



# COMMONWEALTH of VIRGINIA

W. Tayloe Murphy, Jr.  
Secretary of Natural Resources

*DEPARTMENT OF ENVIRONMENTAL QUALITY*  
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Robert G. Burnley  
Director

(804) 698-4000  
1-800-592-5482

April 13, 2005

Mr. Thomas McLaughlin, Project Manager  
Materials De-commissioning Section  
Division of Waste Management and Environmental Protection  
Office of Nuclear Material Safety and Safeguards  
Nuclear Regulatory Commission  
Washington, D.C. 20555

RE: Draft Environmental Assessment, De-commissioning Plan for Building  
7304 at Fort Belvoir, Virginia (NRC Docket No. 030-36574)  
DEQ-05-067F

Dear Mr. McLaughlin:

The Commonwealth of Virginia has completed its review of the above-listed Draft Environmental Assessment ("Draft EA"). The Department of Environmental Quality ("DEQ") is responsible for coordinating Virginia's review of federal environmental documents and responding to appropriate federal officials on behalf of the Commonwealth. In addition, DEQ is the lead agency for Virginia's review of federal consistency determinations and certifications submitted pursuant to the Coastal Zone Management Act. The following agencies, regional planning district commission, and locality joined in this review:

Department of Environmental Quality  
Department of Conservation and Recreation  
Department of Health  
Department of Historic Resources  
Department of Mines, Minerals, and Energy  
Northern Virginia Regional Commission  
Fairfax County.

## Project Description

The Nuclear Regulatory Commission previously authorized the Army to use Building 7304 on Fort Belvoir for radiological waste storage in support of the Army's

research laboratory at Aberdeen Proving Ground, Maryland. The Army ceased using this building in 2003 and requested termination of its NRC license. The Army has conducted characterization surveys of the building and soil beneath it, and discovered contamination from tritium and cesium-137. These will require demolition and removal of the building and some of the soil, pursuant to a license amendment; the materials and soil would be shipped to an authorized disposal facility (EA, pages 1-2).

The EA indicates that the no-action alternative would be unacceptable because it would violate NRC rules requiring licensees to de-commission their facilities when licensed activities cease and to request termination of their radioactive materials license (EA, page 3).

### Environmental Impacts and Mitigation

*1. Natural Heritage Resources.* According to the Draft EA, the U.S. Fish and Wildlife Service has indicated that the bald eagle is the only known federally listed species at Fort Belvoir, and that the de-commissioning activities at Building 7304 would not affect the bald eagle (page 3, "Agencies and Persons Contacted" heading).

The Department of Conservation and Recreation (DCR) strives to preserve and protect the environment of the Commonwealth and advocate the wise use of its scenic, cultural, recreation, and natural heritage resources. "Natural heritage resources" are defined as the habitat of endangered or threatened plant and animal species, unique or exemplary natural communities, significant geologic formations, and similar features of scientific interest. Since the bald eagle can be found on Fort Belvoir, DCR recommends that the Army coordinate the project with the Department of Game and Inland Fisheries, and contact DCR's Division of Natural Heritage for further information. See "Regulatory and Coordination Needs," item 5, below.

*2. Air Quality.* DEQ's Division of Air Program Coordination indicates that Fort Belvoir is in an ozone non-attainment area, which means that the Army should take all reasonable precautions to limit emissions of volatile organic compounds and oxides of nitrogen, which are precursors of atmospheric ozone, in the de-commissioning activities.

*(a) Fugitive Dust Control.* During demolition and related clean-up activities, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;

- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

*(b) Open Burning Requirements.* In addition, if project activities include the burning of any material, this activity must meet the requirements of the Regulations for open burning (9 VAC 5-40-5600 et seq.), and it may require a permit (see “Regulatory and Coordination Needs,” item 2, below). The Regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning. The University should contact appropriate local officials to determine what local requirements, if any, exist. The model ordinance includes, but is not limited to, the following provisions:

- All reasonable effort shall be made to minimize the amount of material burned, with the number and size of the debris piles;
- The material to be burned shall consist of brush, stumps and similar debris waste and clean-burning demolition material;
- The burning shall be at least 500 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted;
- The burning shall be conducted at the greatest distance practicable from highways and air fields;
- The burning shall be attended at all times and conducted to ensure the best possible combustion with a minimum of smoke being produced;
- The burning shall not be allowed to smolder beyond the minimum period of time necessary for the destruction of the materials; and
- The burning shall be conducted only when the prevailing winds are away from any city, town or built-up area.

