employee and the public, and that it fully meets all regulatory requirements.

- A. X-Ray Facilities
Not applicable to this license
- B. Projectile Assembly Containing DU Components

Since ABL is a solid propellant manufacturer many manufacturing buildings are protected by high speed deluge or sprinkler systems. All facilities, equipment, and operating procedures are defined to minimize and control the risk of fire or explosion.

With DU as with propellant, in the event of a fire the building is evacuated and the ABL firemen do not approach any closer than the predetermined distance for that building. The stand off distance for buildings containing DU is currently 220 yards. Self-contained breathing apparatus will be worn by all personnel who enter the area closer than 220 yards of a building containing DU, until radiation surveys verify this is not required. These stand-off requirements are incorporated in the ABL Emergency Control Plan.

11. Waste Management

Hercules/ABL anticipates that little or no radioactive waste will be generated during our DU operations. Any radioactive waste that is generated will be placed in appropriate labeled containers and disposed of through an outside NRC licensed vendor.

Obsolete or rejected DU components will be returned to the component manufacturer for reuse or disposal, or will be disposed of through an outside NRC licensed vendor.