

September 23, 2005

MEMORANDUM-TO: John Lubinski, Section Chief
 Fuel Manufacturing Section
 Fuel Cycle Facilities Branch
 Division of Fuel Cycle Safety
 and Safeguards
 Office of Nuclear Material Safety
 and Safeguards

FROM: B. Jennifer Davis, Section Chief /RA/
 Environmental Review Section
 Environmental and Performance Assessment Directorate
 Division of Waste Management
 and Environmental Protection
 Office of Nuclear Material Safety
 and Safeguards

SUBJECT: ENVIRONMENTAL ASSESSMENT RELATED TO THE
 RENEWAL OF NRC LICENSE NO. SNM-42 FOR BWX
 TECHNOLOGIES, INC. (BWXT)(TAC L31836)

The Environmental Review Section has completed the environmental assessment (EA) related to the license renewal of License No. SNM-42 for BWXT and has concluded that a finding of no significant impact (FONSI) is appropriate. Enclosed is the EA and supporting Appendix.

When the final EAFONSI is published in the *Federal Register*, please notify and submit a copy of the Federal Register notice (FRN), with accession number, to Ms. Carol Walls at caw@nrc.gov. Note that all FRNs to materials licensing actions must be reviewed by the office of General Counsel (see ML 032110331). If you have questions regarding this review or the attached comments, please contact Ron C. Linton of my staff. He can be reached at 301-415-7777 and at rcl1@nrc.gov.

Docket No.: 070-00027
License No.: SNM-42

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Exemption number _____

Nuclear Regulatory Commission _____ law required before public release.

_____ Member, NMSS/FCSS/FCI _____

_____ organization of person making determination

Date of determination _____ 8/25/05 _____

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FOIA-2007-0127

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U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
DIVISION OF WASTE MANAGEMENT AND ENVIRONMENTAL PROTECTION

ENVIRONMENTAL ASSESSMENT
RELATED TO THE RENEWAL OF NRC LICENSE NO. SNM-42
FOR BWX TECHNOLOGIES, INC. (BWXT)

DOCKET NO. 70-27

August 2005

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Exemption number	
Nuclear Regulatory Commission	Review required before public release.
/RA/ [Signature] Director, NMSS/FCS	
Name of organization of person making determination	
Date of determination	8/25/05

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ACRONYMS/ABBREVIATIONS

ALARA	as low as is reasonably achievable
BWXT	BWX Technologies, Inc.
DEQ	Department of Environmental Quality
DGIF	Department of Game and Inland Fisheries
DHR	Department of Historic Resources
EPA	U.S. Environmental Protection Agency
HEPA	high-efficiency particulate air
LTC	Lynchburg Technology Center
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NPD	Nuclear Products Division
NRC	U.S. Nuclear Regulatory Commission
OSHA	Occupational Safety and Health Administration
RCRA	Resource Conservation and Recovery Act
VOC	volatile organic compound
VPDES	Virginia Pollutant Discharge Elimination System
WTF	Waste Treatment Facility

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ENVIRONMENTAL ASSESSMENT
RELATED TO THE RENEWAL OF NRC LICENSE NO. SNM-42
FOR BWX TECHNOLOGIES, INC. (BWXT)

1.0 INTRODUCTION

1.1 Background

By letter dated June 30, 2004, BWX Technologies, Inc., (BWXT, 2004a) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) to renew materials license SNM-42 for the BWXT Nuclear Products Division (NPD) uranium fuel fabrication and research facility located in Lynchburg, Virginia (BWXT, 2004a). BWXT has conducted operations at the site since 1955. In 1994, NRC approved the consolidation of License SNM-778, which regulated the operations of the Lynchburg Technology Center (LTC), into License SNM-42, which regulated the operations of the (b)(4). License SNM-778 was terminated. The expanded license SNM-42 was renewed in September of 1995 for a 10-year period. The current BWXT request is for a 20-year renewal of license SNM-42. Under SNM-42, BWXT is authorized to receive and possess nuclear materials for the fabrication and assembly of nuclear fuel components under the provisions of 10 CFR Part 70, Domestic Licensing of Special Nuclear Material.

EX4

This environmental assessment is being prepared in accordance with NRC National Environmental Policy Act (NEPA)-implementing regulations at 10 CFR Part 51, Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions; applicable NRC guidance from NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with Nuclear Material Safety and Safeguards Programs (NRC, 2003a); and Council on Environmental Quality regulations (40 CFR Parts 1500-1508). NRC also is conducting a detailed safety review of the BWXT request for license renewal. The results of the detailed safety review will be documented in a separate safety evaluation report.

Documents evaluated in preparing this environmental assessment include the Environmental Report for Renewal of License SNM-42, BWXT, NPD (BWXT, 2004b); the BWXT Response to RAI Questions (Morrell, 2005); and the Supplemental Environmental Assessment for Renewal of Special Nuclear Materials License SNM-42, U.S. Nuclear Regulatory Commission, June 1995 (NRC, 1995a). Additional references are listed in Section 8.0 of this environmental assessment.

1.2 Need for the Proposed Action

BWXT NPD operates an NRC-licensed uranium fuel fabrication and research facility. NPD provides (b)(4). NPD also provides reactor fuel elements and components to research and university facilities, conducts research to examine and improve existing products and processes, and develops new products and processes. (b)(4). If the license renewal for the BWXT Lynchburg facility is denied, these activities will likely be performed at another location.

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1.3 The Proposed Action

1.3.1 Description of the Proposed Action

The proposed action is the renewal of special nuclear materials License SNM-42, which would allow the BWXT NPD radiological operations to continue for a period of 20 years beyond the current expiration date of September 2005. BWXT, formerly Babcock and Wilcox, is an operating company of McDermott Inc., which is a subsidiary of McDermott International. There are no plans for any major modifications to the facilities.

(b)(4)
(b)(4)

Ex 4

Many other activities are performed at the facility, including adjusting enrichment, fabricating targets for irradiation in reactors, examining irradiated and radioactive reactor components, and recovering uranium from scrap material. NPD also prepares and decontaminates hardware for inspecting, evaluating, and measuring reactor components. Radiation source analysis, preparation, and modification are performed in the NPD laboratory facilities.

1.3.2 Description of Facility Activities

The NPD site is in central Virginia along the James River in the northeastern part of Campbell County approximately 8 km [5 mi] east of the city of Lynchburg (Figure 1). The main NPD manufacturing and support facilities are located toward the center of the BWXT site (Figure 2).

(b)(4)
(b)(4)

Other NPD operations are conducted in the LTC facilities, which are west of the main NPD manufacturing and support facilities (Figure 2). The LTC operations are diverse, and a majority of LTC facilities are used for office space and nonradiological operations. Radiological operations are mostly limited to analytical laboratories and an area containing hot cells. A hot cell is a protected area where highly radioactive materials (b)(4)

Ex 4

(b)(4) can be tested and examined in a safe environment. Occasionally, high-level radioactive waste is generated in the LTC during cleanup of the hot cell after the completion of projects involving various destructive tests and post irradiation examinations (b)(4)

Ex 4

(b)(4) Other facilities associated with the hot cell area include a cask handling area, a transfer canal, and a storage pool. A cask is a container designed to safely store nuclear fuel or other highly radioactive material. Radioactive materials are shipped and received at the cask handling area. The transfer canal and storage pool are used to receive, unload, load, and prepare casks for shipment. The transfer canal and storage pool are also used to transfer radioactive material to and from the hot cells.

The Waste Treatment Facility (WTF) is located to the north of the main NPD manufacturing and support facilities. Liquid waste treatment and decontamination operations are conducted in the WTF. The WTF contains a variety of facilities, including equalization tanks, neutralization tanks, other treatment tanks, a microfiltration unit, a sludge processing system, and an

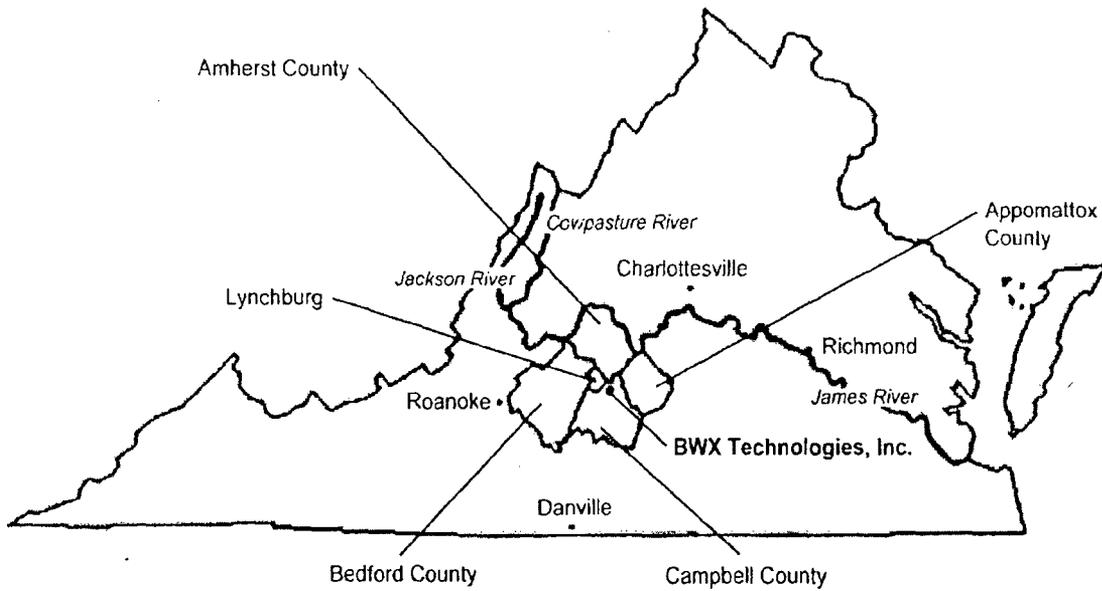


Figure 1. Geographical Location of the Babcock & Wilcox Facility [Modified from NRC (1991)]

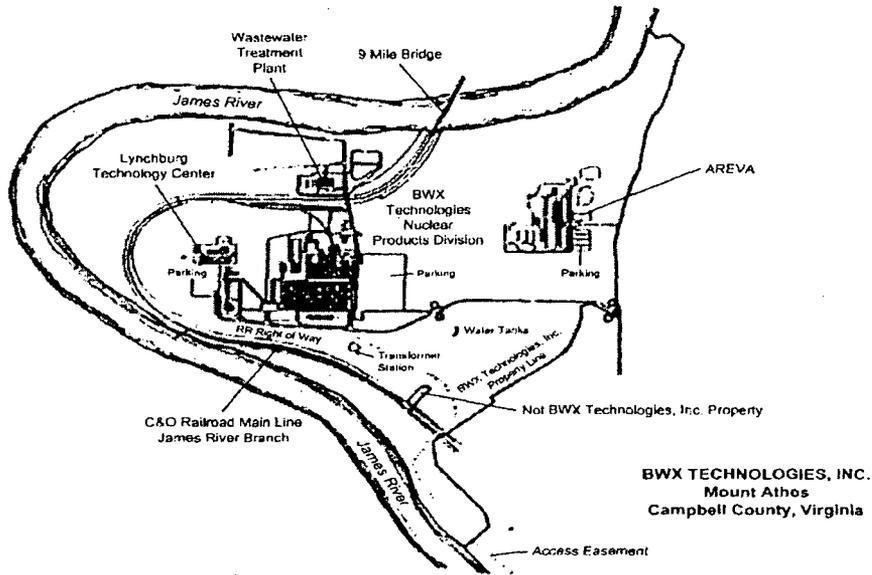


Figure 2. Babcock & Wilcox Facility Map [Modified from NRC (1991)]

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equation pond. The WTF may be used to treat waste water and a variety of other liquids, sludges, and solids. The treatment of low-level radioactive waste water consists of many steps and generates both solid material and liquid effluent. The treatment process solids are packaged in drums that may be compacted and repackaged. These solid wastes are shipped to NRC-approved and licensed low-level radioactive waste disposal facilities such as the Barnwell Site in South Carolina or the Envirocare Site in Utah. The treated liquid effluent is eventually discharged into the James River in accordance with a Virginia Pollutant Discharge Elimination System (VPDES) permit for nonradiological contaminants and 10 CFR Part 20, Standards for Protection Against Radiation, for radiological contaminants.

Radiologically contaminated materials are cleaned for recycling, reuse, or disposal in the Decontamination Facility portion of the WTF. The decontamination process varies from wiping down materials with alcohol or cleaning solutions to aggressive techniques such as grinding. All techniques that generate airborne material use high-efficiency particulate air (HEPA) filter systems and ventilated hoods to reduce the particulate load. Material that meets free release limits is recycled, reused, or scrapped. Materials that fail to meet NRC-established release limits are disposed as low-level radioactive waste.

The Supercompactor Facility compacts solid low-level radioactive waste, which reduces the volume of material and lowers disposal costs. Solids processed in this facility include the treatment process solids from the WTF and solids from the Decontamination Facility. After compaction, the waste is shipped to an NRC-approved and licensed low-level radioactive waste disposal facility. The variety of operations at the BWXT facility creates the potential for the release of contaminated material into the air, soil, and water. As part of its current NRC license, BWXT has implemented a program designed to keep exposures and effluent levels as low as is reasonably achievable (ALARA). The ALARA program examines the technology currently available and compares the implementation costs to the health and safety benefits. This program is implemented in BWXT design procedures so systems, processes, and facilities incorporate the ALARA concept. BWXT also has implemented a formal change control system, which requires that all proposed changes to a facility be examined for impacts to exposures or effluent levels.

Gaseous effluents from NPD radioactive material operations are treated and sampled prior to discharge through stacks. The NPD facilities contain numerous stacks. The HEPA filters and scrubbers are commonly used pollution control equipment for gaseous effluents at the site. Stacks that could release radioactive material are continuously sampled. In addition, separate samples are collected each normal working day in accordance with license requirements.

Liquid wastes from the main NPD manufacturing facilities are sent to the WTF. Liquid wastes from LTC facilities are collected at the Liquid Waste Disposal Facility, where the waste is sampled and compared to discharge limits before it is sent to the WTF.

BWXT operations produce low-level and high-level solid radioactive waste. A variety of low-level radioactive solid wastes are generated from the operations at the NPD main facilities and the LTC. These solid low-level wastes are generally packaged in the area of generation and monitored for radioactivity levels. Most solid low-level radioactive waste is sent to the Supercompactor Facility for volume reduction and eventual disposal offsite. The high-level solid radioactive waste generated in the LTC is packaged in the hot cells in stainless steel drums and then transferred to ^{(b)(4)}

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(b)(4)

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BWXT also operates a comprehensive environmental monitoring program that collects air, groundwater, surface water, sediment, soil, and vegetation samples from areas in and around the site and tests them for radiological content. Requirements for the program are established by license conditions in NRC license SNM-42 and implemented by approved BWXT procedures.

1.3.3 Decommissioning

At the termination of license SNM-42, NRC will require BWXT to decontaminate and decommission the Lynchburg facility. At that point, BWXT will develop a detailed decommissioning plan consistent with the applicable license termination criteria at the time of decommissioning and submit this plan to NRC for review and approval. To cover the costs of potential decontamination and decommissioning activities associated with the termination of NRC License SNM-42, BWXT has established a financial surety agreement in accordance with NRC regulations in 10 CFR 70.25.