*3. Solid and Hazardous Waste Management.* The EA did not address solid waste or hazardous waste issues or sites; nor did it include a search of waste-related data bases. However, the EA indicates that radiological contamination has been identified at the site in question; see “Project Description,” above and “Regulatory and Coordination Needs,” item 2(a), below.

*(a) Waste Division Findings.* DEQ’s Waste Division staff performed a cursory review of its data files, and found the following information about Fort Belvoir in general or the site in particular:

- The site is listed under DEQ’s Federal Facilities Installation Restoration Program (identification number VA5210020082);

- The site is listed as a Formerly Used Defense Site (identification number VA9799F1717).
- Fort Belvoir is listed as a treatment/storage/disposal facility and a large-quantity generator of hazardous waste under the Resource Conservation and Recovery Act (RCRA) (identification number VA7213720082).

In addition, there are four solid waste management entities regulated by DEQ at Fort Belvoir. All of these are located near the junction of U.S. Route 1 and State Route 611:

- A closed Construction and Demolition Debris Landfill (SWP 490);
- Two regulated medical waste steam sterilizers (PBR 164 and PBR 248); and
- A closed Sanitary Landfill (SWP 308).

*(b) RCRA Corrective Action.* Building 7304 could not be conclusively located from the information provided with the EA. There are two facilities associated with the Fort: the Army Engineering Center and the Army Engineering Proving Ground. It appears, from the information, that Building 7304 is near Buildings 7305 and 7307 in the Engineering Center, which means that it is in proximity to buildings which are being classified as Solid Waste Management Units subject to the remediation requirements of the Resource Conservation and Recovery Act (RCRA) Corrective Action program (see 40 CFR section 264.101).

Fort Belvoir is required to implement RCRA corrective action at the main base through the permit issued by DEQ in 2004 under the authority of RCRA sub-sections 3004(u) and (v). A draft Consent Order was issued by the Environmental Protection Agency (EPA) for the Engineering Proving Ground under the authority of RCRA section 3013 on March 7, 2005. EPA is the lead agency on both facilities. DEQ's Office of Waste Permitting recommends that before initiating any land-disturbing activities, the Army (or NRC, on the Army's behalf) contact EPA to discuss RCRA Corrective Action obligations. See "Regulatory and Coordination Needs," item 2(b), below.

*(c) Additional Information for NRC.* The following web sites may prove helpful in locating additional information for the identification numbers given in item 4(a), above:

- [http://www.epa.gov/echo/search\\_by\\_permit.html](http://www.epa.gov/echo/search_by_permit.html) (a RCRA data base)
- <http://www.deq.virginia.gov/waste/waste.html> (the DEQ solid waste data base).

*(d) Pollution Prevention.* DEQ's Waste Division encourages NRC and the Army to implement pollution prevention principles, including the reduction of wastes at the

source, re-use of materials where appropriate, and recycling of materials where that is appropriate.

*4. Erosion and Sediment Control; Stormwater Management.* Federal agencies and their authorized agents conducting regulated land-disturbing activities must comply with the Virginia Erosion and Sediment Control Law (*Virginia Code* section 10.1-560) and the Erosion and Sediment Control Regulations (4 VAC 50-30-30, 4 VAC 50-30-100) if the activities would equal or exceed 2,500 square feet in Chesapeake Bay Preservation Areas (all of Fairfax County has been so designated). Activities covered by this requirement include, but are not limited to, the following:

- clearing and grading
- installation of staging areas
- parking lots
- roads
- buildings
- utilities
- soil/dredge spoil areas
- related land conversion.

The Army should prepare and implement Erosion and Sediment Control Plans to ensure compliance with state law. The Army is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspections, prompt action against non-compliance, and/or other mechanisms consistent with Army policy.

Activities similar to those listed above which involve land disturbance of one acre or more are subject to the Stormwater Management Law (*Virginia Code* section 10.1-603.5). It does not appear likely that the Stormwater Management Law will apply to this project because of the size of the area to be remediated, including the building itself (500 square feet, according to the Draft EA, page 1, "Introduction" heading). See "Regulatory and Coordination Needs," item 8, below.

*5. Radioactivity Analysis in Draft EA.* The Site Health and Safety Plan, provided on e-mail to accompany the Draft EA, does not address the radioisotopes mentioned in the Draft EA, specifically tritium (H-3) and cesium-137 (Cs-137). Similarly, the Draft EA does not address the radioisotopes mentioned in the Plan. The Draft EA does not provide an estimate of total curie quantity of tritium or cesium-137 released into the ground, or a maximum concentration of these isotopes in the soil. According to the Department of Health's Radiological Health Program, tritium is hydrophilic, and its distribution in the soil will be greatly influenced by local hydrology. Factors such as quantity released into the soil and time elapsed after deposition will determine the

significance of groundwater contamination, if any, and the migration of the isotope in the soil.

