



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

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[www.deq.state.va.us](http://www.deq.state.va.us)

W. Tayloe Murphy, Jr.  
Secretary of Natural Resources

Robert G. Burnley  
Director

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

September 17, 2002

Ms. Janice Bell  
U.S. Department of Energy  
National Energy Technology Laboratory  
626 Cochrans Mill Road  
P.O. Box 10940  
Pittsburgh, Pennsylvania 15236-0940

RE: Draft Environmental Assessment: Commercial Demonstration of the Manufactured Aggregate Processing Technology Utilizing Spray Dryer Ash (DOE/EA-1449, DEQ # 02-163F).

Dear Ms. Bell:

The Commonwealth of Virginia has completed its review of the Environmental Assessment (EA) for the above referenced project. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents and responding to appropriate federal officials on behalf of the Commonwealth. Also, as you are aware, pursuant to the Coastal Zone Management Act of 1972, as amended, federal actions that can have foreseeable effects on Virginia's coastal uses or resources must be conducted in a manner which is consistent with the Virginia Coastal Resources Management Program (VCP). DEQ, as the lead agency for the VCP, is responsible for coordinating Virginia's review of federal consistency determinations. The following agencies and locality participated in the review of this EA:

Department of Environmental Quality  
Department of Conservation and Recreation  
Department of Game and Inland Fisheries  
Department of Agriculture and Consumer Services  
Chesapeake Bay Local Assistance Department  
Department of Health  
Department of Forestry  
Department of Historic Resources  
King George County

The Rappahannock Regional Development Commission was also invited to comment.

## **Project Description**

The Department of Energy proposes to demonstrate the manufacture of lightweight aggregate from spray dryer ash. The project site would be located on approximately 3 acres of land within the property lines of the Mirant-Birchwood Power Plant facility in King George County, Virginia. The plant would transform an estimated 115,000 tons per year of spray dryer ash into 167,000 tons of lightweight aggregates.

## **Environmental Impacts and Mitigation**

The Commonwealth of Virginia has no objection to the proposed project provided that it is carried out in accordance with all applicable federal, state and local laws and regulations.

**1. Wetlands and Water Quality.** The EA (page 16) states that no wetlands are located on the proposed project site. The nearest streams on-site (EA, page 23) are located approximately 1000 feet from the project site. The streams are protected by a riparian buffer. No impacts to water resources are anticipated from the proposed project.

**2. Chesapeake Bay Preservation Area.** The EA (page 16) states that the surface water drainage on-site is located within a Resource Protection Area (RPA). The Chesapeake Bay Local Assistance Department (CBLAD) stated that provided that the performance criteria of the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations) are followed, including the stormwater quality provisions, the project should be consistent with the Regulations. CBLAD recommends that the RPA boundary be flagged in this area so that there is no inadvertent encroachment into the RPA.

**3. Natural Heritage Resources.** The Department of Conservation and Recreation's (DCR) Division of Natural Heritage (DNH) maintains a database on natural heritage resources in Virginia. Natural heritage resources are defined as the habitat of rare, threatened, or endangered animal and plant species, unique or exemplary natural communities, and significant geologic communities. The BCD documents the presence of natural heritage resources in the project vicinity. However, due to the scope of the activity and the distance to the resources, DCR does not anticipate that the project will adversely impact these natural heritage resources. Also, pursuant to the Memorandum of Agreement established between DCR and the Virginia Department of Agriculture and Consumer Services (VDACS), DCR has the authority to report for VDACS on state-listed plant and insect species. The current activity will not affect any documented state-listed plant or insect species under the jurisdiction of VDACS. VDACS reviewed the EA and stated that correspondence with state agencies on endangered species is not included in the EA. Expansion of construction activities into adjacent wooded area for staging areas, etc. may affect listed species. Precautions should be taken to avoid such activity in any wooded areas. Please contact DCR's Division of Natural Heritage at (804) 786-7951 if a significant amount of time passes before the project is implemented.