2.0 ALTERNATIVES TO THE PROPOSED ACTION

No Action Alternative

If license SNM-42 is not renewed, radiological operations at the NPD would cease with the expiration of the license and decommissioning of the facilities would begin. In the short term, the environmental impacts from decommissioning would likely be similar to the impacts resulting from radiological operations, with the addition of a significant increase in waste generation.

(b)(4)

Termination of License SNM-42, therefore, implies that fuel production would be performed at another location, and the environmental impacts would shift to that location. If a new facility were built to meet the fuel requirements, the environmental impacts would likely be greater than for an existing facility because of construction and start-up activities.

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The proposed action and the no action alternative were considered to bound the likely impacts associated with the renewal of NRC license SNM-42 and were the only alternatives considered. Other reasonable alternatives are not likely to exceed these impacts or meet the need for the proposed action described in Section 1.2.

3.0 AFFECTED ENVIRONMENT

3.1 Site Description and Land Use

The BWXT facility occupies a 201-ha [497-acre] site approximately 8 km [5 mi] east of Lynchburg, Virginia, in the northeast corner of Campbell County. The site is located on a peninsula surrounded on three sides by the James River. Much of the area adjacent to the river consists of a relatively flat floodplain. Across the river to the north and west are rolling hills. The side of the BWXT site not bounded by the river is adjacent to Mount Athos, which has the highest elevation in the vicinity at 271 m [890 ft] above mean sea level. The nominal

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elevation of the James River is 139.6 m [458 ft] above mean sea level. Elevations on the site range from 140.2 m [460 ft] to approximately 213 m [700 ft] above mean sea level. The high point of the facility is located in the approximate center of the site. The main NPD manufacturing and support facilities occupy approximately 6.8 ha [16.8 acres] and are located towards the center of the site with the main facility at an elevation of 173 m [568 ft] above mean sea level. The LTC facilities occupy approximately 5.5 ha [13.6 acres] and are located west of the main NPD facility. The approximately 0.24-ha [0.6-acre] WTF, with an elevation of 149 m [488 ft] above mean sea level, lies north of the main NPD facility. A security fence encloses approximately 16 ha [39 acres] of the site.

The land around the BWXT facility is used for a variety of purposes. The area hosts other industrial facilities. Located southeast of the BWXT facility is the AREVA site (formerly Framatone Advanced Nuclear Power, Inc.) site, which supports commercial nuclear fuel fabrication and reactor operations under NRC License SNM-1168. The Internet Iron Foundry, which manufactures cast-metal automotive parts, also is located on the peninsula south of the BWXT site. Other industries are located to the east, in and around Lynchburg. Forestry and agriculture, however, dominate the activities in the predominately rural area. The rolling hills west and north of the site are farmlands and woodlands. Northeast of the BWXT site is Joshua Falls, a recreational area that provides access to the James River. Access to the BWXT site is provided from State Route 726. This route intersects Route 460, which is the main highway connecting Lynchburg, Appomattox, and Richmond. The BWXT site also is accessible by railroad with a spur of the CSX Transportation Railroad on the property.

3.2 Demography and Socioeconomic

Located in the northeast corner of Campbell County, the BWXT site is in close proximity to three other counties: Amherst, Appomattox, and Bedford. According to the 2000 Census, 51,078 people resided in Campbell County, and 228,616 people resided in the four-county area (U.S. Census Bureau, 2004). Lynchburg, Virginia, located about 8 km [5 mi] to the west of the BWXT facility, is the population center nearest the site. The city had a 2000 Census population of 65,269 (U.S. Census Bureau, 2004). For Campbell County, the population increased 7.4 percent from 1990 to 2000, while the population of Lynchburg decreased slightly by 1.2 percent. The population of the four-county area increased by 10.9 percent from 1990 to 2000, compared to a 14.4-percent increase for the Commonwealth of Virginia. The minority (nonwhite) population of the four-county area was estimated at 20.6 percent in the 2000 Census, compared to 27.7 percent for the Commonwealth of Virginia (U.S. Census Bureau, 2004).

With the exception of Lynchburg, the four-county area is predominantly rural. The site is bounded on three sides by the James River and, because of the rolling terrain adjacent to the river, most of the population is located more than 4.8 km [3 mi] from the BWXT facility. In the 2000 Census, the census block that includes the facility (Block 2001, Block Group 2, Census Tract 201, Campbell County, Virginia) reported a population of 38 (U.S. Census Bureau, 2004). This census block covers an area about 5.5 km² [2.1 mi²]. There are no significant population concentrations within about 3.2 km [2 mi] of the facility, and the nearest residences are about 0.8 km [0.5 mi] east-northeast (NRC, 2003b). About two-thirds of the population of 9,069 that lives within 8 km [5 mi] of the site resides west-southwest and west-northwest of the facility. This includes the easternmost portions of Lynchburg and the small community of Madison

Heights (NRC, 2003b). In 2000, the vacancy rate for the four-county area was about 8.5 percent of 98,057 housing units (U.S. Census Bureau, 2004).

There are no schools or churches within 4.8 km [3 mi] of the BWXT facility, but there are several nearby businesses. These include the AREVA facility, the Archer Creek Plant of Intermet (formerly Lynchburg) Foundry, and the Central Virginia Federal Credit Union (Framatome, 2002; NRC, 2003b; BWXT, 2004b).

Based on the 2000 Census, the median household income in 1999 for the four-county area ranged from \$28,792 for the city of Bedford to \$43,136 for Bedford County (U.S. Census Bureau, 2004). The range is much narrower (\$36,507 to \$37,393) for Amherst, Appomattox, and Campbell counties; and the median household income in Lynchburg is \$32,234. These incomes are below the median household income of \$46,677 for the Commonwealth of Virginia, but the four-county area maintained about the same proportion relative to the state household income from 1989 to 1999. The percentage of individuals with income below the 1999 poverty level was 11.4 percent for the four-county area, compared to a state poverty level of 9.6 percent. This represents a slight decrease from the poverty level of 11.6 percent reported in 1989 for the four-county area (U.S. Census Bureau, 2004).

For the four-county area, the total civilian labor force (nonfarm) in August 2004 was about 110,000, with a regional unemployment rate of about 4.3 percent (Virginia Employment Commission, 2004). The unemployment rate is slightly higher than the statewide rate of 3.7 percent, and both the regional and state unemployment rates have declined during 2003 and 2004 (Virginia Employment Commission, 2004). BWXT is a major employer in the region, with a current workforce at the Lynchburg facility of about 2,400 (BWXT, 2004b). This is consistent with recent historical employment levels that range from 1,839 workers at the time of the last license renewal in 1995 to 2,579 employees reported in 1991 (NRC, 1995a, 1991). An additional 600 workers are employed at the Intermet, AREVA, and the Central Virginia Federal Credit Union facilities near the BWXT site (Framatome, 2002; NRC, 2003b; BWXT, 2004b).

3.3 Climatology, Meteorology, and Air Quality

The climate of the Lynchburg, Virginia, area is influenced by cold and dry polar continental air masses in the winter and warm and humid gulf maritime air masses in the summer. The mean annual temperature is about 13.0 °C [55.4 °F] with normal average temperatures ranging from 23.9 °C [75.1 °F] in July to 1.4 °C [34.5 °F] in January (National Oceanic and Atmospheric Administration, 2001a). The annual mean rainfall for Lynchburg is 110.0 cm [43.3 in] (National Oceanic and Atmospheric Administration, 2001a). The monthly rates of rainfall are nearly uniform except for a slightly higher rate from May to July. Snowfall in the Lynchburg area generally occurs from December to March, with a mean yearly snowfall total of 47.2 cm [18.6 in] (National Oceanic and Atmospheric Administration, 2001b). From 1930 to 1996, winds were predominately from the southwest with a mean speed of 11.3 km/hr [7.0 mph] (National Oceanic and Atmospheric Administration, 1998). During this same period, the maximum monthly mean wind speed was 14.5 km/hr [9.0 mph], and the maximum peak speed was 119.1 km/hr [74.0 mph] (National Oceanic and Atmospheric Administration, 1998). Data obtained from the National Oceanic and Atmospheric Administration (2004a) indicate that, from 1964 to 2003, the mean relative humidity values were 80 percent in the morning and 53 percent in the afternoon.

Extremes in weather conditions in the area are rare. Severe weather at the site is generally limited to thunderstorms, with a low probability of tornadoes. Data obtained from the National Oceanic and Atmospheric Administration (2004b) show that the mean number of storm events classified as "thunderstorm and high-wind" occurring in Campbell County, Virginia was about four per year from 1994 to 2003. The thunderstorm and high wind classification is reserved for more extreme storm events that can include severe thunderstorms, damaging winds, or hail.

From 1950 to 1995, an average of 6 tornadoes per year occurred in the Commonwealth of Virginia, occurring at a rate of about 6.2×10^{-5} tornadoes per year per km^2 [1.6×10^{-4} tornadoes per year per mi^2] (Lott, et al., 2000). Of those tornadoes, two per year would be classified in the "strong-violent" category. Tornadoes with a rating on the Fujita Tornado Damage Scale between F2 and F5 are considered "strong-violent" (Lott, et al., 2000). An increase in the Fujita Tornado Damage Scale number represents an increase in tornado severity. In the 46-year period from 1950 to 1995, only one tornado in Virginia was categorized higher than F3 (National Oceanic and Atmospheric Administration, 2004c).

Air quality at BWXT is regulated for nonradiological emissions by the Virginia Department of Environmental Quality (DEQ) and for radiological emissions by NRC. Regulations that apply to air pollutant control include 40 CFR Part 50, National Primary and Secondary Ambient Air Quality Standards; 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants; and 10 CFR Part 20, Standards for Protection Against Radiation.

The National Ambient Air Quality Standards (NAAQS) define the acceptable levels for six common nonradiological pollutants: nitrogen oxides, ozone, sulphur oxides, carbon monoxide, lead, and total suspended particles. Compliance is attained when pollutant concentration levels are lower than the established NAAQS standards. Campbell County is in attainment for all six of these pollutants (BWXT, 2004b). The National Emission Standards for Hazardous Air Pollutants (NESHAP) sets limits for hazardous chemicals. These pollutants are normally associated with particular industrial sources or activities.

Nonradiological emissions are reported annually to the Virginia DEQ as required by the Title V operating permit (effective February 16, 2002) (BWXT, 2004b). Included in this report are emissions related to the NAAQS pollutants and three other compounds: ammonia, hydrochloric acid, and hydrofluoric acid. These air emissions are estimated based on process throughputs and engineering knowledge. The operating permit limits the amount of throughput for certain industrial processes in order to control the amount of air pollutants generated. For the 4-year period from 2000 to 2003, no regulated process ran at more than about 25 percent of the permitted operating level (BWXT, 2004b). Most processes at BWXT have no limits other than opacity or the lack of visible emissions. BWXT has not exceeded the opacity limit since the February 16, 2002, effective date of the Title V permit (BWXT, 2004b).

Radiological emissions are regulated by NRC under 10 CFR Part 20, Standards for Protection Against Radiation and by the U.S. Environmental Protection Agency (EPA) under 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants. BWXT collects air samples at 13 site boundary locations to determine the levels of radiological airborne discharge. For the 10-year period from 1994 to 2003, the maximum concentration for any of the locations was 2.5 percent of the 10 CFR Part 20 limit. BWXT also directly monitors radiological airborne discharges from the various stacks and calculates an offsite dose from the

combined emissions. For the 9-year period from 1995 to 2003, the highest offsite dose was determined to be 1.8 percent of the 0.1 mSv/yr [10 mrem/yr] limit described in 10 CFR 20.1101.

3.4 Hydrology

3.4.1 Surface Water

The BWXT facility is situated in a meander bend within the middle reaches of the James River. The James River flows generally east-southeast from the Blue Ridge Mountains through the Piedmont Province of Virginia to the Atlantic Ocean, draining about 20 percent of the northern areas of Campbell County, including the BWXT facility site. Surface water flow at the BWXT facility site is approximately to the north-northeast, comprising mainly drainage from rain events. There are no natural ponds or lakes within the BWXT facility, but several retention ponds have been built for stormwater detention and effluent storage. Flooding occurs infrequently in the James River. Since 1771, there have been 11 major flood events, the most recent being in 1996 (BWXT, 2004b). The BWXT facility site contains several small, isolated wetlands primarily located within the floodplains of the meander bend.

Previously, BWXT withdrew water directly from the James River for industrial purposes, but in August 2003, the site switched to a public water supply from the Campbell County Utilities Service Authority. The BWXT facility discharges treated waste water into the James River through three outfalls. Outfall 001 discharges directly into the James River, while outfalls 002 and 003 discharge into ditches that flow into the James River. These discharges are regulated for nonradioactive contaminants under the VPDES (Permit No. 00367) and for radiological contaminants under 10 CFR Part 20 (BWXT, 2004b). The section of the James River in the vicinity of the BWXT facility is currently not designated for drinking water use¹ (State Water Control Board, 2004).

3.4.2 Groundwater

Groundwater in the Middle James River watershed occurs in crystalline bedrock and in the overlying unconsolidated sediment. At the BWXT facility site, groundwater flows northeast toward the James River. Prior to converting to the public water supply, BWXT withdrew groundwater from seven onsite wells for process applications and employee consumption (BWXT, 2004b).

Groundwater at the site has been contaminated from past operations. In 1986, BWXT identified volatile organic compounds (VOCs) in the groundwater system adjacent to the James River. The EPA Region 3 issued a Consent Order in 1991 for BWXT to perform corrective action in accordance with the Resource Conservation and Recovery Act (RCRA). The EPA Region 3 documents the monitoring and corrective action implemented (EPA, 2004a). The BWXT baseline monitoring indicates that (i) there are no unacceptable human health risks at the site, (ii) the migration of contaminated groundwater at the site has stabilized, and (iii) groundwater discharges to surface water are currently acceptable (EPA, 2004b). With EPA approval, several monitoring wells have been installed at the site, and observations are

¹Osiele, O. "BWXT EA Comment Resolution." Personal communication with A. Gray, Virginia DEQ, documented in email (July 28) from B. Werling, Center for Nuclear Waste Regulatory Analyses, to R. Linton, NRC. San Antonio, Texas: Center for Nuclear Waste Regulatory Analyses. 2005.

reported annually to EPA Region 3. Two remediation technologies are in operation at the site: a soil vapor extraction system for the removal of VOCs from soils and a groundwater pump and treatment system. BWXT and EPA have agreed to a long-term alternative screening study of these two active corrective action technologies.

In 2001, BWXT discovered more VOCs at another location. The source of these chemicals was a landfill formerly used for the disposal of solids generated from the treatment of industrial waste water. Although field studies indicate that the groundwater plume from this landfill does not intersect the James River, the associated monitoring wells have been included in the site annual sampling program.

3.4.3 Wetlands

The Clean Water Act gives the U.S. Army Corps of Engineers jurisdiction to protect and regulate wetlands that are classified as "waters of the United States." The Virginia DEQ administers the Clean Water Act and enforces state laws protecting state waters, including wetlands. As depicted on the Department of the Interior Wetland Inventory Map (U.S. Fish and Wildlife Service, 2004a), 13 wetland areas are located on the site. Nine of the 13 wetland areas are located within the 100-year floodplain and would be considered jurisdictional by the U.S. Army Corps of Engineers and subject to protection under Section 404 and the Clean Water Act. The four remaining areas are man-made ponds that are used for storm water management or as effluent collection points as part of the waste treatment process. These four areas are not considered to be under the jurisdiction of the Clean Water Act and are regulated under VPDES Permit Number 00367².