The significance of released tritium depends on its radioactivity. If the radioactivity is in the tens of curies, there is not much cause for concern; if it is in the thousands, the concern would be greater. The total amount of soil to be removed is also informative as to any safety concerns. The Army or its contractor should address the appropriate isotopes, tritium and cesium-137, in the Health and Safety Plan. In any case, the "authorized disposal facility" (Draft EA, page 1, "Summary" heading) is likely to be one of several that are located in distant states (Ellis/Foldesi, 4/6/05, 4/7/05).

6. *Chesapeake Bay Preservation Areas.* The Department of Conservation and Recreation's Division of Chesapeake Bay Local Assistance had no comments on this project. As mentioned above (item 4), all of Fairfax County has been designated as a Chesapeake Bay Preservation Area.

7. *Water Quality.* According to the Draft EA, the de-commissioning activity is not expected to generate any liquid effluents, in part because all radiological material has been removed from the building (pages 2-3, "Environmental Impacts..." heading). DEQ's Northern Virginia Regional Office had no comments on the project. See also item 5, above.

8. *Local and Regional Comments.* Fairfax County indicates that although "no radiation exposure to any member of the public is expected" (EA, page 3, "Conclusions and Finding of No Significant Impact" heading), it is not clear to what extent long-term public access restrictions to the site would be needed to avoid public exposure to radiation in light of the "Derived Concentration Guidance Limits" that will apply to the site under the license (EA, page 2, "The Proposed Action" heading). Similarly, given the mapping provided, the location of Building 7304 is not precisely delineated.

Fairfax County's Department of Planning and Zoning recommends that the Army and NRC coordinate with other County departments. See "Regulatory and Coordination Needs," item 7, below.

The Northern Virginia Regional Commission had no comments on the project.

#### Regulatory and Coordination Needs

1. *Federal Consistency.* Pursuant to the Coastal Zone Management Act of 1972, as amended, the NRC or the Army is required to determine the consistency of its activities affecting Virginia's coastal resources or coastal uses with the Virginia Coastal Resources Management Program (VCP) (see section 307(c)(1) of the Act and the Federal

Consistency Regulations at 15 CFR Part 930, sub-part C, section 930.34). This involves an analysis of the activities in light of the Enforceable Policies of the VCP (first enclosure), and submission of a consistency determination reflecting that analysis and committing the agency to comply with the Enforceable Policies. In addition, we invite your attention to the Advisory Policies of the VCP (second enclosure). The federal consistency determination may be provided as part of the documentation concluding the NEPA process, or independently, depending on your agency's preference. Section 930.39 gives content requirements for the consistency determination.

Based on our review of the document and the comments from reviewing agencies, it appears that a negative determination may be appropriate for this undertaking (see the Federal Consistency Regulations, section 930.35). If you need clarification of these comments, please contact Charles Ellis at (804) 698-4488.

2. *Air Quality Regulation.* If open burning is contemplated, DEQ's Northern Virginia Regional Office (Mr. Terry Darton, telephone (703) 583-3845) should be contacted to determine permitting requirements and obtain application forms.

3. *Solid and Hazardous Waste Management.*

(a) *Hazardous Waste.* Any soil suspected of contamination, or hazardous wastes that are generated by the project, must be tested and disposed of in accordance with applicable federal and state laws and regulations. The applicable laws and regulations include, but are not limited to, the Virginia Waste Management Act (*Virginia Code* sections 10.1-1400 *et seq.*), the Virginia Hazardous Waste Management Regulations (9 VAC 20-60), and the Virginia Solid Waste Management Regulations (9 VAC 20-80). (See attached Waste Division memo, Brockman to Ellis, dated March 31, 2005, page 2 for additional citations.)

(b) *RCRA Corrective Action.* As mentioned above ("Environmental Impacts and Mitigation," item 3(b)), the Army should contact EPA's Region III Office (Wanda Martinez, project manager, telephone (215) 814-3434) to discuss RCRA Corrective Action obligations before disturbing any land at the site of Building 7304.

(c) *Lead-based Paint.* Building 7304 should be checked for lead-based paint before its demolition. If any is found, the Army must follow the provision in the Virginia Hazardous Waste Management Regulations relating to lead-based paint (9 VAC 20-60-261) as well as other requirements of the Virginia Waste Management Act.