**4. Wildlife Resources.** Under title 29.1 of the Code of Virginia, the Department of Game and Inland Fisheries (DGIF) is the primary wildlife and freshwater fish management agency in the Commonwealth. The DGIF has full law enforcement and regulatory jurisdiction over all wildlife resources, inclusive of state and federally endangered or threatened species, but excluding listed insects. After review of the EA, DGIF stated that they do not anticipate significant adverse impacts to species under their jurisdiction.

**5. Non-point Source Pollution Control.** The EA (page 23) states that Best Management Practices for erosion and sediment control and stormwater management would be employed during construction of the proposed project. An Erosion and Sedimentation Control Plan would be submitted to the King George County Conservation District for review and approval. Executive Order 12088-Federal Compliance with Pollution Control Standards and the Sikes Act authorizes cooperation between state and federal agencies regarding the conservation of natural resources. Compliance with the state Erosion and Sediment Control and Stormwater Management programs through proper design and implementation is consistent with the mandate of these federal directives. Notwithstanding cooperation with DCR, federal agencies are responsible for ensuring compliance with the state program on regulated activities under their authority through separate agreements with contractors, training, field inspection, enforcement action, or other means that are consistent with agency policy and federal and state mandates.

**6. Air Quality.** The EA (page 24) states that King George County is currently in attainment for all six criteria pollutants. It is anticipated that the facility would not be considered a major source of air pollutant emissions, so therefore would not be subject to the Prevention of Significant Deterioration (PSD) regulations. The plant, however, would be subject to the DEQ construction and operating permit regulations for stationary emission sources.

During construction, fugitive dust must be kept at a minimum by using applicable control methods outlined in 9 VAC 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

For more information, contact the DEQ-Northern Regional Office at (703) 583-3800.

**7. Solid and Hazardous Wastes.** The EA (page 24) states that should hazardous or residual wastes be uncovered during construction, the wastes would be stockpiled, tested, transported and disposed of in accordance with federal, state and local regulations. The DEQ-Waste Division stated that the EA did address hazardous waste issues, but solid waste issues were not addressed. Also, the Waste Division stated that spray dryer ash is excluded from classification as a solid waste because of its beneficial use in accordance with 9VAC 20-80-150.E.2a(8) in the Virginia

Solid Waste Management Regulations. However, storage of the ash feed stock needs to be addressed to assure that it is done in accordance with state regulations. Any solid or hazardous wastes generated by this project should be reduced at the source, re-used, or recycled. Solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations.

**8. Wild and Scenic Rivers.** The Department of Conservation and Recreation determined that the proposed action is not anticipated to have any adverse impacts on existing or planned recreational facilities. The project will also not impact any streams on the National Park Service's Nationwide Inventory, Final List of Rivers, potential Scenic Rivers or existing or potential State Scenic Byways.

**9. Historic Structures and Archaeological Resources.** The EA (page 12) states that a cultural resources survey was conducted in 1991 prior to the construction of the Mirant-Birchwood Facility. The survey encompassed the parcel for the proposed project. Two sites, 44KG100 and 44KG103, are located within the proposed footprint of the aggregate facility. However, due to impact from agricultural plowing and site grading from the power plant preparation, the Phase I archaeological investigation determined that the research potential of these sites was deemed insignificant. The Department of Historic Resources (DHR), in an August 1, 2002 letter to the proponent, agreed with the assessment. In addition, DHR responded to our office by stating that they had previously commented that no historic properties would be affected by this project.

**10. Pollution Prevention.** The Department of Environmental Quality advocates that principles of pollution prevention be used in all construction projects. DEQ has some recommendations regarding pollution prevention:

- Consider development of an effective Environmental Management System (EMS). An effective EMS will ensure that the proposed facility is committed to minimizing its environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and recognizes facilities with effective EMS through its Virginia Environmental Excellence Program.
- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered.
- Consider contractors' commitments to the environment when choosing contractors. Also, specifications regarding raw material selection (alternative fuels and energy sources) and construction practices can be included in contract documents and requests for proposals.
- Choose sustainable practices and materials in infrastructure and building construction and design. These could include asphalt and concrete containing recycled materials and integrated pest management in landscaping.
- Integrate pollution prevention techniques into the facility maintenance and operation to include the following: inventory control (record keeping and centralized storage for

hazardous materials), product substitution (use of low toxic cleaners), and source reduction (fixing leaks, energy efficient products).