3.5 Geology and Seismology

The site is located at the western edge of the Piedmont physiographic province. Surficial deposits at the site consist of Quaternary age alluvium and Quaternary age or older terrace gravels. Bedrock at the site consists of a micaceous schist, a phyllite member of the Chandler formation, and a graphite schist member of the Archer Creek Formation. Both of these formations are Paleozoic metamorphic rocks of the Evington Group. Soils at the site have been identified as Culen-Wilkens. The moderately deep, well-drained, and gently sloping to steep soils have a dominantly clay subsoil (NRC, 1995a).

The site falls within the western part of the Central Virginia Seismic Zone (Wheeler, 1998). Between 1774 and 1994, there were 18 earthquakes in Virginia reported as having a Modified Mercalli Intensity of VI or higher. The Modified Mercalli Intensity scale indicates the shaking severity of an earthquake. An increase in the Modified Mercalli Intensity number represents an increase in earthquake severity. The largest historical earthquake occurred in 1897. It was located 161 km [100 mi] west of the site and had a Modified Mercalli Intensity of VIII (NRC, 1995a; Virginia Department of Mines, Minerals, and Energy, 1994). The site has a 10-percent probability of exceeding a peak ground acceleration of 0.035g (the force of gravity) and a 2-percent chance of exceeding a peak ground acceleration of 0.113g in a 50-year period (Frankel, et al., 1997).

²Strye, B. "Phone Conversation Documentation for BWXT EA Comment Resolution." Phone conversation (July 25) with C. Harold, Virginia Water Protection Permit Program documented in email (July 29) from B. Werling, Center for Nuclear Waste Regulatory Analyses, to R. Linton, NRC. Houston, Texas: Raba Kistner. 2005.

3.6 Ecology

3.6.1 Terrestrial

The native vegetative climax community in the Lynchburg/Campbell County area is an oak-hickory-pine (*Quercus-Carya-Pinus*) forest. Unimproved portions of the BWXT site are comprised of secondary succession forests and grasslands (BWXT, 2004b). Forested wetlands and emergent herbaceous wetlands are located within the 100-year floodplain adjacent to the James River.

According to the Virginia Department of Game and Inland Fisheries (DGIF) (Virginia Fish and Wildlife, 2004), there are 492 species known or likely to occur within a 6.4-km [4-mi] radius of the BWXT facility. The animals consist of more than 50 mammal, 35 reptile, 17 amphibian, 74 invertebrate, and approximately 243 bird species.

3.6.2 Aquatic

There are approximately 72 species of fish known or likely to occur in a 6.4-km [4-mi] radius of the BWXT facility. The James River has an aquatic community characteristic of a moderately polluted river. Fish common to the site vicinity include large mouth bass, blue gills, and shiners (NRC, 1995a). The stretch of the James River in the vicinity of the facility is a Potential Anadromous Fish Use Area^{3,4}. The benthic community of the James River near the BWXT facility is common to both flowing and back water systems (NRC, 1995a).

3.6.3 Threatened and Endangered Species

According to the U.S. Fish and Wildlife Service (2004b), the Commonwealth of Virginia has 50 listed threatened or endangered animal species, including four believed to be no longer found in Virginia. In addition, there are 17 threatened or endangered plant species, with one species believed to be no longer found. One animal species classified by both the federal and state governments as threatened or endangered exists in the vicinity of the BWXT facility. A Bald eagle (*Haliaeetus leucocephalus*) nest is located approximately 1.6 km [1 mi] from the site⁵. According to Virginia DGIF (Virginia Fish and Wildlife, 2004), the James spiny mussel (*Pegias fibula*), another animal species classified by both the federal and state governments as threatened or endangered, has the potential to occur within a 6.4-km [4-mi] radius of the BWXT facility if the correct habitat is found. In addition, the James River is designated as a Threatened and Endangered Species water due to the documented presence of the Atlantic pigtoe (*Fusconaia masoni*), a species classified by Virginia as a Commonwealth threatened species⁶. Five other state-threatened or endangered animal species were noted with the

³Irons, E. "Preliminary Final Environmental Assessment, License Renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility NRC Docket No. 70-27, DEQ-05-149F." Letter (June 30) to J. Davis, NRC. Richmond, Virginia: Commonwealth of Virginia, DEQ. 2005. (Official Use Only).

⁴Zadnick, A. "05-149_ESSLOG 20680_BWX License Renewal_Campbell." Email communication (June 21) to C. Ellis, Virginia DEQ. Richmond, Virginia: DGIF, Environmental Services Section. 2005.

⁵Ibid.

⁶Ibid.

potential to occur within a 6.4-km [4-mi] radius of the facility. These species were identified as the Loggerhead shrike (*Lanius ludovicianus*), Carolina darter (*Etheostoma collis*), Henslow sparrow (*Ammodramus henslowi*), Peregrine falcon (*Falco peregrinus*), and Upland sandpiper (*Bartramia langicauda*) (Virginia Fish and Wildlife, 2004).

According to the Virginia Department of Natural Heritage (Virginia Department of Conservation and Recreation, 2004), there are one federal threatened or endangered plant and two State-listed threatened or endangered plant species located within the general area of the BWXT facility site. The Smooth coneflower (*Echinacea laevigata*) appears on both Federal and state lists. The Nestronia (*Nestronia umbellula*) is the other plant on the state list.

3.7 Historical and Cultural Resources

The BWXT facility is located in the Piedmont region off the Blue Ridge Mountains. The Piedmont region along the James River was inhabited for thousands of years by various Native American tribes, including the Manahoacs, Monacans, Occaneechis, and Saponis. The arrival of European settlers occurred in the late 16th to early 17th centuries. The city of Lynchburg was founded on the banks of the James River in the late 18th century. By the early 19th century, the agricultural development of the area thrived, with tobacco production providing major economic growth. By the early 20th century, the economic base of Lynchburg shifted from agriculture to manufacturing. A large number of diverse factories became established in the area, which presently include industries related to communications, paper, machinery, and nuclear energy.

Within the four-county area (Amherst, Appomattox, Bedford, and Campbell) surrounding and containing BWXT, there are a number of culturally significant sites listed on the National Register of Historic Places. None of these sites are located within the BWXT boundaries; however, two of the listed sites, the Norfolk Southern 6-Mile Bridge No. 58, which crosses the James River north of BWXT, as well as the ruins of the Mt. Athos Mansion and Plantation, are within 4.8 km [3 mi] of the BWXT facility (BWXT, 2004b). The ruins of the Mt. Athos Plantation are located east of BWXT. Constructed in 1796 and originally known as the Buffalo Lick Plantation, the Mt. Athos manor house was destroyed by fire in 1876, and the plantation property was later subdivided into private ownership. The National Register site currently includes the ruins of the manor house, grave sites, a tobacco barn, and stone cisterns. The 9-Mile Bridge located northeast of the facility has been determined eligible for listing on the National Register.

Remains of the Kanawha Canal exist on BWXT property and are located north of the railroad tracks and facility structures (BWXT, 2004b). The canal was constructed in the early 19th century to facilitate the exportation of area agricultural products (e.g., tobacco and wheat). During the Civil War, the canal was used by Confederate troops to transport war materials. Six archaeological sites (44CP87–92) associated with the James River and Kanawha Canal are located on BWXT property⁷ (BWXT, 2004b). These sites are generally found adjacent to the river. The significance of these resources has not been evaluated, but other features

⁷Kirchen, R.W. Letter (March 9) to J. Davis, NRC. "Comments on Docket No. 70-27 Renewal of NRC License for BWX Technologies, Inc. DHR File No. 2003-0590." Richmond, Virginia: Commonwealth of Virginia, Department of Historic Resources. 2005. (Official Use Only).

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associated with the canal have been determined eligible for listing on the National Register of Historic Places.

Two prehistoric sites are located in the vicinity of the BWXT property: Site 44CP22, located within the neighboring AREVA facility, and Site 44CP5, located along the railroad tracks north of the BWXT facility.⁸ The significance of these sites has not been evaluated.

Normally, a site must be at least 50 years old in order to be considered for entry into the National Register of Historic Places (National Park Service, 2004). BWXT has been operating a nuclear related facility in the Lynchburg area since 1955. Elements of the facility that date to the earliest period of operation, therefore, could be considered eligible for listing on the National Register of Historic Places.

3.8 Noise

Noise from site operations is limited (BWXT, 2004b). Most operations are conducted indoors, so the greatest contributors to environmental noise are automobiles and building ventilation systems. The distance from the buildings to the site boundary helps mitigate any offsite noise impacts from the operation of the ventilation systems.

3.9 Waste

BWXT operations produce airborne, liquid, and solid effluents. Airborne effluents are normally treated by HEPA filters or scrubbers before being discharged through one of the stacks. Nonradiological gaseous emissions are dominated by nitrogen oxides and volatile organic compounds. In 2003, an estimated 44.54 metric tons [49.10 tons] of nitrogen oxide and 16.39 metric tons [18.07 tons] of volatile organic compounds were emitted from the BWXT facility (BWXT, 2004b). Liquid effluents from the NPD and LTC facilities are treated at the WTF and discharged into the James River in accordance with VPDES and 10 CFR Part 20 requirements. For the 10-year period from 1994 to 2003, the average amount of water discharged annually through the three BWXT outfalls was 823.3 million L [217.5 million gal]. The highest amount was discharged in 1998 with a value of 998.6 million L [263.8 million gal] (BWXT, 2004b). BWXT operations produce low-level and high-level radioactive solid waste. For the 4-year period from 2000 to 2003, an average of 825.2 m³ [29,142 ft³] of low-level radioactive solid waste was generated. The highest amount of this waste was generated in 2000 with a value of 1,217.6 m³ [42,999 ft³] (BWXT, 2004b). The low-level radioactive solids are stored in 208-L [55-gal] drums. Usually, these drums are sent to the Supercompactor Facility on site, crushed, and repackaged into 265-L [70-gal]-overpack drums. All drums containing low-level radioactive waste are sent offsite for disposal at licensed disposal facilities (e.g., the Barnwell Site in South Carolina and the Envirocare Site in Utah). For the 4-year period from 2000 to 2003, high-level radioactive solid waste was generated in only two of the years. In 2000, 1.8 m³ [63 ft³] was generated, and in 2001, 1.6 m³ [57 ft³] was generated (BWXT, 2004b). High-level radioactive solid wastes are stored in stainless steel drums (b)(4)

EX4 (b)(4) [This high-level waste is retained onsite because there are currently no (b)(4) BWXT is negotiating with the U.S. EX4

Department of Energy concerning the ultimate disposition of this waste.

⁸ Ibid.

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Nonradioactive hazardous waste is also generated from BWXT operations. The Virginia DEQ requires BWXT to prepare a biennial hazardous waste generator report (BWXT, 2004b). This report lists all hazardous waste streams and identifies all disposal methods. Normally, the hazardous wastes are collected at satellite accumulation areas within the facility. The waste is eventually transferred to the NPD Hazardous Waste Building where it is inventoried, documented, and prepared for offsite shipment.

Approximately 0.3m³/yr [10.6 ft³/yr] of mixed wastes also are generated from the BWXT operations. The majority of this waste is radioactive trichloroethylene. This waste is packaged and shipped offsite for disposal.

BWXT operations produce solid waste that is not contaminated with constituents regulated as radioactive or hazardous wastes. Occasionally, BWXT disposes a small portion of the noncontaminated inert material onsite. This material consists primarily of broken concrete and is used as fill at construction locations. The Virginia Solid Waste Management Regulations allow this practice. A conservative estimate of the amount of this material generated and disposed onsite is 30.6 m³/yr [40 yd³/yr].

3.10 Public and Occupational Health

The continued handling of materials and conduct of NPD operations pose a potential impact to public and occupational health. For normal operations, the impacts are related to the release of low levels of toxic or radioactive materials to the environment over extended periods of time. For accident conditions, the hazard may involve releasing higher concentrations of materials over relatively short periods of time.

3.10.1 Background Radiological Characteristics

The average total effective dose equivalent to a person living in the United States from natural background sources of radiation is approximately 3 mSv/yr [300 mrem/yr] (BWXT, 2004b). This dose comes from exposure to cosmic radiation, cosmogenic radionuclides, terrestrial radionuclides, inhaled radionuclides, and radionuclides naturally occurring in the body. On average, an additional total effective dose equivalent of approximately 0.6 mSv/yr [60 mrem/yr] derives from anthropogenic sources such as medical diagnostic tests and consumer products (BWXT, 2004b). The background radiological characteristics of the BWXT site were first evaluated as part of a preoperational environmental monitoring program conducted in 1956 and were found to be comparable to the aforementioned U.S. average (NRC, 1995a). BWXT continues to monitor background radiation levels through a comprehensive environmental monitoring program.

3.10.2 Public Health and Safety

The primary risk to public health and safety from NPD operations is exposure to radioactivity associated with examining and handling nuclear fuel assemblies and managing associated effluent streams. Radioactive materials released from NPD facilities may migrate in the environment through a variety of transport pathways, contributing to public exposures from both internal and external exposure pathways. For atmospheric releases, internal exposures may occur through inhaling radioactive material dispersed in the air or ingesting crops and animal products that come in contact with radioactive material deposited from the air. External

exposures may occur through direct radiation from an airborne plume or from particulates deposited on the ground from the plume. For liquid releases, internal exposures from ingesting water or irrigated crops may occur. External exposures from recreational activities, including swimming and boating, may occur.

The NPD operations release small amounts of radioactive material to the atmosphere from numerous stacks. The NPD main manufacturing facilities primarily release uranium, while the LTC releases mixed fission products, including tritium and krypton (NRC, 1995b). Prior to discharge into the James River, low-level liquid radioactive waste from NPD operations is processed through the WTF to meet 10 CFR Part 20 effluent limits. Releases attributable to the NPD main manufacturing facilities are primarily uranium, while those from the LTC are primarily tritium (NRC, 1995b). Radiological doses associated with NPD operations are dominated by liquid effluent releases to the environment. For the 6-year period from 1998 to 2003, the average total effective dose equivalent for the maximally exposed member of the public received from the combined effluent releases from all NPD operations were estimated as 3.5×10^{-3} mSv/yr [3.5×10^{-1} mrem/yr] (BWXT, 2004b). The highest annual total effective dose equivalent occurred in 2001 with a value of 6.5×10^{-3} mSv/yr [6.5×10^{-1} mrem/yr] (BWXT, 2004b). This dose was primarily a result of liquid effluent releases associated with normal operations of these facilities and is a small fraction of the NRC 1.0 mSv [100 mrem] annual dose limit for individual members of the public in 10 CFR 20.1301.

