

Decommissioning Funding Plan for Davy Crockett M101 Depleted Uranium Impact Areas at M101 DU-affected Ranges

1. Site-specific cost estimates for decommissioning the Davy Crockett M101 depleted uranium (DU) impact areas at Pohakuloa Training Area and Schofield Barracks have been previously submitted. The NRC accepted those estimates.
2. A generic cost estimate for decommissioning a one-kilometer square Davy Crockett M101 DU impact area (Encl 1) was prepared following regulatory guidance provided in Section A.3.1 of NUREG-1757, *Consolidated Decommissioning Guidance*, Vol. 3, "Financial Assurance, Recordkeeping, and Timeliness," September 2003 (NUREG-1757, Vol. 3).
 - a. The generic cost estimate does not take credit for any salvage value that the Army might realize from the sale of potential assets (for example, recovered materials or decontaminated equipment) during or after decommissioning.
 - b. The generic cost estimate consists of a fixed cost (\$208,706), which is the same for all ranges, and an area-proportional cost (\$3,363,110), which depends on the area of each RCA.
3. The RCA-specific cost estimates, derived from the generic cost estimate, are provided in Encl 2.
4. The description of the means the Army will use to adjust the site-specific cost estimates and associated funding levels periodically over the life of the facilities follows regulatory guidance in Section A.3.2 of NUREG-1757, Vol. 3.
 - a. The Army will make adjustments to site-specific cost estimates for decommissioning that account for inflation, for other changes in the prices of goods and services (for example, disposal cost increases), for changes in facility conditions or operations, and for changes in expected decommissioning procedures.
 - b. The Army has no current plans to change facility conditions or operations at the radiation controlled areas (RCAs) in a way that would require a license amendment application.
5. The certification of financial assurance is in the form of a statement of intent (Encl 2). The statement of intent is the Army's commitment to request and obtain decommissioning funds from its funding body when necessary.
6. A facility description summary, prepared using the guidance in Section A.3.1.1 of NUREG-1757, Vol. 3, follows.

a. *NRC license number and type:* SUC-1593, source material (10 CFR 40)

b. *Types and quantities of materials authorized under the license listed above:* No more than 5600 kilograms (kg) of DU are on all of the ranges, combined. An estimate of the amount on each installation is provided in the amendment application (discussion for Item 5 Radioactive material). If an installation has more than one RCA, the specific amounts of DU in those RCAs are unknown.

c. *Description of how licensed materials are used:* possession only. The licensed material is residual DU remaining from Atomic Energy Commission authorized firing in the 1960s.

d. *Description of facility, including buildings, rooms, grounds, and description of where particular types of materials are used:* active firing and training ranges

(1) The locations of the RCAs at M101 DU-affected Ranges is provided elsewhere (attachment 2) in the amendment application.

(2) Ranges are open areas with no habitable structures but may contain training materials, such as targets and associated supporting materials. None of these structures and materials is likely to be DU-contaminated.

(3) Conventional unexploded ordnance (UXO) is present in the RCAs at all ranges. Because of the presence of UXO, ordnance and explosives safety staff support is required for activities within the RCAs, except for UXO-cleared areas.

(4) The UXO safety requirements significantly reduce radiological survey and remediation productivity. Portions of the RCAs are within “firing fans” of active ranges.

e. *Quantities of materials or waste accumulated before shipping or disposal:* generally none or no more than a few M101 rounds (less than 1 kg of DU).

(1) In accordance with license conditions, DU accumulates for waste shipping and disposal only when the Army detects it by happenstance and retrieves it.

(2) The Department of Defense (DOD) Executive Agent for Low-Level Radioactive Waste (LLRW) Disposal has primary responsibility for disposal of DOD LLRW. To support this, the Executive Agent conducts periodic waste removals from installations worldwide. If the Army collects any DU, the Army will secure and hold it for the next scheduled Executive Agent pick up. The Executive Agent will properly dispose of it in accordance with all applicable Federal and DOD regulations and with all disposal site conditions.

Enclosures

1. Generic cost estimate for decommissioning a M101 DU-affected range
2. Site-specific cost estimates for decommissioning M101 DU-affected ranges
3. Statement of intent

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Enclosure 1. Generic cost estimate for decommissioning a M101 DU-affected range

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Enclosure 2. Site-specific cost estimates for decommissioning M101 DU-affected ranges

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GARRISON	RADIATION CONTROLLED AREAS (RANGE/TARGET ZONES/IMPACT AREAS)	ESTIMATED AREA (km²)	ESTIMATED COST
Previously Submitted (estimate includes 25 percent contingency)			
Hawaii	Pohakuloa Training Area	8.9	\$66,864,608
Hawaii	Schofield Barracks	3.7	\$42,470,781
Generic (estimate includes 25 percent contingency)			
Generic 1 km ² fixed cost		1.0	\$260,883
Generic 1 km ² area proportional cost		1.0	\$4,203,888
Sum		1.0	\$4,464,770
Specific M101 DU Impact Areas [estimate includes 25 percent contingency]			
Fort Knox	Arms Knob	1.8	\$7,827,880
Fort Knox	O'Brein, Lawley and Garvin	1.9	\$8,248,269
Joint Base Lewis-McChord	Fort Lewis 52, 53, OP8 and OP9	3.5	\$14,974,489
Joint Base Lewis-McChord	Yakima Training Center 14, 17, and 20	3.0	\$12,872,545
Fort Riley	27A, 27B, and 29	2.0	\$8,668,658
Fort Riley	18A, B, and C and 27A and B	1.6	\$6,987,103
Fort Polk	33 & 34A	2.0	\$8,668,658
Fort Benning	Hook	1.0	\$4,464,770
Fort Benning	Patton	1.0	\$4,464,770
Fort Benning	Buchanan	1.0	\$4,464,770
Fort Benning	Coolidge	1.0	\$4,464,770
Fort Benning	Brann	1.0	\$4,464,770
Fort Benning	Z-4 (Lae Field)	1.0	\$4,464,770
Fort Benning	K-18	1.0	\$4,464,770
Fort Benning	K-15	1.0	\$4,464,770
Fort Benning	Burma Hill	0.073	\$567,624
Fort Campbell	OP2/OP3	1.0	\$4,464,770
Fort Bragg	OP-5	1.0	\$4,464,770
Fort Carson	141	1.0	\$4,464,770
Fort Carson	Titus and Sergeants Roads	2.8	\$12,031,768
Fort Carson	Battalion Field Training Area	1.0	\$4,464,770
Fort Gordon	E	1.0	\$4,464,770
Fort Hood	[no name]	1.0	\$4,464,770
Fort Hunter Liggett	C8	1.0	\$4,464,770
Fort Hunter Liggett	B11	1.0	\$4,464,770
Fort Hunter Liggett	B13	1.0	\$4,464,770
Fort Jackson	[no name]	1.0	\$4,464,770
Fort Sill	FP 182/West	1.0	\$4,464,770
Total for all ranges			\$275,013,010

Enclosure 3. Statement of intent

[To be prepared for Commanding General's signature in final version]

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