(d) *Asbestos Abatement.* As with lead-based paint (above), the building should be checked for asbestos-containing materials before its demolition. If asbestos-containing materials are found, the Army must follow the provisions in the Virginia Solid Waste

Management Regulations relating to asbestos abatement (9 VAC 20-80-640) as well as other requirements of the Virginia Waste Management Act.

4. *Bald Eagle Coordination and Information.* The Department of Conservation and Recreation's Division of Natural Heritage (Rene' Hypes, telephone (804) 371-2708) may be contacted for additional information concerning bald eagle habitat at Fort Belvoir. In addition, the Department of Conservation and Recreation recommends that the Army contact the Department of Game and Inland Fisheries (Andy Zadnik, telephone (804) 367-2733) to identify any concerns of that Department as the Army carries out activities at Building 7304.

5. *Radioactivity.* Questions and any discussion on the radioactivity of the soil and in the remediation activity may be directed to the Department of Health's Radiological Health Program (Mr. Leslie Foldesi, telephone (804) 864-8151).

6. *Historic Structures and Archaeological Resources.* To ensure compliance with the National Historic Preservation Act, this activity must be coordinated with the Department of Historic Resources (Marc Holma, telephone (804) 367-2323, extension 114) pursuant to section 106 of the Act.

7. *Fairfax County Coordination.* Fairfax County recommends that the Army, and NRC as appropriate, coordinate with the following County agencies in regard to the proposed de-commissioning of Building 7304, and with regard to any other de-commissioning of structures on the Fort:

- Hazardous Materials and Investigative Services Section, Fire and Rescue Department (telephone (703) 246-4386); and
- Division of Environmental Health (telephone (703) 246-2205).

8. *Erosion and Sediment Control; Stormwater Management.* If the total land disturbance from this project will equal or exceed 2,500 square feet, the Army must comply with the Virginia Erosion and Sediment Control Law (*Virginia Code* sections 10.1-560, 10.1-564), and the Virginia Erosion and Sediment Control Regulations (4 VAC 50-30-30, 4 VAC 50-30-100). Questions may be directed to the Department of Conservation and Recreation's Potomac Watershed Office (Gary Switzer, telephone (540) 347-6420).

Mr. Thomas Laughlin  
Page 9

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Ellie L. Irons". The signature is fluid and cursive, with the first name "Ellie" being more prominent than the last name "Irons".

Ellie L. Irons  
Program Manager  
Office of Environmental Impact Review

Enclosures

cc: C. Scott Crafton, DCR  
Alan D. Weber, VDH  
Leslie P. Foldesi, VDH  
Kotur S. Narasimhan, DEQ-Air  
Allen R. Brockman, DEQ-Waste  
John D. Bowden, DEQ-NVRO  
Marc E. Holma, DHR  
Gerald P. Wilkes, DMME  
Alice R.T. Baird, DCR-DCBLA  
G. Mark Gibb, NVRC  
Fred R. Selden, Fairfax County

**Ellis, Charles**

---

**From:** Jerry Cassidy [Jerry.Cassidy@dcr.virginia.gov]  
**Sent:** Wednesday, April 06, 2005 2:44 PM  
**To:** Ellis, Charles  
**Cc:** Scott Crafton; Synthia Waymack  
**Subject:** DEQ# 05-067Fort Belvoir Decommissioning Plan for Building 7304at Fort Belvoir

Charlie,

DCR has performed a cursory review of the submitted information on the "Decommission Plan for Building 7304,at Fort Belvoir"

Based on the submitted information, the U. S. Fish and Wildlife Service has documented a bald eagle near the project site. Due to the legal status of this species we recommend coordination of this project with the Virginia Department of Game and Inland Fisheries regarding any concerns they may. We recommend that Fort Belvoir contact our Division of Natural Heritage (Rene' Hypes, 804.371.2708) for additional information on rare, threatened and endangered species that may be documented in the project area.

Be advised that federal agencies and their authorized agents conducting regulated land disturbing activities on private and public lands in the state must comply with the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R), Virginia Stormwater Management Law and Regulations (VSWML&R), and other applicable federal nonpoint source pollution mandates (e.g, Clean Water Act-Section 313, Federal Consistency under the Coastal Zone Management Act).

Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, soil/dredge spoil areas, or related land conversion activities that disturb 2,500 square feet or more would be regulated by VESCL&R and those that disturb one acre or greater would be covered by VSWML&R. Accordingly, the sponsoring federal agency should prepare and implement erosion and sediment control (ESC) and stormwater management (SWM) plans to ensure compliance with state law. The sponsoring federal agency is ultimately responsible for achieving project compliance through oversight of on site contractors, regular field inspection, prompt action against non-compliant sites, and/or other mechanisms consistent with agency policy.