3.10.3 Occupational Health and Safety

Risks to occupational health and safety include exposure to industrial hazards, hazardous materials, and radioactive materials. Industrial hazards for the NPD facilities are typical for an industrial facility of this size and include chemical exposures, heavy machinery accidents, crush injuries, and cuts and abrasions. These hazards are experienced by workers associated with the material processing operations, as well as by those conducting monitoring, research, general office, and industrial site activities. The average NPD Occupational Safety and Health Administration (OSHA) incident rate from fiscal year 2000 to fiscal year 2003 is 2.20 (BWXT, 2004b). The OSHA incident rate has become a standard for measuring and comparing work injuries, illnesses, and accidents within and between industries. The incident rate accounts for both the number of OSHA recordable injuries and illnesses and the total number of man-hours worked. Average incident rates are calculated for various industry classifications because the incident rate can vary based on the nature of the work. The average incident rate for the classification of industry applicable to facilities like BWXT is 7.3 (BWXT, 2004b).

The NPD facilities handle nonradiological materials that could pose a risk to worker health and safety through chronic exposure or improper handling. The list of hazardous chemicals used in operations includes chromium compounds, cobalt compounds, copper compounds, hydrochloric acid, hydrogen fluoride, nickel compounds, nitric acid, sulfuric acid, and trichloroethylene. The BWXT Industrial Hygiene Program addresses monitoring for industrial exposures to nonradiological chemicals. Existing operations have been monitored for potential exposure and new chemicals and operations are identified and monitored in the facility Change Management Program.

Radiation exposure from normal operations is primarily due to inhaled radioactive material during the fuel fabrication process. A radiation protection plan is maintained in accordance with 10 CFR Part 20 to ensure that radiation doses are maintained below NRC limits and are

ALARA. Radiological impacts to workers will result from fabrication, assembly, recovery, research operations, and other activities. For the 5-year period from 1999 to 2003, the average total effective dose equivalent for the maximally exposed NPD worker was 13.18 mSv/yr [1,318 mrem/yr] (BWXT, 2004b). The highest annual total effective dose equivalent occurred in 2000 with a value of 20.07 mSv/yr [2,007 mrem/yr] (BWXT, 2004b). For the 5-year period from 1999 to 2003, the average total effective dose equivalent for the maximally exposed LTC worker was 16.59 mSv/yr [1,659 mrem/yr] (BWXT, 2004b). The highest annual total effective dose equivalent occurred in 2000 with a value of 22.31 mSv/yr [2,231 mrem/yr] (BWXT, 2004b). These doses are below the NRC 50 mSv [5,000 mrem] annual occupational dose limit in 10 CFR 20.1201.

4.0 ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION AND THE NO ACTION ALTERNATIVE

The proposed action is for a license renewal of the existing BWXT facility. No changes to facilities or operations are associated with this renewal. The level of activity for the various operations changes over time, which can result in fluctuations in the amount of effluents. The evaluation of the environmental impacts of the license renewal, however, can be based on the impacts from past and current operations. The short-term impact for the no action alternative would result from closing the facility and from the decommissioning activities associated with license termination. The long-term impact for the no action alternative would depend on the license termination approach chosen by BWXT. This approach would dictate whether the land is released for restricted or unrestricted use based on the level of decontamination achieved.

4.1 Nonradiological Impacts

No change in impacts from the proposed action on land use are anticipated. The various facilities at the BWXT site already exist and are operating. No plans exist to expand facilities at the site. Future expansion within the industrial portion of the site is likely, however. The no action alternative would have an impact on land use. In the short term, decommissioning activities could require areas within the site for equipment, waste, and decontamination.

No change in impacts due to the proposed action are anticipated from the transportation routes to the site. The quantity and type of shipments to the site are anticipated to continue at present levels, so the proposed action would not cause an increase in traffic or require expanding the infrastructure. The short-term impact for the no action alternative would be a significant increase in amount of material shipped offsite as a result of decommissioning activities.

Because no new work activities are proposed, the proposed action to renew License SNM-42 would not have a significant socioeconomic impact on the region. BWXT would continue to directly employ about 2,400 workers, representing about 2-3 percent of the regional civilian labor force. There is sufficient available housing to meet likely fluctuations in the BWXT work force. Impacts from the no action alternative are potentially significant. The expiration of the license would require closing the BWXT facility and eliminate the need for a work force of 2,400. Many of the work requirements at the BWXT facility are specialized, and it is unlikely that a sufficient number of similar positions would be found to replace these jobs in the local economy. Decommissioning activities would continue to provide some employment for a period of time, but these activities would likely require a significantly reduced work force that would no longer be needed upon completing the decommissioning of the site.

No change in impacts to the air quality from nonradiological contaminants are anticipated because of the proposed action. Without changes to the facilities or operations, the type of contaminants produced at the site would not change. The NPD emission quantities vary over time but current levels are well below applicable limits. The short-term impact for the no action alternative could be an increase in emissions, especially for particulate matter, associated with decommissioning activities.

No change in impacts to water quality is anticipated because of the proposed action. In August 2003, BWXT converted to a public water supply, thus eliminating the need for withdrawals from the James River. The impact of BWXT operations no longer includes the disruption of flow of the James River and the drawdown of the local water table. Potential surface water impacts associated with operation of the BWXT facility include the degradation of James River water quality due to contaminant release. This potential impact is minimized by compliance with the discharge limits outlined in the VPDES permit. Current effluent quality characteristics are well within the permit limitations (BWXT, 2004b). Potential groundwater impacts include the degradation of groundwater quality due to contamination caused by leaks or spills of material into the soil. This potential impact is minimized by implementing engineering controls such as equipment designed to contain spills. Administrative controls (e.g., routine leak inspections) also are used to minimize the potential impact. With the corrective actions and monitoring programs currently in effect, continued operations at the BWXT facility should not result in additional negative impacts on the local groundwater system. No filling or other impact to identified jurisdictional wetlands or "waters of the U.S." is expected as a result of the current operation of the BWXT facility.

The site geology and soils will not be impacted by the proposed action because no changes to the land are associated with the license renewal. The presence of vegetation and maintenance of the facilities, parking lots, and roadways helps control erosion at the site. Decommissioning activities associated with the no action alternative may have a short term impact on the site surficial geology.

Site ecology would not be affected by the proposed action. Impacts to native flora and fauna, including those on the Federal and state threatened or endangered species lists, are unlikely.

The proposed action would not result in any additional impacts to the regional historic and cultural resources because the facility already exists, and no expansion or change of activity is associated with the license renewal. In the short term, the decommissioning activities associated with the no action alternative may have historical and archeological impacts within the BWXT site. Facility structures, some of which are 50 years of age or older and considered potentially eligible for listing on the National Register of Historic Places, might be removed. Furthermore, areas not previously disturbed, which may contain potentially significant archaeological resources, may be impacted by decommissioning activities.

No change in impacts to noise levels is anticipated because of the proposed action because currently no plans exist that would result in a noise level change. The short-term impact for the no action alternative might be an increase in noise levels if the decommissioning included demolition of facilities.

No change in impacts to nonradiological waste management is anticipated because of the proposed action. The BWXT facility would continue to generate and handle wastes in a

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manner consistent with past operations. Nonradiological waste disposed onsite is limited to small quantities of fill material occasionally used during construction activities. Because this material is inert, no environmental impacts are expected. The short-term impact for the no action alternative would be an increase in the quantity of waste associated with decommissioning the facility.

The proposed action is not expected to change nonradiological impacts to public and occupational health, because no changes in facilities or operations are associated with the license renewal.

4.2 Radiological Impacts

4.2.1 Normal Operations

No change in impacts to the air quality from radiological contaminants is anticipated because of the proposed action. The types of radiological contaminants produced at the site would be similar to the past with some fluctuation in quantities due to variations in operations. The NPD radiological releases are within applicable regulatory limits of 10 CFR Part 20 (BWXT, 2004b).

No change in impacts to water quality is anticipated because of the proposed action. Water quality can be negatively impacted by the release of radioactive material into surface water and groundwater. The levels of radioactive material released into the surface water are below discharge limits in 10 CFR Part 20 (BWXT, 2004b). Groundwater monitoring for radiological material has indicated that BWXT operations have not had a significant impact (BWXT, 2004b).

No change in impacts from low-level and high-level radiological waste management is anticipated because of the proposed action. The BWXT facility would continue to generate and handle these radiological wastes consistent with past operations. Low-level waste would be sent offsite for disposal, and high-level waste would be stored (b)(4)

(b)(4) Potential impacts from mixed waste may be lessened because of reduced amounts stored onsite. According to the previous environmental assessment (NRC, 1995a), mixed waste was accumulated onsite because no licensed commercial facilities were available for disposal of this material. Currently, BWXT ships mixed waste offsite to a licensed commercial facility. Ex 4

The proposed action is not expected to result in any change in radiological impacts to public and occupational health. The dose for the maximally exposed individual of the general public is a small fraction of the NRC's 1.0 mSv [100 mrem] annual limit in 10 CFR 20.1301 and indicates that facility operations will have no significant impact on public health and safety (BWXT, 2004b). Occupational exposures also are maintained below the NRC limit of 50 mSv/yr [5,000 mrem/yr] specified in 10 CFR 20.1201 (BWXT, 2004b).

4.2.2 Accidents

The NRC is performing a detailed safety review of the BWXT facility. This review, including consideration of potential accident scenarios, consequences, and compliance with NRC regulations, will be documented in a separate safety evaluation report.

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Within the NPD facilities, materials are handled that could pose a risk to public health and safety if released during accidents. An accident scenario may result in releasing a higher concentration of material over a shorter time period relative to releases associated with normal operations. In accordance with NRC regulations in 10 CFR Part 70, BWXT has conducted an integrated safety analysis of the Lynchburg facility. The integrated safety analysis identifies hazards, estimates likelihood, and identifies potential consequences. The controls used to limit, prevent, or mitigate potential accidents are also identified. Hazards examined include radiological, nuclear criticality, fire, and chemical.

The results of the integrated safety analysis are documented in an integrated safety analysis summary and a series of safety analysis reports. In general, safety analysis reports are written for each major area or operation. These documents are classified as proprietary or confidential. Only a portion of the safety analysis reports were made available to staff preparing this environmental assessment.

(b)(4)

(b)(4)

Ex 4

4.3 Cumulative Impacts

The NRC staff has evaluated whether cumulative environmental effects could result from the incremental impacts of the SNM-42 license renewal for the BWXT facility when added to relevant past, present, or reasonably foreseeable future actions in the area. The relevant other actions include the past, current, and future operation of the BWXT facility (under a renewed license) and the continued operation of the nearby AREVA facility. No significant cumulative effects were identified for the areas discussed as the affect environment. The BWXT facility is in compliance with relevant environmental standards and regulations and NRC regulations. Further, the facility uses a formal ALARA program, routine environmental and radiation monitoring, and other planning and management measures to minimize the associated direct, indirect, and cumulative effects (BWXT, 2003g).

4.4 Monitoring

BWXT monitors for the presence of contamination in the facility effluents and the environment in and around the site to assess impacts on health and to comply with various regulations and requirements. Samples are collected from the air, groundwater, surface water, sediment, soil, and vegetation. Collection frequency and action levels differ for the various sample types. Responses to sample results that exceed action levels include investigation, further sampling, corrective action, and notification to the regulatory agency, if required. Typical corrective actions include the repair, replacement, cleaning, modification, or addition of equipment (BWXT, 2002).

Air samples are analyzed for nonradioactive and radioactive contaminants. The Title V permit regulating nonradiological air pollutants does not require facility stacks to be physically sampled for analyses. The stacks are observed on a weekly basis for any visible emissions or opacity. If visible emissions are observed, a sample is collected for an official opacity determination, and the results are compared to the limits in the operating permit. The monitoring for radiological contaminants at the point of emission varies from continuous to daily based on the particular stack or activity. Air samples for radiological analyses are collected from four boundary locations on a weekly basis.

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Water samples are analyzed for nonradioactive and radioactive contaminants, and the WTF liquid effluent is monitored for several nonradioactive parameters. The monitoring frequency varies by parameter and ranges from continuous to quarterly. The details are specified in the VPDES permit. Composite samples from the WTF liquid effluent are analyzed for alpha and beta/gamma radiological contamination on both a daily and monthly basis. Other water samples from groundwater, surface water, and various ponds and pools within the facility are collected and analyzed for radiological contaminants. The monitoring frequency varies from monthly to yearly and is specified for each location in the license. The majority of the site stormwater from industrial areas discharges through outfalls 002 and 003. The VPDES permit requires annual sampling for these outfalls for several nonradioactive parameters. The VPDES permit also requires BWXT to maintain an approved Storm Water Pollution Prevention Plan that covers industrial activity throughout the site.

Sediment, vegetation, and soil samples are analyzed for alpha and beta/gamma contamination. Samples are collected on a semi-annual basis (except for a few soil samples that are collected quarterly) as required by the NRC license.

Radiation monitors (thermoluminescent dosimeters or equivalent) are used for continuous monitoring around the LTC boundary.

The Virginia Department of Health also has performed environmental monitoring of the BWXT facility by collecting air, soil, vegetation, and water samples since 1983⁹.

5.0 AGENCIES AND PERSONS CONSULTED

In accordance with NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs (NRC, 2003a), the NRC staff consulted with other agencies regarding the proposed action. These consultations were intended to provide other agencies an opportunity to comment on the proposed action and to ensure that the requirements of Section 106 of the National Historic Preservation Act and Section 7 of the Endangered Species Act were met with respect to the proposed action. Consultation letters for this environmental assessment are provided in the Appendix.

5.1 Commonwealth of Virginia

On May 19, 2005, the NRC staff provided 18 copies of the final preliminary environmental assessment for this proposed action to the Virginia DEQ. The DEQ is responsible for coordinating Virginia's review of environmental assessments and requested 18 copies. The DEQ provided the environmental assessment copies to a variety of organizations within the Commonwealth for comment. Certain security-sensitive and proprietary information was redacted from the environmental assessment, as appropriate. The NRC requested at the end of the review, DEQ either destroy the copies or return them to the NRC. On July 19, 2005, DEQ returned 13 copies of the redacted final preliminary environmental assessment and

⁹Foldesi, L. "Nuclear Regulatory Commission's Environmental Assessment (EA) on the License Renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility." Letter (June 17) to C. Ellis, DEQ. Richmond, Virginia: Commonwealth of Virginia, Department of Health. 2005. (Official Use Only).

notified the NRC that the remaining copies had been destroyed. In addition to providing their own comments, the DEQ received comments from the following organizations:

- DGIF
- Department of Agriculture and Consumer Services
- Department of Conservation and Recreation
- Department of Health
- Marine Resources Commission
- Department of Historic Resources (DHR)
- Campbell County

The DEQ provided a summary of the comments to the staff in a letter from the Office of the Environmental Impact Review Program Manager dated June 30, 2005 (provided in the Appendix). All organizations that provided comments generally agreed that license renewal would not result in any significant impacts since the proposed action did not include any changes to facilities or operations. Several organizations provided comments that would be relevant if changes to the facilities or operations were proposed by BWXT. Because this license renewal does not propose any changes to the facilities or operations, the environmental assessment was not revised in response to these comments. The NRC will conduct a separate environmental review for any future license amendment requests as part of the licensing review process. The following discussion summarizes the major comments for this proposed action and provides the NRC staff responses. These comments were provided to the NRC by the DEQ, which collected and summarized the comments on behalf of a variety of organizations within the state. The DHR had previously provided comments directly to the NRC staff, and these are documented in Section 5.2 of this environmental assessment.