- Pollution prevention measures are likely to minimize chemical exposure to employees, reduce potential environmental impacts, and reduce costs for material purchasing and waste disposal.

For more information, contact DEQ's Office of Pollution Prevention, Mr. Tom Griffin at (804) 698-4545.

**11. Water Supply.** The Department of Health stated that if the proposed potable water well serves 25 or more persons for 60 or more days per year, then it would be classified as a public water system and as such, must be permitted by the Department of Health. For more information, please contact Susan Douglas at (804) 371-2883.

## **12. Other Matters.**

*a) Local Issues.* King George County indicated that at its July 9, 2002 County Planning Commission meeting, the Commission approved the rezoning request, with proffers, and the amendment to the Special Exception Permit. The King George Board of Supervisor also approved the rezoning request, with proffers, and the amendment to the Special Exception Permit at their August 21, 2002 meeting. The copies of the minutes of the meetings and copies of the Proffer Statement and Special Exception Permit are attached.

## **Regulatory and Coordination Needs**

**1. Wetlands and Water Quality.** If the project is not implemented before December 4, 2002 and the project impacts 1 acre or more, a Virginia Pollutant Discharge Elimination System Stormwater General Permit for construction activities may be required. For more information, please contact the DEQ-Northern Regional Office at (703) 583-3800.

**2. Erosion and Sediment Control.** For compliance with State erosion and sediment control and stormwater management programs, federal agencies and their authorized agents conducting regulated land disturbing activities on private and public lands in the state must comply with the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R), Virginia Stormwater Management Law and Regulations (VSWML&R), and other applicable federal nonpoint source pollution mandates (e.g., Clean Water Act-Section 313, Federal Consistency under the Coastal Zone Management Act). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, soil/dredge spoil areas, or related land conversion activities that disturb 10,000 square feet or more (2,500 square feet or more in a CBPA area) would be regulated by VESCL&R and those that disturb one acre or greater would be covered by VSWML&R. Accordingly, federal agencies should prepare and implement erosion and sediment control (ESC) and stormwater management (SWM) plans that comply with state law. The federal agency is ultimately responsible for achieving project compliance through oversight of on site contractors, regular field inspection, prompt action against non-compliant

sites, and/or other mechanisms consistent with agency policy. Agencies are highly encouraged to contact DCR's Rappahannock Watershed Office at (540) 899-4389 to obtain plan development or implementation assistance to ensure project compliance during and after active construction. [Reference: VESCL§10.1-567; VSWML §10.1-603.15].

**3. Air Quality Regulations.** This project may be subject to regulation by the DEQ. The following sections of Virginia Administrative Code may be applicable: 9 VAC 5-50-60 et seq. governing fugitive dust emissions and 9 VAC 5-40-5600 et seq. addressing open burning. In addition, since it is expected that facility would operate beyond the demonstration period, air permits would be required. For additional information, please contact the DEQ-Northern Regional Office at (703) 583-3800.

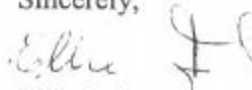
**4. Solid and Hazardous Waste.** Any soil that is suspected of contamination that is encountered during construction must be tested and disposed of in accordance with applicable federal, state and local laws and regulations. Should contamination be discovered, please contact the Northern Regional Office of the DEQ. Also, all solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations. The following state regulations may be applicable: Virginia Waste Management Act, Code of Virginia Sections 10.1-1400 et seq.; Virginia Hazardous Waste Management Regulations (9VAC 20-60); Virginia Solid Waste Management Regulations (9VAC 20-80) and Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal regulations are the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 et seq. and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Parts 107, 171.1-172.558. Contact the DEQ-Northern Regional Office at (703) 583-3800 concerning the location and availability of suitable waste management facilities in the project area or if free product, discolored soils, or other evidence of contaminated soils are encountered.