Finally, comments, if any, on this project from DCR's Division of Chesapeake Bay Local Assistance will be sent directly to you.

Thank you for the opportunity to offer comments.

Synthia Waymack  
Department of Conservation & Recreation  
203 Governor Street, Suite 326  
Richmond, Virginia 23219  
804.786.4379 telephone  
804.371.7899 fax

4/6/2005



# COMMONWEALTH of VIRGINIA

TTY 7-1-1 OR  
1-800-828-1120

*Department of Health*  
RADIOLOGICAL HEALTH PROGRAM  
109 GOVERNOR STREET, ROOM 730  
P. O. BOX 2448  
RICHMOND, VA 23218

PHONE: (804) 864-8150  
FAX: (804) 864-5155

April 5, 2005

Charlie Ellis  
Department of Environmental Quality  
P.O. Box 10009  
Richmond, VA 23240

RE: Nuclear Regulatory Commission's Draft Environmental Assessment (EA) on the  
Decommissioning Plan for Building #7304 at Fort Belvoir

Dear Mr. Ellis:

I reviewed the materials provided regarding the Decommissioning Plan for Building #7304 at Fort Belvoir and have the following comments:

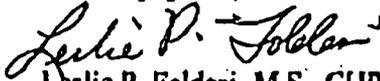
The Site Health and Safety Plan does not address the radioisotopes mentioned in the EA, specifically tritium (H-3) and Cesium-137 (Cs-137). The ones mentioned in the Plan are not mentioned in the EA.

The EA does not provide an estimate of total curie quantity of tritium and Cs-137 released into the ground, or maximum concentration of these isotopes in the soil.

Tritium is hydrophilic and its distribution in the soil will be greatly influenced by the local hydrology. Factors such as quantity released into the ground, and time elapsed after deposition, will determine the significance of ground water contamination, if any, and migration of the isotope in the soil.

Thank you for the opportunity to comment on this EA.

Sincerely yours,

  
Leslie P. Foldesi, M.S., CHP  
Director, Radiological Health

**VDH** VIRGINIA  
DEPARTMENT  
OF HEALTH  
*Protecting You and Your Environment*  
[www.vdh.state.va.us](http://www.vdh.state.va.us)



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DEQ-050 of Environmental  
March Review

MAR 30 2005

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## MEMORANDUM

**TO:** Charles H. Ellis, III, Environmental Program Planner

**FROM:** *ARB* Allen Brockman, Waste Division Environmental Review Coordinator

**DATE:** March 31, 2005

**COPIES:** Sanjay Thirunagari, Waste Division Environmental Review Manager, Durwood Willis, Leslie Romanchik, file

**SUBJECT:** Environmental Assessment  
DOD/Army—Ft. Belvoir, Decommissioning Plan for Building 7304, DEQ Project #05-067F

The Waste Division has completed its review of the Environmental Assessment report for the plan for decommissioning building 7304 at Ft. Belvoir, Virginia. We have the following comments concerning the waste issues associated with this project:

Neither solid waste nor hazardous waste issues and sites were addressed in the report. Nor did the report include a search of waste-related data bases. The Waste Division staff performed a cursory review of its data files and determined that the facility is a site under DEQ's Federal Facilities Installation Restoration Program (VA5210020082) and a Formerly Used Defense Site (VA9799F1717). There are four solid waste management entities regulated by DEQ at Ft. Belvoir: a closed Construction and Demolition Debris Landfill (SWP 490), two regulated medical waste steam sterilizers (PBR 164 and PBR 248), and a closed Sanitary Landfill (SWP 308)—all listed as located near the junction of routes 1 and 611. Finally, Ft. Belvoir is listed as a treatment/storage/disposal facility and a large quantity generator of RCRA hazardous waste (VA7213720082). The following websites may prove helpful in locating additional information for these identification numbers: [http://www.epa.gov/enviro/html/rcris/rcris\\_query\\_java.html](http://www.epa.gov/enviro/html/rcris/rcris_query_java.html) (CERCLA), [http://www.epa.gov/echo/search\\_by\\_permit.html](http://www.epa.gov/echo/search_by_permit.html) (RCRA), and <http://www.deq.virginia.gov/waste/waste.html> (DEQ solid waste database).