Comment: The DHR recommended NRC include the finding of "No Historic Properties Affected" in the final environmental assessment.

Response: The NRC conclusion was that the proposed action would not result in any additional impacts to the regional historic and cultural resources.

Comment: The DHR recommended NRC include the March 9, 2005, letter as an attachment to the final environmental assessment.

Response: An appendix that contains the March 9, 2005, DHR letter and other consultation letters has been included in this environmental assessment.

Comment: The DGIF reports that the James River in the vicinity of the facility is a Potential Anadromous Fish Use Area.

Response: Section 3.6.2 of this environmental assessment has been revised to include this information.

Comment: The DGIF reports that James River is designated as a Threatened and Endangered Species Water due to the documented presence of the Atlantic pigtoe.

Response: Section 3.6.3 of this environmental assessment has been revised to include this information.

Comment: The DGIF reports that a Bald eagle nest exists approximately 1.6 km [1 mi] from the BWXT facility.

Response: Section 3.6.3 of this environmental assessment has been revised to include this information.

Comment: The DGIF emphasizes the need for strict environmental monitoring to ensure contaminants are not leaching into the surrounding soil, groundwater, or wetlands since the facility is situated on the James River floodplain.

Response: The current environmental monitoring program is documented in Section 4.5 of this environmental assessment. The proposed action does not identify any changes in the activities or facilities at the site. The NRC will conduct separate environmental reviews for any future license amendment requests associated with proposed changes to the facility or operations.

Comment: The DGIF noted that additional information about wildlife locations, including threatened and endangered species, trout streams, and anadromous fish water is available through its website at http://www.dgif.virginia.gov/wildlife/info_map/index.html.

Response: The specific referenced website was investigated. No changes to the text of the environmental assessment resulted from this investigation because no substantially new information was discovered.

Comment: The DGIF sought clarification of the phrase "used for plant operations" for the four wetlands not considered jurisdictional under the Clean Water Act.

Response: All four wetland areas are man-made ponds that are used for storm water management or for effluent collection points as part of the waste treatment process. Section 3.4.3 of this Environmental Assessment has been revised to include this information.

Comment: The DGIF requested to know whether the four wetlands that are not considered jurisdictional under the Clean Water Act are protected by the Virginia Water Protection Permit Program.

Response: The manager of the Virginia Water Protection Permit Program was contacted by phone on July 25, 2005. The manager stated that the four areas would not be classified as "waters of the United States" or as "waters of the state" and as part of plant operations would only need to be regulated under the VPDES¹⁰. Section 3.4.3 of this environmental assessment has been revised to include this information.

Comment: The DGIF recommended compensation be provided if the four nonjurisdictional wetlands were impacted without the necessary permits.

¹⁰Strye, B. "Phone Conversation Documentation for BWXT EA Comment Resolution." Phone conversation (July 25) with C. Harold, Virginia Water Protection Permit Program documented in email (July 29) from B. Werling, Center for Nuclear Waste Regulatory Analyses, to R. Linton, NRC. Houston, Texas: Raba Kistner. 2005.

Response: The four areas are being regulated under VPDES Permit Number 00367. No additional permits are required, so no compensation will be necessary.

Comment: The Department of Health sought clarification concerning the use of the James River as a drinking water source. Section 3.4.1 of the environmental assessment states that the James River is currently not designated for drinking water use. The Department of Health reports that the James River is a source of drinking water for Richmond, Virginia, approximately 161-km [100-mi] downstream from the facility.

Response: Information obtained in a phone conversation with DEQ personnel on July 28, 2005, revealed that James River water quality is assessed in sections. The river section in the vicinity of the BWXT facility is currently not designated for drinking water use. Section 3.4.1 of this environmental assessment has been revised to include this information.

Comment: The Department of Health commented that it has performed environmental monitoring of the facility since 1983.

Response: Section 4.4 of this environmental assessment has been revised to include this information.

Comment: The DEQ Waste Division noted that the environmental assessment did not include a search of waste-related databases and provided a website address that might provide helpful information by using the BWXT facility Resource Conservation and Recovery Act hazardous waste identification number.

Response: As noted in the memorandum from the Waste Division Environmental Review Coordinator^{11,12} both solid and hazardous waste issues were addressed adequately in the environmental assessment. The specific website referenced was investigated. No changes to the text of the environmental assessment resulted from this investigation because no substantially new information was discovered.

Comment: The DEQ Waste Division offered guidance on construction and demolition precautions. Specific comments on construction related to the proper disposal of soils suspected of contamination or wastes. Specific comments on demolition or renovation related to checking for and properly handling asbestos-containing materials and lead-based paint.

Response: The current proposed action does not identify any construction or demolition of facilities at the site. NRC will conduct separate environmental reviews for any future license amendment requests associated with proposed changes to the facility.

¹¹Irons, E. "Preliminary Final Environmental Assessment, License Renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility NRC Docket No. 70-27, DEQ-05-149F." Letter (June 30) to J. Davis, NRC. Richmond, Virginia: Commonwealth of Virginia, DEQ. 2005. (Official Use Only).

¹²Brockman, A. "Environmental Assessment: USNRC—License Renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility, DEQ Project #05-149F." Memorandum (June 27) to C. Ellis, Commonwealth of Virginia, DEQ. Richmond, Virginia: Commonwealth of Virginia, DEQ. 2005. (Official Use Only).

5.2 Virginia Department of Historic Resources

On January 23, 2005, the NRC staff provided a copy of the draft environmental assessment for this proposed action to DHR for review and comment. Certain security-sensitive and proprietary information was redacted from the draft as necessary. The DHR provided its comments on the redacted draft environmental assessment in a letter¹³. The following discussion summarizes the DHR major comments and provides the NRC staff responses.

Comment: The DHR archival records indicate that several historic and archaeological resources are recorded within or adjacent to the subject property.

Response: As noted by DHR, six archaeological sites (44CP87–44CP92) associated with the James River and the Kanawha Canal are located on BWXT property. These sites are expected to be located between the CSX railroad tracks and the river. In addition, a prehistoric site (44CP5) is located along the railroad tracks north of the BWXT facility, and another prehistoric site (44CP22) is located within the adjacent AREVA facility. The historical significance of these resources has not been evaluated. The 9-mile Bridge (DHR Identification No. 005-0218) is located to the northeast of the facility and has been determined eligible for listing on the National Register of Historic Places.

Section 3.8 of this environmental assessment has been revised to identify the existence of these sites. As noted by DHR, the current proposed action (renewal of the license No. SNM–42) does not identify any changes in activities at the facility that are likely to have a significant impact on identified historic sites. NRC will conduct separate environmental reviews for future license amendment requests associated with proposed changes to facility operations as part of the licensing review process. Part of these reviews will take into consideration the potential for impacts to historic resources and identify any additional consultations or mitigation measures that may be necessary.

Comment: The potential impacts from future development to recorded and unrecorded archaeological resources should be considered.

Response: As noted by DHR, the current proposed action (renewal of the license No. SNM–42) does not identify any changes in activities at the facility that are likely to have a significant impact on recorded and unrecorded archaeological resources. The NRC will conduct separate environmental reviews for future license amendment requests as part of the licensing review process. Part of these reviews will take into consideration the potential impacts to archaeological resources from proposed changes to existing operations and facilities and identify any additional consultations or mitigation measures that may be necessary.

Comment: Since BWXT operations at the site began in 1955, any element of the facility that dates to the earliest period of operation should be considered potentially eligible for listing on the National Register of Historic Places. The historic significance of any structure 50 years of age or older should be evaluated when future actions at the facility are contemplated.

¹³Kirchen, R.W. Letter (March 9) to J. Davis, NRC. "Comments on Docket No.: 70-27 Renewal of NRC License for BWX Technologies, Inc. DHR File No. 2003-0590." Richmond, Virginia: Commonwealth of Virginia, Department of Historic Resources. 2005. (Official Use Only).

Response: As noted by DHR, the current proposed action (renewal of the license No. SNM-42) does not identify any changes in activities at the facility that are likely to have a significant impact on elements of the facility that are potentially eligible for listing on the National Register of Historic Places. NRC will conduct separate environmental reviews for future license amendment requests associated as part of the licensing review process. Part of these reviews will take into consideration the potential for impacts to potentially eligible structures at the facility from proposed changes to existing operations and identify any additional consultations or mitigation measures that may be necessary.

5.3 Fish and Wildlife

On January 23, 2005, the NRC staff provided a copy of the draft environmental assessment for the proposed action to the Fish and Wildlife Service for review and comment. Certain security-sensitive and proprietary information was redacted from the draft as necessary. In a letter from K. Mayne of the Virginia Field Office dated March 22, 2005, the Fish and Wildlife Service expressed the view that the proposed action will not adversely affect federally listed species or federally designated critical habitat.

5.4 Virginia Council on Indians

On March 31, 2005, the NRC staff discussed its preliminary findings with Deanna Beacham of the Virginia Council on Indians. Ms. Beacham indicated that the site was most likely old Monacan Indian territory and that since this was for a license renewal and no construction was proposed, she would not need to review the draft environmental assessment.

6.0 CONCLUSION

The NRC staff concludes that the proposed renewal of license SNM-42 involving the continued NPD operations at the BWXT site in Lynchburg will not result in a significant impact to the environment. The NRC staff concludes that the proposed action will not adversely affect federally listed species or federally designated critical habitat because no federally listed species are known to occur in the project area. The NRC staff finds that no historic properties will be affected by the proposed action. The facility is already built, and no changes to the operations are associated with the license renewal. The proposed action can be viewed as a continuation of impacts and can be evaluated based on the previous impacts from past operations.

Airborne effluents released through stacks and liquid effluents released in the James River are below regulatory limits for nonradiological and radiological contaminants. The radiological dose associated with the exposure to these effluents for the maximally exposed individual is less than 1 percent of the NRC's 1.0 mSv [100 mrem] annual limit in 10 CFR 20.1301 (BWXT, 2004b). Occupational doses are also well below regulatory limits.

The environmental impacts of the proposed action have been evaluated in accordance with the requirements presented in 10 CFR Part 51. The NRC staff has determined that the renewal of license SNM-42 allowing continued NPD operations at the BWXT facility will not have a significant impact on the human environment. No environmental impact statement is required, and a finding of no significant impact is appropriate in accordance with 10 CFR 51.31.

7.0 LIST OF PREPARERS

G. Adams, Research Engineer, Waste and Radiological Operations—Accidents

L. Canter, Consultant, Cumulative Impacts

E. Fedors, Consultant, Regional Historic, Scenic, and Cultural

N. Franklin, Scientist, Geology and Seismology

R. Linton, Project Manager, All sections

F. Osidele, Senior Research Engineer, Performance Assessment

M. Smith, Senior Research Engineer, Climatology, Meteorology, Background Radiological Characteristics, and Public and Occupational Health

B. Strye, Environmental Professional, Ecology

D. Turner, Assistant Director of Non-Repository Programs, Demography and Socioeconomic

B. Werling, Research Scientist, Site Description, Land Use, Air Quality, Transportation, Noise, Waste, and Monitoring

~~Withhold~~

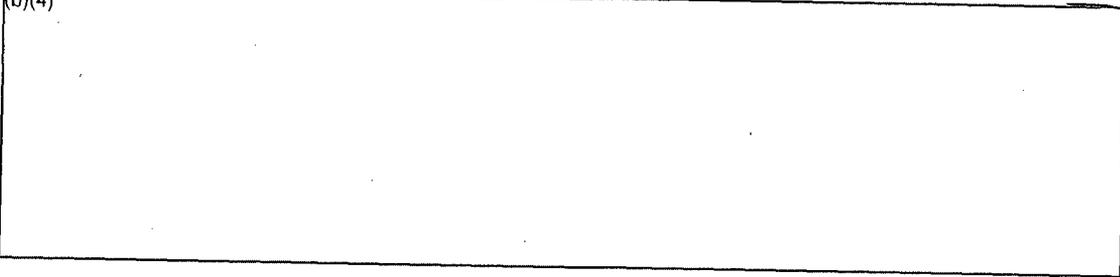
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8.0 LIST OF REFERENCES

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(b)(4)



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APPENDIX

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— OFFICIAL USE ONLY —
UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 23, 2005

State Historic Preservation Officer
ATTN: Mr. Roger Kirchen, Archaeologist
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221

SUBJECT: INITIATION OF THE NATIONAL HISTORIC PRESERVATION ACT SECTION 106 PROCESS FOR THE PROPOSED LICENSE RENEWAL OF THE BWX TECHNOLOGIES NUCLEAR FUEL FABRICATION FACILITY, LYNCHBURG, VIRGINIA

Dear Mr. Kirchen:

BWX Technologies (BWXT), Nuclear Products Division, has submitted a license renewal application to the U.S. Nuclear Regulatory Commission (NRC) to continue operations at their facility in Campbell County, Virginia, near Lynchburg. The NRC is in the initial stages of developing an Environmental Assessment (EA) in conjunction with the review of this license renewal application. A copy of the draft EA is enclosed for your review. The area of potential effects is defined as the 476 acre BWXT site that is located approximately 5 miles east of Lynchburg, Virginia, along the southern bank of the James River and can be located on the U.S. Geological Survey Kelly Quadrangle. The location of the facility is diagramed in figure 1 and figure 2 of the draft EA. There are no major modifications planned to the existing facility within the 476 acre site.

As required by 36 CFR 800.4(a), the NRC is requesting the views of the State Historic Preservation Officer on further actions to identify historic properties that may be affected by the NRC's proposed action to renew the license to allow continued operations at the BWXT facility. After assessing the information provided by you, we will determine what additional actions are necessary to comply with the Section 106 consultation process.

Within the four county area (Amherst, Appomattox, Bedford, and Campbell) containing and surrounding BWXT, 52 registered historical sites are listed on the National Register of Historic Places. There are only two sites within 3 miles of the facility, the Mt. Athos Plantation and the Norfolk & Southern 6-Mile Bridge. Enclosed is a completed Virginia Department of Historic Resources Project Review Form. For security reasons, we have not enclosed a topographic map or coordinates for the facility.

OFFICIAL USE ONLY

Not exempt from public release under the Freedom of Information Act (5 U.S.C. 552)

Exemption number 1

Nuclear Regulatory Commission review required before public release.

Miss. L. 11/10/04

Names and organization of persons involved in determination.

Determination 1/5/05

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R. Krichen

-2-

The draft EA is not classified information, but is sensitive Official Use Only. Portions of the draft EA have been redacted. The draft EA should not be duplicated and should be kept within a controlled access area or a locked drawer when not being reviewed. At the end of the consultation process, we request that the draft EA either be returned to the NRC or a letter sent to us confirming its destruction. If you have any questions or comments, or need any additional information, please contact Ron C. Linton of my staff at 301-415-7777.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Jennifer Davis". The signature is stylized and cursive.

B. Jennifer Davis, Section Chief
Division of Waste Management
and Environmental Protection
Office of Nuclear Material Safety
and Safeguards

Docket No.: 70-27

Enclosures:

1. VDHR Project Review Form
2. Draft EA (redacted)

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VIRGINIA DEPARTMENT OF HISTORIC RESOURCES
PROJECT REVIEW FORM

This application may be completed for all projects that will be federally funded, licensed, or assisted. Allow 30 days from receipt for the review of a project. All information on the form must be completed before review of a project can begin.