**5. Water Supply.** For further information on well siting, construction and to ensure adherence to state regulations, contact the Department of Health's Culpeper Engineering Field Office (telephone, (540) 829-7340).

**6. Federal Consistency Determination.** Pursuant to the Coastal Zone Management Act of 1972, as amended, federal activities (regardless of location) with reasonable foreseeable effects on coastal uses and resources to the maximum extent practicable, must be constructed and operated in a manner that is consistent with the Virginia Coastal Resources Management Program. In order to be consistent with the VCP, the Applicant must obtain all applicable approvals listed under the Enforceable Programs of the VCP (see Attachment 1). In addition, we invite your attention to the Advisory Policies of the VCP (see Attachment 2). Section 930.39 of the federal consistency regulations (15 CFR Part 930) gives content requirements for the consistency determination. The consistency determination may be provided as part of the documentation concluding the NEPA process, or independently, depending on your agency's preference. Contact Anne Newsom at (804) 698-4135 for more information.

Thank you for the opportunity to review the Environmental Assessment. Detailed comments of reviewing agencies are attached for your review. If you have any questions, please contact Anne Newsom at (804) 698-4135.

Sincerely,



Ellie L. Irons  
Program Manager  
Office of Environmental Impact Review

Enclosures

Cc: Ethel Eaton, DHR  
Charlie Forbes, DEQ-NRO  
Keith Tignor, VDACS  
Catherine Harold, CBLAD  
Tom Modena, DEQ-Waste



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### Attachment 1

### Enforceable Regulatory Programs comprising Virginia's Coastal Resources Management Program (VCP)

- a. Fisheries Management - The program stresses the conservation and enhancement of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities. This program is administered by the Marine Resources Commission (VMRC); Virginia Code §28.2-200 to §28.2-713 and the Department of Game and Inland Fisheries (DGIF); Virginia Code §29.1-100 to §29.1-570.

The State Tributyltin (TBT) Regulatory Program has been added to the Fisheries Management program. The General Assembly amended the Virginia Pesticide Use and Application Act as it related to the possession, sale, or use of marine antifoulant paints containing TBT. The use of TBT in boat paint constitutes a serious threat to important marine animal species. The TBT program monitors boating activities and boat painting activities to ensure compliance with TBT regulations promulgated pursuant to the amendment. The VMRC, DGIF, and Virginia Department of Agriculture Consumer Services (VDACS) share enforcement responsibilities; Virginia Code §3.1-249.59 to §3.1-249.62.

- b. Subaqueous Lands Management - The management program for subaqueous lands establishes conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, tidal wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by the Department of Environmental Quality (DEQ). The program is administered by the Marine Resources Commission; Virginia Code §28.2-1200 to §28.2-1213.
- c. Wetlands Management - The purpose of the wetlands management program is to preserve wetlands, prevent their despoliation, and accommodate economic development in a manner consistent with wetlands preservation.
- (1) The tidal wetlands program is administered by the Marine Resources Commission; Virginia Code §28.2-1301 through §28.2-1320.
  - (2) The Virginia Water Protection Permit program administered by DEQ includes protection of wetlands --both tidal and non-tidal; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.



Attachment 1 continued

- d. Dunes Management - Dune protection is carried out pursuant to The Coastal Primary Sand Dune Protection Act and is intended to prevent destruction or alteration of primary dunes. This program is administered by the Marine Resources Commission; Virginia Code §28.2-1400 through §28.2-1420.
- e. Non-point Source Pollution Control – (1) Virginia's Erosion and Sediment Control Law requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries, and other rivers and waters of the Commonwealth. This program is administered by the Department of Conservation and Recreation; Virginia Code §10.1-560 et seq..  
  