Durwood Willis of DEQ's Federal Facilities Program has been contacted for his review of this assessment and will reply in a separate memo, if he identifies any additional issues. In addition, Leslie Romanchik of the Hazardous Waste Corrective Action Program was contacted for her review of this assessment, and her comments are in the attached memo (March 24, 2005).

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Radiological contamination has been identified at the site. Any soil that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-80); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal laws and regulations are: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous materials, 49 CFR Parts 107.

Also, any structures to be demolished or renovated should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to those activities. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, State regulations 9VAC 20-80-640 for ACM and 9VAC 20-60-261 for LBP must be followed.

Please note that DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

If you have any questions or need further information, please contact Allen Brockman at (804) 698-4468.



Department of Environmental Quality  
Waste Division  
Office of Waste Permitting

TO: Allen Brockman  
Office of Waste Programs

FROM: Leslie A. Romanchik *LAR*  
Director, Office of Waste Permitting

COPY: Sanjay Thirunagari  
Dan Gwinner  
Maria Williams  
Richard Doucette, NRO

DATE: March 24, 2005

SUBJ: HW Program Environmental Assessment Review Comments  
Fort Belvoir NRC License Amendment  
Docket NO. 030-36574  
EPA ID numbers: VA7123720082, VA1210000906

The Office of Waste Permitting has reviewed the attached *U.S. Nuclear Regulatory Commission Docket NO. 030-36574 Environmental Assessment Related to Issuance of a License Amendment of US NRC Material License No. 19-10306-02*, dated March 4, 2005, as you requested. The document was prepared in support of Fort Belvoir's May 17, 2004 request to the NRC to amend its license to allow the dismantling of Building 7304 (known as Building 304 prior to 1992). According to the March 2005 document, an NRC approved decommissioning plan or a specific license amendment is required prior to performing building demolition, soil remediation and final status surveys. The EA states that the Army has prepared a decommissioning plan dated May 24, 2004, in support of the license amendment and reference is made to it in the document provided for review; however, the plan itself was not attached or included. Without reviewing that plan, specific comments on the proposed soil removal and/or remediation are not possible.

A map identifying the location of the building was not provided. It should be noted that there are two facilities associated with Fort Belvoir (the US Army Engineering Center Fort Belvoir and the US Army Engineering Proving Ground) and it is not possible to conclusively determine where the Building is located from the information provided. Therefore, information from both locations has been reviewed. Without a map, this building can only be tentatively identified as located near Buildings 305 and 307 (renumbered 7305 and 7307) on the Engineering Center. This places building 7304 in close proximity to other buildings which are being classified as Solid Waste Management Units subject to the remediation requirements of the RCRA Corrective Action (CA) program (40 CR 264.101).

The facility is required to implement RCRA Corrective Action at the main base through the permit issued by DEQ in 2004 under the authority of RCRA §§ 3004 (u) and (v). A draft Consent Order was issued by EPA for the EPG under the authority of RCRA § 3013 on March 7, 2005. EPA is the lead agency on both facilities. The Office of Waste Permitting recommends the facility contact Ms. Wanda Martinez, the EPA Project Manager, to discuss the RCRA CA obligations at the site prior to initiating any land disturbing activities. She can be reached at (215) 814-3434.

Attachment

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR PROGRAM COORDINATION

ENVIRONMENTAL REVIEW COMMENTS APPLICABLE TO AIR QUALITY

TO: Charles H. Ellis III

DEQ - OEIA PROJECT NUMBER: 05 -067F

PROJECT TYPE:  STATE EA / EIR / FONSI  FEDERAL EA / EIS  SCC

X CONSISTENCY DETERMINATION/CERTIFICATION

PROJECT TITLE: DECOMMISSIONING PLAN FOR BUILDING 7304 AT FORT BELVOIR

PROJECT SPONSOR: NUCLEAR REGULATORY COMMISSION

PROJECT LOCATION:  X OZONE NON ATTAINMENT AREA

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MAR 18 2005

DEQ-Office of Environmental  
Impact Review

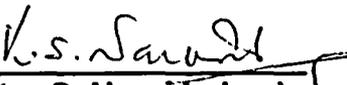
REGULATORY REQUIREMENTS MAY BE APPLICABLE TO:  X DEMOLITION  OPERATION

STATE AIR POLLUTION CONTROL BOARD REGULATIONS THAT MAY APPLY:

1.  9 VAC 5-40-5200 C & 9 VAC 5-40-5220 E – STAGE I
2.  9 VAC 5-40-5200 C & 9 VAC 5-40-5220 F – STAGE II Vapor Recovery
3.  9 VAC 5-40-5490 et seq. – Asphalt Paving operations
4.  X 9 VAC 5-40-5600 et seq. – Open Burning
5.  X 9 VAC 5-50-60 et seq. Fugitive Dust Emissions
6.  9 VAC 5-50-130 et seq. - Odorous Emissions; Applicable to \_\_\_\_\_
7.  9 VAC 5-50-160 et seq. – Standards of Performance for Toxic Pollutants
8.  9 VAC 5-50-400 Subpart \_\_\_\_\_, Standards of Performance for New Stationary Sources, designates standards of performance for the \_\_\_\_\_
9.  9 VAC 5-80-10 et seq. of the regulations – Permits for Stationary Sources
10.  9 VAC 5-80-1700 et seq. Of the regulations – Major or Modified Sources located in PSD areas. This rule may be applicable to the \_\_\_\_\_
11.  9 VAC 5-80-2000 et seq. of the regulations – New and modified sources located in non-attainment areas
12.  9 VAC 5-80-800 et seq. Of the regulations – Operating Permits and exemptions. This rule may be applicable to \_\_\_\_\_

COMMENTS SPECIFIC TO THE PROJECT:

Being in an area of ozone non-attainment, all precautions are necessary to restrict the emissions of volatile organic compounds (VOC) and oxides of nitrogen (NOx) during demolition and waste disposal.

  
(Kotur S. Narasimhan)  
Office of Air Data Analysis

DATE: March 18, 2005

**Ellis, Charles**

---

**From:** Bowden, John  
**Sent:** Monday, March 21, 2005 2:55 PM  
**To:** Ellis, Charles  
**Subject:** EA #05-067F

NVRO comments regarding Decommissioning Plan for Building 7304 at Fort Belvoir sponsored by the Nuclear Regulatory Commission are as follows:

There are no environmental impact statements or declarations included in the draft EA regarding programs and/or actions regulated by NVRO-DEQ, therefore NVRO is unable to provide any comments on this matter.

**John D. Bowden**  
**Deputy Regional Director**  
**Department of Environmental Quality**  
**Northern Virginia Regional Office**  
**(703) 583-3880**  
**[jdbowden@deq.virginia.gov](mailto:jdbowden@deq.virginia.gov)**

If you cannot meet the deadline, please notify CHARLIE ELLIS at 804/698-4488 prior to the date given. Arrangements will be made to extend the date for your review if possible. An agency will not be considered to have reviewed a document if no comments are received (or contact is made) within the period specified.

REVIEW INSTRUCTIONS:

- A. Please review the document carefully. If the proposal has been reviewed earlier (i.e. if the document is a federal Final EIS or a state supplement), please consider whether your earlier comments have been adequately addressed.
- B. Prepare your agency's comments in a form which would be acceptable for responding directly to a project proponent agency.
- C. Use your agency stationery or the space below for your comments. IF YOU USE THE SPACE BELOW, THE FORM MUST BE SIGNED AND DATED.

Please return your comments to:

MR. CHARLES H. ELLIS III  
 DEPARTMENT OF ENVIRONMENTAL QUALITY  
 OFFICE OF ENVIRONMENTAL IMPACT REVIEW  
 629 EAST MAIN STREET, SIXTH FLOOR  
 RICHMOND, VA 23219  
 FAX #804/698-4319

*Charles H. Ellis III*  
 \_\_\_\_\_  
 CHARLES H. ELLIS III  
 ENVIRONMENTAL PROGRAM PLANNER

COMMENTS

Please remind the applicant that this undertaking must be coordinated with DHR pursuant to Section 106 of the National Historic Preservation Act.

(signed) *John Holman* (date) 6 April 05  
 (title) Architectural Historian  
 (agency) DHR

PROJECT # 05-067F

8/98

DHR *... D & ...*

If you cannot meet the deadline, please notify CHARLIE ELLIS at 804/698-4488 prior to the date given. Arrangements will be made to extend the date for your review if possible. An agency will not be considered to have reviewed a document if no comments are received (or contact is made) within the period specified.

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FAX #804/698-4319

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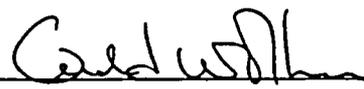
MAR 23 2005

DEQ-Office of Environmental  
Impact Review

  
CHARLES H. ELLIS III  
ENVIRONMENTAL PROGRAM PLANNER

COMMENTS

NO COMMENTS.