DHR Use Only

Date Received: _____

GENERAL INFORMATION

1. Project Name: BWX Technologies (BWXT) renewal of US Nuclear Regulatory Commission (NRC) license

2. Project Location (City or County): Campbell County

3. Federal Agency (providing funding, assistance, license, or permit): NRC

4. Agency Contact Person, Address, and Phone: Ron C. Linton, Project Manager, M.S. T7 J08, Washington DC 20555 phone (301) 415-7777

5. Other Federal Agencies involved (include names and addresses of contacts): not applicable

6. Name and Firm of Applicant: BWXT

7. Address and Phone Number of Applicant: BWXT, P.O. Box 785, Lynchburg, VA, 24505-0785, (434) 522-6000

DESCRIPTION AND LOCATION

A photocopy of a 7.5 minute USGS topographic quadrangle, or a clearly labeled portion thereof, showing the exact boundaries of the project area must be attached to the application. The map should not be reduced or enlarged.

8. USGS Quadrangle Name: Kelly, (see draft EA, quad map not enclosed for security reasons)

9. Number of acres included in the project: 476

10. Has this project been previously reviewed by the DHR?

Yes: _____ No: _____ Do Not Know: X (If yes, give the DHR file no., if known)

11. Have any architectural or archaeological surveys of the area been conducted?

Yes: _____ No: _____ Do Not Know: X

(If yes, list author, title, date of the report _____)

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Enclosure 1

12. Project Description

A. Explain any ground disturbance that might occur (e.g. excavating for sewer or utility installations, digging footings, grading roads, or developing erosion controls). Describe existing land use within the project area (e.g. plowed, residential, forest, etc.). Mention any previous modifications (e.g. grading, plowing, filling).

No major modifications are planned to the existing facilities. _____

B. Are any structures more than 50 years old within or adjacent to the project area?

Yes: ____ No: X Do Not Know: ____ BWXT has conducted operations since 1955 at the site. (A photograph of each structure over 50 years of age keyed to the USGS quad within or adjacent to the project area must be submitted.) Pictures of the BWXT facility are not permitted due to the security classification.

C. Does the project involve the rehabilitation, alteration, removal, or demolition of any structure, building, designed site (e.g. park, cemetery), or district that is 50 years or older?

Yes: ____ No: X Do Not Know: ____

(If yes, describe extent of alterations to property. Attach additional page(s) if necessary.)

To the best of my knowledge, I have accurately described the proposed project and its likely impacts.

B. J. D. C.
Signature of Applicant/Agent

1/23/05
Date

When completed, send this form and all required attachments to the address below. If you have any questions, please contact the Division of Resource Services and Review at (804) 367-2323, ext.106.

Department of Historic Resources
Division of Resource Services and Review
2801 Kensington Avenue
Richmond, VA 23221

This space for DHR response only:	
Comments _____	

Signature _____	Date _____
Phone Number _____	DHR File No. _____



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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 23, 2005

Mr. David Sutherland, Biologist
U.S. Fish and Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401

SUBJECT: SECTION 7 CONSULTATION, REQUEST FOR CONCURRENCE ON NRC'S DETERMINATION OF EFFECTS ON FEDERALLY LISTED SPECIES AND THEIR CRITICAL HABITATS FOR THE BWX TECHNOLOGIES FACILITY, LYNCHBURG, VIRGINIA

Dear Mr. Sutherland:

BWX Technologies (BWXT), Nuclear Products Division, has submitted a license renewal application to the U.S. Nuclear Regulatory Commission (NRC) to continue operations at their facility in Campbell County, Virginia, near Lynchburg. The NRC has developed a draft Environmental Assessment (EA) in conjunction with the review of this license renewal application. The action area of influence is defined as a four mile radius around the site. The BWXT site is located approximately 5 miles east of Lynchburg, Virginia, along the southern bank of the James River and can be located on the U.S. Geological Survey Kelly Quadrangle. A copy of the draft EA is enclosed for your review. The location of the facility is diagrammed in figure 1 and figure 2 of the draft EA. There are no major modifications planned to the existing facility within the 476 acre site.

After development of the draft EA and a review of the potential impacts of the proposed action, we have determined that the proposed action "may affect" listed species or their designated critical habitat. However, these effects are expected to be insignificant. We have concluded that the proposed action is "not likely to adversely affect" any endangered or threatened species or critical habitat within the area of influence for the proposed action. The supporting basis for this conclusion is the draft EA. We request your concurrence with NRC's determination of "not likely to adversely affect" any listed species or their critical habitat.

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May be exempt from public release under Freedom of Information Act (5 U.S.C. 552)	
Exemption number	
Nuclear Regulatory Commission review required before public release	
Name and title of person making determination	M. J. S.
Date of determination	1/16/05

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~~OFFICIAL USE ONLY~~

D. Sutherland

-2-

The draft EA is not classified information, but is sensitive Official Use Only. Portions of the draft EA have been redacted. The draft EA should not be duplicated and should be kept within a controlled access area or a locked drawer when not being reviewed. At the end of the consultation process, we request that the draft EA either be returned to the NRC or a letter sent to us confirming its destruction. If you have any questions or comments, or need any additional information, please contact Ron C. Linton of my staff at 301-415-7777.

Sincerely,



Jennifer Davis, Section Chief
Division of Waste Management
and Environmental Protection
Office of Nuclear Material Safety
and Safeguards

Docket No.:70-27

Enclosure: Draft EA (redacted)

~~OFFICIAL USE ONLY~~

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COMMONWEALTH of VIRGINIA

W. Taylor Murphy, Jr.
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

March 9, 2005

Ms. B. Jennifer Davis, Section Chief
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

RE: COMMENTS ON DOCKET NO.: 70-27
Renewal of NRC License for BWX Technologies, Inc
DHR File No. 2003-0590

Dear Ms. Davis:

Thank you for your request for comments on the Draft Environmental Assessment for the project referenced above. Although the established boundaries for the 476-acre BWX Technologies, Inc. (BWXT) facility are not adequately shown in the correspondence, our archival records indicate that several resources are recorded within or adjacent to the subject property. Our Archives maintain information on the specific location of these recorded resources if you wish to include them in your planning documents.

Six archaeological sites (44CP87 - 92) associated with the James River & Kanawha Canal surround the facility and are generally found adjacent to the river. The significance of these resources has not been evaluated, but other features associated with this canal have been determined eligible for listing on the National Register of Historic Places. Site 44CP22 is a prehistoric site located within the current AREVA facility and has not been evaluated. Site 44CP5 is a prehistoric site located along the railroad tracks north of the BWXT facility and has not been evaluated. The Nine Mile Bridge (DHR ID #005-0218) located northeast of the facility has been determined eligible for listing on the National Register. Given that BWXT has conducted operations at the subject site since 1955, any elements of the facility that date to the earliest period of operation should be considered potentially eligible for listing on the National Register.

We are of the opinion that the relicensing of the BWXT facility, with no proposed improvements, will not impact any known historic architectural or archaeological resources listed on or eligible for the National Register of Historic Places. Accordingly, inclusion of your finding of *No Historic Properties Affected* in the final EA, along with this letter of concurrence, will provide the interested public the opportunity to inspect the documentation prior to approval of the undertaking in accordance with 36 CFR 800.4(d)(1) of the regulations implementing Section 106 of the National Historic Preservation Act of 1966 (as amended). We recommend, however, that the NRC and BWXT consider the historic significance of any structures fifty

Administrative Services
10 Courthouse Avenue
Petersburg, VA 23103
Tel: (804) 863-1624
Fax: (804) 863-1104

Capital Region Office
2801 Kensington Ave.
Richmond, VA 23221
Tel: (804) 367-2323

Tidewater Region Office
12412 Old Dominion Blvd., 2nd Floor
Newport News, VA 23606
Tel: (757) 887-7111

Roanoke Region Office
1020 Peters Ave., SE
Roanoke, VA 24013
Tel: (540) 857-7444

Winchester Region Office
107 N. Kent Street, Suite 203
Winchester, VA 22601
Tel: (336) 733-1177

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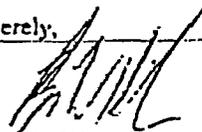
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Page 2
March 9, 2005
Mr. Ron C. Linton

years of age or old during future actions at the facility. In addition, the potential impacts from future development to recorded and unrecorded archaeological resources should be considered.

Thank you for seeking our comments on the impacts of this project on historic properties. If you have any questions about these comments or our review process, please do not hesitate to contact me at (804) 367-2323, ext. 153; fax (804) 367-2391; e-mail roger.kirchen@dhr.virginia.gov.

Sincerely,



Roger W. Kirchen, Archaeologist
Office of Review and Compliance

Cc: Mr. Ron C. Linton, Project Manager, NRC

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United States Department of the Interior



FISH AND WILDLIFE SERVICE
Ecological Services
6669 Short Lane
Gloucester, VA 23061

Date: March 22, 2005Project name: BWX TECHNOLOGIES FACILITYProject number: 89194 City County, VA LYNCHBURG, VA

The U.S. Fish and Wildlife Service (Service) has reviewed your request for information on federally listed or proposed endangered or threatened species and designated critical habitat for the above referenced project. The following comments are provided under provisions of the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

We believe that the proposed action will not adversely affect federally listed species or federally designated critical habitat because no federally listed species are known to occur in the project area. Should project plans change or if additional information on listed and proposed species becomes available, this determination may be reconsidered.

We recommend that you contact both of the following State agencies for site specific information on listed species in Virginia. Each agency maintains a different database and has differing expertise and/or regulatory responsibility:

Virginia Dept. of Game & Inland Fisheries
Environmental Services Section
P.O. Box 11104
Richmond, VA 23230
(804) 367-1000

Virginia Dept. of Conservation and Recreation
Division of Natural Heritage
217 Governor Street, 2nd Floor
Richmond, VA 23219
(804) 786-7951

If either agency indicates a federally listed species is present, please resubmit your project description with letters from both agencies attached.

If appropriate habitat may be present, we recommend surveys within appropriate habitat by a qualified surveyor. Enclosed are county lists with fact sheets that contain information the species' habitat requirements and lists of qualified surveyors. If this project involves a Federal agency (Federal permit, funding, or land), we encourage the Federal agency to contact this office if appropriate habitat is present and if they determine their proposed action may affect federally listed species or critical habitat.

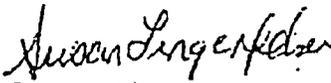
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_____ Determinations of the presence of waters of the United States, including wetlands, and the need for permits are made by the U.S. Army Corps of Engineers. They may be contacted at: Regulatory Branch, U.S. Army Corps of Engineers, Norfolk District, 803 Front Street, Norfolk, Virginia 23510, telephone (757) 441-7652.

Our website <http://virginiafieldoffice.fws.gov> contains many resources that may assist with project reviews. Point of contact is J. ERIC DAVIS at (804) 693-6694, ext. 104.

Sincerely,


B. Karen L. Mayne
Supervisor
Virginia Field Office

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Ms. Ellie L. Irons
Program Manager
Office of Environmental Impact Review
Virginia Department of Environmental Quality
629 East Main Street
P. O. Box 10009
Richmond, Virginia 23240

SUBJECT: ENVIRONMENTAL IMPACT REVIEW OF U. S. NUCLEAR REGULATORY
COMMISSION PRELIMINARY FINAL ENVIRONMENTAL ASSESSMENT FOR
BWX TECHNOLOGIES FACILITY, LYNCHBURG, VIRGINIA

Dear Ms. Irons:

BWX Technologies (BWXT), Nuclear Products Division, has submitted a license renewal application to the U.S. Nuclear Regulatory Commission (NRC) to continue operations at their facility in Campbell County, Virginia, near Lynchburg. The NRC has developed a preliminary final Environmental Assessment (EA) in conjunction with the review of this license renewal application. The NRC is submitting the EA to your office for review and comment. Eighteen copies of the preliminary final EA are enclosed.

The BWXT site is located approximately 5 miles east of Lynchburg, Virginia, along the southern bank of the James River and can be located on the U.S. Geological Survey Kelly Quadrangle. The location of the facility is diagrammed in figure 1 and figure 2 of the preliminary final EA. There are no major modifications planned to the existing facility within the 476 acre site.

The NRC has contacted the U.S. Fish and Wildlife Service in conjunction with our Section 7 consultation under the Endangered Species Act and received an opinion that the proposed action will not adversely affect federally listed species or federally designated critical habitat because no federally listed species are known to occur in the project area. We have also contacted the Virginia Department of Historic Resources in conjunction with our Section 106 consultation under the National Historic Preservation Act and received an opinion that the facility will not impact any known historic architectural or archeological resources listed on or eligible for the National Register of Historic Places.

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May not be released from public release under the Freedom of Information Act (5 U.S.C. 552)	
Exemption number _____	
Nuclear Regulatory Commission review required before public release.	
Name _____	Organization of person making determination.
Date of determination _____	5/1/70

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~~OFFICIAL USE ONLY~~

E. Irons

-2-

The preliminary final EA does not contain classified information, but is sensitive Official Use Only, and may be exempt from public release under the Freedom of Information Act. Portions of the EA have been redacted. The EA should not be duplicated and should be kept within a controlled access area or a locked drawer when not being reviewed. At the end of the consultation process, we request that the preliminary final EA be returned to the NRC or a letter sent to us confirming its destruction. If you have any questions or comments, or need any additional information, please contact Ron C. Linton of my staff at 301-415-7777.

Sincerely,

/RA/

Jennifer Davis, Chief
Environmental Review Section
Environmental and Performance
Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Nuclear Material Safety
and Safeguards

Docket No.:70-27

Enclosure: Draft preliminary final EA (redacted)

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COMMONWEALTH of VIRGINIA

W. Taylor Murphy, Jr.
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P. O. Box 10009, Richmond, Virginia 23240
Fax (804) 698-4500 TDD (804) 698-4021
www.deq.virginia.gov

Robert G. Burnley
Director

(804) 698-4000
1-800-392-5482

June 30, 2005

Ms. Jennifer Davis
Chief, Environmental Review Section
Mail Stop T 7 J 08
Environmental and Performance Assessment Directorate
Division of Waste Management and Environmental Protection
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

RE: Preliminary Final Environmental Assessment, License Renewal for
BWX Technologies, Uranium Fuel Fabrication and Research Facility
NRC Docket No. 70-27
DEQ-05-149F

Dear Ms. Davis:

The Commonwealth of Virginia has completed its review of the preliminary final Environmental Assessment listed above (hereinafter "EA"). The Department of Environmental Quality is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act and responding to appropriate federal officials on behalf of the Commonwealth. The following agencies, regional planning district commission, and locality joined in this review:

- Department of Environmental Quality
- Department of Game and Inland Fisheries
- Department of Agriculture and Consumer Services
- Department of Conservation and Recreation
- Department of Health
- Marine Resources Commission
- Department of Historic Resources
- Campbell County.

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Exempt from public release under the Freedom of Information Act (5 U.S.C. 552)

Exemption number: 2

Nuclear Regulatory Commission review required before public release.

John L. [Signature] / [Signature]

Name and position of person making this determination.

Date of determination: 7/11/05

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Ms. Jennifer Davis
Page 2

In addition, the Virginia Department of Transportation and the Region 2000 Regional Commission were invited to comment.