(signed)  (date) 3/21/05  
(title) GEOLOGIST  
(agency) DMME

PROJECT # 05-067F

8/98

**Ellis, Charles**

---

**From:** Alice Baird [Alice.Baird@dcr.virginia.gov]  
**Sent:** Wednesday, April 06, 2005 11:32 AM  
**To:** Ellis, Charles  
**Subject:** NRC decommissioning of Building 7304

Charlie,

We have no comments on this project.  
Alli

Alli Baird  
Department of Conservation and Recreation  
Division of Chesapeake Bay Local Assistance  
James Monroe Building  
101 North 14th Street, 17th Floor  
Richmond, Virginia 23219  
Phone: (804) 225-2307  
Fax: (804) 225-3447



**Northern Virginia Regional Commission**

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DEQ-Office of Environmental  
Impact Review

April 7, 2005

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(as of January 27, 2005)

Mr. Charles H. Ellis III  
Department of Environmental Quality  
Office of Environmental Impact Review  
629 East Main Street, Sixth Floor  
Richmond, VA 23219

Re: Federal Project 05-067F

The Northern Virginia Regional Commission staff has reviewed the application described above and has no comment on the proposal.

Thank you for this opportunity to participate in the intergovernmental review process.

Sincerely,

Katherine K. Mull  
Senior Environmental Planner

Project: Decommissioning Bldg. 7304 Ft. Belvoir  
Sponsor: Nuclear Regulatory Commission



# FAIRFAX COUNTY

## DEPARTMENT OF PLANNING AND ZONING

Planning Division  
12055 Government Center Parkway, Suite 730  
Fairfax, Virginia 22035-5505

(703) 324-1210

Fax (703) 324-3056

V I R G I N I A

Mr. Charles H. Ellis III  
Virginia Department of Environmental Quality  
Office of Environmental Impact Review  
Post Office Box 10009  
Richmond, VA 23240-0009

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**APR 04 2005**

DEQ-Office of Environmental  
Impact Review

Dear Mr. Ellis:

Thank you for forwarding your request for comments regarding the proposed decommissioning plan for Building 7304 at Fort Belvoir. As noted in the brief Environmental Assessment (EA) dated March 4, 2005, the building in question was used as a radiological waste storage area in support of a research laboratory. The EA also notes that other buildings at Fort Belvoir within which radiological materials were used have been successfully decommissioned, although we don't recall seeing EAs for those activities and question whether/why this particular proposal is being treated differently.

The EA notes that the Army has conducted "characterization surveys" of Building 7304 and has identified soil contamination by tritium and Cesium-137. It is also noted that demolition and removal of the building and some of the underlying soil will be required, with removed materials to be shipped to an authorized disposal facility. The EA does not provide any maps or descriptions of where Building 7304 is located but indicates that, in all, only a limited area (approximately 500 square feet) is in need of remediation. Based on the information provided in the EA, it does not appear that the Army is proposing to remove all radioactive materials from soils; rather, "Derived Concentration Guidance Limits" are being proposed for the two radionuclides noted above as well as for Carbon-14, Promethium-147, Thorium-232, and Americium-241. According to the EA, the Nuclear Regulatory Commission staff has determined that the proposed decommissioning plan would be in compliance with federal radiological criteria allowing for unrestricted use of the site, that adequate radiation protection procedures and capabilities have been established by the Army to ensure protection of workers during decommissioning activities, and that "no radiation exposure to any member of the public is expected." However, it is not clear to what extent long-term public access restrictions on the site will be needed in the future in order to ensure that there will be no public exposure in light of the "Derived Concentration Guidance Limits" noted above.

We do not possess expertise on matters relating to site remediation for radiological materials and have not been afforded sufficient time under the EA review schedule to fully coordinate with other County agencies. As such, we decline to offer further comment at this time. However, we will be forwarding the EA to the County's Fire and Rescue Department and Health Department

Mr. Charles H. Ellis, III  
Page Two

and request that the Army coordinate with these agencies on the decommissioning of Building 7304 and any other similar structure on the post. The Hazardous Materials and Investigative Services Section of the Fire and Rescue Department can be reached at (703) 246-4386, and the Division of Environmental Health can be reached at (703) 246-2205.

I thank you for your attention.

Sincerely,



Fred R. Seiden  
Director

FRS:NHK

cc:

Board of Supervisors

Anthony H. Griffin, County Executive

Robert A. Stalzer, Deputy County Executive

Dennis Hill, Director, Division of Environmental Health, Department of Health

Garrett Dyer, Battalion Chief, Hazardous Materials and Investigative Services Section,  
Fire and Rescue Department

Noel H. Kaplan, Senior Environmental Planner, Planning Division, DPZ