In light of the precautions recommended in the NRC cover letter to safeguard "For Official Use Only" information, DEQ's Office of Environmental Impact Review reminded reviewing agencies at the outset of the review. Of the 18 copies of the EA that we received at the outset, reviewing agencies have destroyed 3 copies, and we now have 7 copies on hand. We will send a follow-up letter when we the remaining reviewing agencies inform us of their disposition of the remaining 8 copies and we have destroyed the rest.

Project Description

The Nuclear Regulatory Commission ("NRC") is considering a license renewal application by BWX Technologies, Inc. (formerly Babcock and Wilcox) to continue operations at the applicant's uranium laboratories in Campbell County, approximately five miles east of Lynchburg, Virginia (hereinafter "facility"). The license term would be 20 years. No major modifications to the facility are proposed. Portions of the EA are redacted, and it may be exempt from public release under the Freedom of Information Act, according to NRC (NRC cover letter dated May 19, 2005, pages 1-2; EA, pages 1-2). Accordingly, DEQ did not list this project description on its website listing of environmental documents currently under review.

Environmental Impacts and Mitigation

1. Natural Heritage Resources. The Department of Conservation and Recreation (DCR) has searched its Biotics Data System for occurrences of natural heritage resources in the project area. "Natural heritage resources" are defined as the habitat of rare, threatened, and endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations. According to DCR, natural heritage resources are present in the vicinity of the facility. However, because of the distance to the resources and the scope of the project, DCR does not anticipate that the continuation of licensed activities at the facility would give rise to significant adverse impacts upon natural heritage resources.

Under a memorandum of agreement between DCR and the Department of Agriculture and Consumer Services (VDACS), DCR represents VDACS in commenting on project impacts on state-listed endangered or threatened plant or insect species. According to DCR, no such species would be affected by continued operation of the facility. The Department of Agriculture and Consumer

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Ms. Jennifer Davis
Page 3

Services, which has responsibility for state-listed threatened and endangered plant and insect species, indicates its agreement with this assessment.

2. *Wildlife Resources.* The Department of Game and Inland Fisheries, as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state or federally listed endangered or threatened species, but excluding listed insects. The Department (hereinafter "DGIF") is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 *et seq.*), and provides environmental analysis of projects or permit applications coordinated through the Department of Environmental Quality and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce, or compensate for those impacts.

(a) *Findings.* According to DGIF, the stretch of the James River in the vicinity of the facility is a Potential Anadromous Fish Use Area. In addition, the James River is designated as a Threatened and Endangered Species Water due to the documented presence of the Atlantic pigtoe, a species listed by the federal government as a species of concern, and by the state government as a threatened species. There is also a bald eagle nest approximately 1 mile from the facility. However, because the activities licensed under the proposed license renewal would not be expanded from current operations at the facility, the Department of Game and Inland Fisheries does not anticipate a significant adverse impact upon critical wildlife resources under its jurisdiction.

(b) *Monitoring.* Because the BWX facility is situated on the James River floodplain, the Department of Game and Inland Fisheries emphasizes the need for strict environmental monitoring to ensure that contaminants are not leaching into the surrounding soil, groundwater, or wetlands. There are several monitoring wells at the site because of past contamination (EA, page 9, section 3.4.2; see also page 19, section 4.5). See also item 5, below.

(c) *Additional Information.* DGIF maintains a data base of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters. This data base, which may contain information not available on the Department of Conservation and Recreation's data base (item 1, above), is available through the DGIF web site:

- http://www.dgif.virginia.gov/wildlife/info_map/index.html.

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Ms. Jennifer Davis
Page 4

Questions on the data base may be addressed to DGIF (Shirl Dresser, telephone (804) 367-6913).

3. *Water Quality and Wetlands.*

(a) *Wetlands.* The EA states that 9 of the 13 wetland areas located on the property in question are considered jurisdictional by the Army Corps of Engineers and thus are protected under the Clean Water Act. According to the EA, "The remaining four areas are not considered jurisdictional and are used for plant operations" (page 10, section 3.4.3). It is not clear to DGIF what is meant by "used for plant operations," and DGIF asks whether the remaining four wetlands might still be protected under the Virginia Water Protection Permit program.

(b) *Permitting Issues.* According to DEQ's South Central Regional Office, the facility is covered by an individual Virginia Pollutant Discharge Elimination System (VPDES) permit (# VA0003697), which allows discharge of non-radioactive contaminants through three outfalls directed to the James River and its tributaries. The facility also discharges stormwater from the site through outfall numbers 006 through 010. The facility is subject to routine compliance evaluations by DEQ staff. It is considered to be in substantial compliance with all applicable water quality requirements.

DEQ's Division of Water Resources states that because the applicant no longer draws water from the James River for the facility, but instead gets it from a Campbell County public water supply, the Division has no comments (see EA, page 9, section 3.4.1).

(c) *Drinking Water.* The EA states, "The James River is currently not designated for drinking water (BWXT, 2004b)" (EA, page 9, section 3.4.1). This statement needs clarification. The Department of Health states that the James River serves the drinking water needs of Richmond, approximately 100 miles downstream from the facility, and possibly other localities as well.

4. *Air Quality.* DEQ's Division of Air Program Coordination has no comments on this review.

DEQ's South Central Regional Office reports that the facility is covered by a Title V air permit and is the subject of routine compliance evaluations by DEQ staff. Information on the type and quantity of air emissions is submitted annually to DEQ's South Central Regional Office. Based on DEQ's review of that information and on-site evaluations, the facility is considered to be in compliance with all applicable air quality requirements. There have been no air quality

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Ms. Jennifer Davis
Page 5

concerns identified for the facility. Inasmuch as no change is proposed, DEQ's South Central Regional Office has no reason to believe future operations under the renewed license would change these observations.

5. Solid and Hazardous Waste Management. According to DEQ's Waste Division, both solid and hazardous waste issues were adequately addressed in the EA. However, the EA did not include a search of waste-related data bases.

(a) Findings. DEQ's Waste Division performed a cursory review of its data files and found that the facility is a RCRA (Resource Conservation and Recovery Act) treatment/storage/disposal facility and a large-quantity generator of hazardous waste (identification number VAD046960449).

The EA states that an examination by EPA in 1986 found that volatile organic compounds (VOCs) had contaminated the groundwater at the site of the facility as a result of past operations. However, according to the EA, EPA reviewed current levels of groundwater contamination at the site and found that the risks to human health and the environment from these levels are acceptable (page 9, section 3.4.2).

(b) Additional Information. The following web site may prove helpful in locating additional information about this identification number:

- http://www.epa.gov/echo/search_by_permit.html.

(c) Remediation Activities. According to DEQ's Waste Division, the absence of major modifications means that proposed activities are not expected to affect on-going hazardous waste closure activities at the facility.

In addition to these closure activities, the facility is also required to implement RCRA Corrective Action through an Order issued by EPA in 1991. EPA is the lead agency for RCRA Corrective Action activities. Questions on these activities may be directed to EPA Region III (Robert Greaves, telephone (215) 814, 3423).

(d) Construction Precautions. While the EA indicates that the NRC is contemplating continued operation of the facility, DEQ's Waste Division offers guidance on construction and demolition precautions. (See attached Waste Division comments.)

6. Monitoring of the Facility. The EA discusses the applicant's monitoring efforts (page 19, section 4.5). The Virginia Department of Health also monitors

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Ms. Jennifer Davis
Page 6

the environment at the facility, and has collected data for air, soil, vegetation, and water samples since 1983.

7. *Historic Resources.* The Department of Historic Resources indicates that the re-licensing of the facility, involving no proposed changes to the operation thereof (EA, page 2, section 1.3.1), will not give rise to impacts upon known architectural or archaeological resources listed on or eligible for the National Register of Historic Places. See "Regulatory and Coordination Needs," item 2, below.

(a) *Nearby Archaeological Resources and Historic Structure.* Although the EA fails to show the established boundaries for the 476-acre BWX facility, the Department of Historic Resources has records indicating the proximity of several architectural and archaeological resources situated on or adjacent to the property. Specifically, six archaeological sites (numbers 44CP87 through 44CP92) associated with the James River and Kanawha Canal surround the facility and are generally found adjacent to the River. The significance of these resources has not been evaluated.

However, other features associated with the Canal have been determined eligible for listing on the National Register of Historic Places. These include:

- Site 44CP22, a pre-historic site located within the current AREVA facility; this site has not been evaluated.
- Site 44CP5, a pre-historic site located along the railroad tracks north of the facility; this site has not been evaluated.
- Nine Mile Bridge (DHR identification number 005-0218), located northeast of the facility; this site has been determined eligible for listing on the National Register.

(b) *Other Potentially Historic Features.* Because BWX Technologies (the applicant) has conducted operations at the facility since 1955 (EA, page 1, section 1.1), the Department of Historic Resources recommends that any elements of the facility that date to the earliest period of operation should be considered potentially eligible for listing on the National Register of Historic Places.

In any future actions at the facility, NRC and the applicant should consider the historic significance of any structures that are 50 or more years old. In

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Ms. Jennifer Davis
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addition, the potential impacts of future actions upon recorded and unrecorded archaeological resources should be considered.

8. *Natural Area Preserves.* According to the Department of Conservation and Recreation, there are no state Natural Area Preserves in the vicinity of this project.

9. *Local and Regional Comments.* Based on its understanding that the activities under the renewed license involve no major modifications at the facility, Campbell County indicates its support for the re-issuance of the operating license and the acceptance of the EA. According to the County, the applicant has a long-standing record of safety, environmental awareness, and positive community participation. The applicant's Nuclear Products Division, as well as other operations at the Mount Athos facility, has consistently demonstrated the highest level of corporate responsibility, and provided employment opportunities in the region that improve quality of life, according to the County.

Regulatory and Coordination Needs

1. *Solid and Hazardous Waste Management.* Any soil 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. These 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 the enclosed DEQ memo, Brockman to Ellis, dated June 27, 2005 for additional citations.)

2. *Historic Resources.* The Department of Historic Resources recommends that NRC include the finding of "No Historic Properties Affected" in the Final EA, along with the Department's March 9, 2005 letter (attached). Provision of the letter in the Final EA will afford the interested public an opportunity to inspect the relevant documentation prior to approval of the undertaking, pursuant to the regulations implementing the National Historic Preservation Act of 1966, as amended (Title 36, Code of Federal Regulations, Part 800, section 800.4(d)(1)). Questions on this matter may be addressed to the Department of Historic Resources (Roger Kirchen, telephone (804) 367-2323, extension 153).

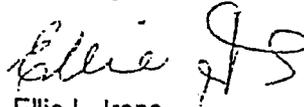
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Ms. Jennifer Davis
Page 8

Thank you for the opportunity to review this EA. If you have questions, please feel free to call me (telephone (804) 698-4325) or Charlie Ellis of this Office (telephone (804) 698-4488).

Sincerely,



Ellie L. Irons
Program Manager
Office of Environmental Impact Review

Enclosures

cc: Andrew K. Zadnik, DGIF
Keith R. Tignor, VDACS
C. Scott Crafton, DCR
S. Rene Hypes, DCR
Leslie P. Foldesi, VDH
Allen R. Brockman, DEQ-Waste
Kotur S. Narasimhan, DEQ-Air
Amanda Gray, DEQ-SCRO
Marlee A. Parker, VDOT
Justin D. Worrell, MRC
Roger Kirchen, DHR
Joseph P. Hassell, DEQ-DWR
Gary F. Christie, Region 2000 Regional Commission
R. David Laurell, Campbell County

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Ellis, Charles

From: Andrew Zadnik [Andrew.Zadnik@dgif.virginia.gov]
Sent: Tuesday, June 21, 2005 9:28 AM
To: Ellis, Charles
Cc: ProjectReview.Richmond_PO.DGIF@dgif.virginia.gov
Subject: 05-149F_ESSLOG 20680_BWX license renewal_Campbell

This project involves the renewal of uranium facilities operated by BWX Technologies, near Lynchburg. We understand there are no plans for any major modifications to the facilities.

The James River, in the project vicinity, is a Potential Anadromous Fish Use Area. The James River also is designated as a Threatened and Endangered Species Water due to the documented presence of the Federal Species of Concern/State Threatened Atlantic pigtoe. In addition, there is a bald eagle nest approximately 1 mile from the project site. However, as this project does not include any expansion of current operations, we do not anticipate a significant adverse impact upon critical wildlife resources under our jurisdiction.

We note that, on Page 10 of the EA, it states that 9 of the 13 wetland areas located on the property are considered jurisdictional by the USACE and, thus, are protected under the Clean Water Act. "The remaining four areas are not considered jurisdictional and are used for plant operations." We question what "used for plant operations" means? Wouldn't the remaining four wetlands still be protected under the Virginia Water Protection Permit program? If these wetlands have been impacted without the necessary permits, we recommend compensating for those impacts.

Due to the location of this facility, on the James River floodplain, we emphasize the need for strict environmental monitoring to ensure that contaminants are not leaching into the surrounding soil, groundwater, or wetlands. We understand that, due to past groundwater contamination, there currently are several monitoring wells at the site (Page 9).

Thank you,

Andrew K. Zadnik
Environmental Services Section Biologist
Department of Game and Inland Fisheries
4010 West Broad Street
Richmond, VA 23230

(804) 367-2733
(804) 367-2427 (fax)

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Ellis, Charles

From: Keith Tignor [ktignor.PO.MAIL@vdacs.virginia.gov]
Sent: Tuesday, June 28, 2005 8:29 AM
To: Ellis, Charles
Subject: Re: NRC EA on License Renewal of BWX Tech. Facility near Lynchburg (DEQ-05-149F)

Charlie,

VDACS concurs with DCR assessment of T/E plant species in the area. No additional comments are necessary. I'll forward a hard copy today.

Sincerely,
Keith Tignor
State Apiarist/Endangered Species Coordinator

VA Department of Agriculture and Consumer Services
Office of Plant and Pest Services
P.O. Box 1163
Richmond, VA 23218

Phone: (804) 786-3515
Fax number: (804) 371-7793
Website: www.vdacs.state.va.us

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W. Tayloe Murphy, Jr.
Secretary of Natural
Resources

Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

217 Governor Street
Richmond, Virginia 23219-2010
Telephone (804) 786-7951 FAX (804) 371-2674 TDD (804) 786-2121

June 29, 2005

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

Re: DEQ# 05-149F, License Renewal for BWX Technologies, Uranium Fuel Fabrication and
Research Facility

Dear Mr. Ellis:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

Biotics documents the presence of natural heritage resources in the project area. However, due to the scope of the activity and the distance to the resources, we do not anticipate that this project will adversely impact these natural heritage resources.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Virginia Department of Conservation and Recreation (DCR), DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

In addition, our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters, that may contain information not documented in this letter. Their database may be accessed from www.deif.virginia.gov/wildlifeinfo_map/index.html, or contact Shirl Dressler at (804) 367-6913.

State Parks • Soil and Water Conservation • Natural Heritage • Outdoor Recreation Planning
Chesapeake Bay Local Assistance • Park Services • Forest Land Management • Land Conservation

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Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,

S. Rene' Hypes
Project Review Coordinator

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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

June 17, 2005

RECEIVED

JUN 21 2005

DEQ-Office of Environmental
Impact Review

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

Charlie Ellis
Department of Environmental Quality
Office of Environmental Impact Review
629 East Main Street, Sixth Floor
Richmond, VA 23219

RE: Nuclear Regulatory Commission's Environmental Assessment (EA) on the License Renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility

Dear Mr. Ellis:

I reviewed the materials provided regarding the EA on the License Renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility. I have the following comments:

Section 3.4.1 Hydrology- Surface Water

The last sentence states "The James River is currently not designated for drinking water (BWXT, 2004b)". This statement needs clarification. The James River is a drinking water source for the City of Richmond approximately 100 miles down river and possibly other localities down river.

Section 4.2.2 Radiological Impacts- Accidents

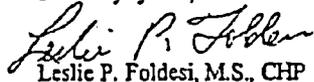
The BWXT facility is included among the fixed nuclear facilities described in the Commonwealth of Virginia's Emergency Operations Plan, Annex for Radiological Emergency Response. The licensee has provided VDEM and VDH staff access to the facility for observing radiological exercises. I believe BWXT also maintains letters of agreement with neighboring jurisdictions for emergency response, and a local hospital, in case of injuries during a declared event. I also concur with the conclusion of the safety analysis report that the accident scenario with the greatest consequences would be those associated with fires that could result in airborne releases of radioactive materials. The effects of a criticality accident would probably be limited to the immediate area (within the security perimeter) and without any off-site consequences.

Section 4.5 Monitoring

VDH also monitors the environment at the BWXT facility and has collected data for air, soil, vegetation and water samples since 1983.

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

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Impact Review

COMMONWEALTH of VIRGINIA

W. Taylor Murphy, Jr.
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
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Robert G. Burnley
Director

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MEMORANDUM

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JUN 27 2005

DEQ-Office of Environmental
Impact Review

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

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

DATE: June 27, 2005

COPIES: Sanjay Thirunagari, Waste Division Environmental Review Manager; Leslie Romanchik, Director, Office of Waste Permitting; Maria Williams, Corrective Action Program; file

SUBJECT: Environmental Assessment
USNRC—License Renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility, DEQ Project #05-149F

The Waste Division has completed its review of the Environmental Impact report for the U.S. Nuclear Regulatory Commission's proposed license renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility in Lynchburg, Virginia. We have the following comments concerning the waste issues associated with this project:

Both solid and hazardous waste issues were addressed adequately in the report. However, the report did not 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 RCRA treatment/disposal/storage facility and a large quantity generator of hazardous waste (VAD046960449). The following website may prove helpful in locating additional information for this identification number: http://www.epa.gov/echo/search_by_permit.html. Leslie Romanchik Director of DEQ's Office of Waste Permitting was contacted for her review of this report. Her review, dated June 6, 2005, is attached.

This is a 20-yr renewal of the facility's NRC license and licensed and permitted operations must be maintained in accordance with Waste regulations and laws cited in the next paragraph of this review memo. Page 2 of the report's text stated that there are no plans for any major modifications to the facilities at this time. On page 9, the report also noted that volatile organic compounds (VOCs) contaminate the groundwater as a result of past operations at the site. However, the report stated that current levels of VOCs in the groundwater at the site have been reviewed by USEPA Region III and that the level of potential human health and environmental risks, posed by the VOC contaminated groundwater, have been found acceptable by USEPA.

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In any construction at the facility, soil that is suspected of contamination or wastes that are generated must be tested and disposed 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 Part 107.

Also, all structures to be demolished/renovated/removed should be checked for asbestos-containing materials (ACM) and lead-based paint prior to demolition. 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.

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DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE DIVISION
OFFICE OF WASTE PERMITTING



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

DATE: June 6, 2005

SUBJ: HW Program Environmental Assessment Review Comments
BWX Technologies, Inc.
NRC License Renewal, Docket No.: 70-27
EPA ID number: VAD046960449

The Office of Waste Permitting has reviewed the attached Preliminary Final (Redacted) Pre-decisional U.S. Nuclear Regulatory Commission Docket NO. 70-27 Environmental Assessment Related to Renewal of the NRC Material License for BWX Technologies, Inc. (BWXT) No. ---42, dated May 2005. The document was prepared in support of BWXT's June 30, 2004 request to the NRC to renew its NRC license for the BWXT Nuclear Products Division uranium fuel fabrication and research facility located in Lynchburg, Virginia. The current request is for a 20-year renewal of the license.

The application states that there are no plans for any major modifications to the existing facilities. Therefore the proposed activities are not expected to will not impact the on-going hazardous waste closure activities at the facility.

The facility is also required to implement RCRA Corrective Action (CA) through an Order issued by EPA in 1991. EPA is the lead agency for the RCRA CA activities. Any questions regarding the ongoing RCRA CA activities should be directed to Mr. Robert Greaves at EPA Region III. He can be reached at (215) 814-3423.

Attachment

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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:

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
Environmental Review Coordinator

COMMENTS

According to the EA, BWTX switched
in 2003 from an intake on the James River
to a public water supply connection with Campbell County
Therefore the Division of Water Resources has no comment

(signed) Joseph P. Hassell (date) June 1, 2005
(title) Env. Program Manager
(agency) DEQ - DWR

PROJECT # 05-149F

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DEPARTMENT OF ENVIRONMENTAL QUALITY

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

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(434) 582-5120 Fax (434) 582-5125
www.deq.virginia.gov

Robert G. Bumley
Director

Thomas L. Henderson
Regional Director

MEMORANDUM

TO: Charles H. Ellis III, Office of Environmental Impact Review

FROM: Amanda Gray, South Central Regional Office (SCRO) *AG*

SUBJECT: License Renewal for BWX Technologies, Uranium Fuel Fabrication and Research Facility
DEQ #05-149F

DATE: June 23, 2005

The staff of the South Central Regional Office of the Virginia Department of Environmental Quality (VDEQ) has reviewed the federal environmental assessment for the License Renewal for BWX Technologies, Uranium Fuel Fabrication and research Facility in Campbell County, Virginia. Significant environmental impacts are not expected from this project, however, we offer the following comments:

Air Quality

The facility is covered by a Title V air permit and is the subject of routine compliance evaluations by SCRO staff. Information on the type and quantity of air emissions is submitted to this office annually. Based on our review of information submitted and on-site evaluations, the facility is currently considered to be in compliance with all applicable air requirements and there have been no air quality concerns identified for this site.

Given that the assessment indicates no changes to the facility, we have no reason to believe that future operations would change our current observations.

Water Quality

The facility is covered by an Individual VPDES permit (#VA0003697) to discharge nonradioactive contaminants through 3 outfalls directed to the James River and its tributaries. The facility also discharges stormwater from the site through outfall numbers 006-010. The facility is subject to routine compliance evaluations by SCRO staff and is considered to be in substantial compliance with all applicable water requirements.

Given that the assessment indicates no changes to the facility, we have no reason to believe that future operations would change our current observations.

If you have any questions, please contact Amanda Gray at (434) 582-5120 ext. 6027. Thank you for the opportunity to comment.

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An Agency of the Natural Resources Secretariat

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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.

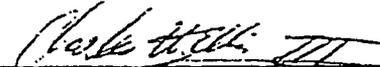
Please return your comments to:

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

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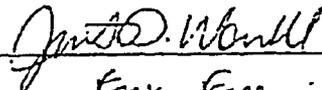
DEQ-Office of Environmental
Impact Review


Charles H. Ellis III
Environmental Review Coordinator

COMMENTS

This will acknowledge receipt of your transmittal letter with enclosures requesting Commission review of the above-referenced project.

Please be advised that the Marine Resources Commission pursuant to Section 28.2-1204 of the Code of Virginia has jurisdiction over any encroachments in, on, or over any State-owned rivers, streams, or creeks in the Commonwealth. Accordingly, if any portion of the subject projects involves any encroachments channelward of ordinary high water along natural rivers and streams, or channelward of mean low water in tidal waters, a permit may be required from our agency.

(signed)  (date) 6-24-05
(title) Env. Eng.
(agency) VMRC

PROJECT # 05-149F

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If you cannot meet the deadline, please notify CHARLIE ELLIS at 804/598-4499 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:

CHARLES H. ELLIS III
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL IMPACT REVIEW
629 EAST MAIN STREET, SIXTH FLOOR
RICHMOND, VA 23219
FAX #804/598-4319

Charles H. Ellis III
Charles H. Ellis III
Environmental Review Coordinator

COMMENTS

We have previously provided comment directly to NRC. Please see attached.

(signed) *RKH* (date) 6-8-05
(title) ROGER KIRCHEN - ARCHAEOLOGIST
(agency) DHR.

PROJECT # 05-149F

PHR # 2003-0590

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COMMONWEALTH of VIRGINIA

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

W. Taylor Murphy, Jr.
Secretary of Natural Resources

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

March 9, 2005

Ms. B. Jennifer Davis, Section Chief
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

RE: COMMENTS ON DOCKET NO.: 70-27
Renewal of NRC License for BWX Technologies, Inc
DHR File No. 2003-0590

Dear Ms. Davis:

Thank you for your request for comments on the Draft Environmental Assessment for the project referenced above. Although the established boundaries for the 476-acre BWX Technologies, Inc. (BWXT) facility are not adequately shown in the correspondence, our archival records indicate that several resources are recorded within or adjacent to the subject property. Our Archives maintain information on the specific location of these recorded resources if you wish to include them in your planning documents.

Six archaeological sites (44CP87 - 92) associated with the James River & Kanawha Canal surround the facility and are generally found adjacent to the river. The significance of these resources has not been evaluated, but other features associated with this canal have been determined eligible for listing on the National Register of Historic Places. Site 44CP22 is a prehistoric site located within the current AREVA facility and has not been evaluated. Site 44CP5 is a prehistoric site located along the railroad tracks north of the BWXT facility and has not been evaluated. The Nine Mile Bridge (DHR ID #005-0218) located northeast of the facility has been determined eligible for listing on the National Register. Given that BWXT has conducted operations at the subject site since 1955, any elements of the facility that date to the earliest period of operation should be considered potentially eligible for listing on the National Register.

We are of the opinion that the relicensing of the BWXT facility, with no proposed improvements, will not impact any known historic architectural or archaeological resources listed on or eligible for the National Register of Historic Places. Accordingly, inclusion of your finding of *No Historic Properties Affected* in the final EA, along with this letter of concurrence, will provide the interested public the opportunity to inspect the documentation prior to approval of the undertaking in accordance with 36 CFR 800.4(d)(1) of the regulations implementing Section 106 of the National Historic Preservation Act of 1966 (as amended). We recommend, however, that the NRC and BWXT consider the historic significance of any structures fifty

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Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2321

Tidewater Region Office
14415 Old Dominion Way, 2nd Floor
Newport News, VA 23606
Tel: (757) 883-1111

Roanoke Region Office
1070 Perrin Ave., SE
Roanoke, VA 24013
Tel: (540) 857-7585

Winchester Region Office
107 N. Kent Street, Suite 203
Winchester, VA 22601
Tel: (540) 772-1477

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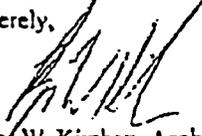
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Page 2
March 9, 2005
Mr. Ron C. Linton

years of age or old during future actions at the facility. In addition, the potential impacts from future development to recorded and unrecorded archaeological resources should be considered.

Thank you for seeking our comments on the impacts of this project on historic properties. If you have any questions about these comments or our review process, please do not hesitate to contact me at (804) 367-2323, ext. 153; fax (804) 367-2391; e-mail roger.kirchen@dhr.virginia.gov.

Sincerely,



Roger W. Kirchen, Archaeologist
Office of Review and Compliance

Cc: Mr. Ron C. Linton, Project Manager, NRC

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COUNTY OF CAMPBELL



SUPERVISORS

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CALVIN P. CARTER
EDDIE GUNTER, JR.
JAMES R. MAYS
HUGH T. PENDLETON, JR.
J. D. PUCKETT
HUGH W. ROSSEER

BOARD OF SUPERVISORS

POST OFFICE BOX 100, RUSTBURG, VIRGINIA 24589
www.co.campbell.va.us

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JUN 09 2005

DEO-Office of Environmental
Impact Assessment
ADMINISTRATOR
R. DAVID LAURRELL

BROOKNEAL (434) 283-9525
LYNCHBURG (434) 592-9525
RUSTBURG (434) 332-9525
FAX NO. (434) 332-5617

June 8, 2005

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

Re: License Renewal – BWXT – NPD – Campbell County, Virginia

Dear Mr. Ellis:

Thank you for providing an opportunity to comment on the application by BWX Technologies – Nuclear Products Division for renewal of their current operating license at their facility in Campbell County, Virginia. It is the County's understanding that this application is consistent with their current operations regulated under the authority of the U.S. Nuclear Regulatory Commission and that no major modifications are planned at the existing facility.

BWX Technologies has a long standing record of safety, environmental awareness, and positive community participation. The Nuclear Products Division, as well as other operations located at the Mt. Athos facility, have consistently demonstrated the highest levels of corporate responsibility in carrying out their mission and have provided for employment opportunities within the region that consistently improve quality of life measures.

On behalf of Campbell County I would like to express our support for the acceptance of the Environmental Assessment report submitted and request that the Department of Environmental Quality support the request for re-issuance of the operating permit that expires this coming September.

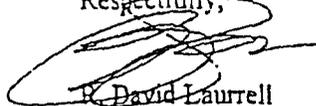
Please do not hesitate to let me know if you have any questions or if I can provide you with any additional information.

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Charles H. Ellis, III
June 8, 2005
Page 2

With kind regards, I am

Respectfully,


R. David Laurrell
County Administrator

- C: Campbell County Board of Supervisors
Richard W. Loving, Director of Administration, BWX Technologies, Inc.
Winfred D. Nash, Vice President and General Manager, BWXT – NPD
Gary Christie, Executive Director, Region 2000 Partnership – Local Government Council
Jennifer Davis, Chief, Environmental Review Section, Nuclear Regulatory Commission

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COMMONWEALTH of VIRGINIA

W. Taylor Murphy, Jr.
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
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Robert G. Burnley
Director

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July 19, 2005

Ms. Jennifer Davis
Chief, Environmental Review Section
Mail Stop T 7 J 08
Environmental and Performance Assessment Directorate
Division of Waste Management and Environmental Protection
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

RE: Preliminary Final Environmental Assessment, License Renewal for
BWX Technologies, Uranium Fuel Fabrication and Research Facility
NRC Docket No. 70-27 (DEQ-05-149F)

Dear Ms. Davis:

In our June 30, 2005 letter to you on the above subject, we indicated that this Office had recommended precautions to reviewing agencies regarding the security of the Environmental Assessment documents under review. We indicated that we had learned that 3 copies had been destroyed and that we had 7 copies on hand.

I can now report that our follow-up efforts in this regard are complete. We have learned that 3 more copies were destroyed by reviewing agencies, for a total of 6 copies destroyed. An additional 6 copies have been returned, which gives us 13 copies on hand. We have learned that an additional 2 copies have been destroyed, which makes 5 destroyed. The 13 and 5 make 18 copies, which are as many as we received from your office at the outset of the review.

We are enclosing the remaining 13 copies with this letter, along with their cover sheets.

Sincerely,

A handwritten signature in cursive script, appearing to read "Charles H. Ellis III".

Charles H. Ellis III
Environmental Review Coordinator
Office of Environmental Impact Review

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