(2) Coastal Lands Management is a state-local cooperative program administered by the Chesapeake Bay Local Assistance Department and 84 localities in Tidewater (see i) Virginia; Virginia Code §10.1-2100 –10.1-2114 and 9 VAC10-20 et seq.
- f. Point Source Pollution Control - The point source program is administered by the State Water Control Board (DEQ) pursuant to Virginia Code §62.1-44.15. Point source pollution control is accomplished through the implementation of:
  - (1) The National Pollutant Discharge Elimination System (NPDES) permit program established pursuant to Section 402 of the federal Clean Water Act and administered in Virginia as the Virginia Pollutant Discharge Elimination System (VPDES) permit program.
  - (2) The Virginia Water Protection Permit (VWPP) program administered by DEQ; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.
- g. Shoreline Sanitation - The purpose of this program is to regulate the installation of septic tanks, set standards concerning soil types suitable for septic tanks, and specify minimum distances that tanks must be placed away from streams, rivers, and other waters of the Commonwealth. This program is administered by the Department of Health (Virginia Code §32.1-164 through §32.1-165).
- h. Air Pollution Control - The program implements the federal Clean Air Act to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by the State Air Pollution Control Board (Virginia Code §10-1.1300 through §10.1-1320).
- i. Coastal Lands Management is a state-local cooperative program administered by the Chesapeake Bay Local Assistance Department and 84 localities in Tidewater, Virginia established pursuant to the Chesapeake Bay Preservation Act; Virginia Code §10.1-2100 –10.1-2114 and Chesapeake Bay Preservation Area Designation and Management Regulations; Virginia Administrative Code 9 VAC10-20 et seq.

## Attachment 2

### Advisory Policies for Geographic Areas of Particular Concern

- a. Coastal Natural Resource Areas - These areas are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline. Such areas receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. These areas are worthy of special consideration in any planning or resources management process and include the following resources:
  - a) Wetlands
  - b) Aquatic Spawning, Nursery, and Feeding Grounds
  - c) Coastal Primary Sand Dunes
  - d) Barrier Islands
  - e) Significant Wildlife Habitat Areas
  - f) Public Recreation Areas
  - g) Sand and Gravel Resources
  - h) Underwater Historic Sites.
  
- b. Coastal Natural Hazard Areas - This policy covers areas vulnerable to continuing and severe erosion and areas susceptible to potential damage from wind, tidal, and storm related events including flooding. New buildings and other structures should be designed and sited to minimize the potential for property damage due to storms or shoreline erosion. The areas of concern are as follows:
  - i) Highly Erodible Areas
  - ii) Coastal High Hazard Areas, including flood plains.
  
- c. Waterfront Development Areas - These areas are vital to the Commonwealth because of the limited number of areas suitable for waterfront activities. The areas of concern are as follows:
  - i) Commercial Ports
  - ii) Commercial Fishing Piers
  - iii) Community Waterfronts

Although the management of such areas is the responsibility of local government and some regional authorities, designation of these areas as Waterfront Development Areas of Particular Concern (APC) under the VCRMP is encouraged. Designation will allow the use of federal CZMA funds to be used to assist planning for such areas and the implementation of such plans. The VCRMP recognizes two broad classes of priority uses for waterfront development APC:

## Attachment 2 con't

- i) water access dependent activities;
- ii) activities significantly enhanced by the waterfront location and complementary to other existing and/or planned activities in a given waterfront area.

### Advisory Policies for Shorefront Access Planning and Protection

- a. Virginia Public Beaches - Approximately 25 miles of public beaches are located in the cities, counties, and towns of Virginia exclusive of public beaches on state and federal land. These public shoreline areas will be maintained to allow public access to recreational resources.
- b. Virginia Outdoors Plan - Planning for coastal access is provided by the Department of Conservation and Recreation in cooperation with other state and local government agencies. The Virginia Outdoors Plan (VOP), which is published by the Department, identifies recreational facilities in the Commonwealth that provide recreational access. The VOP also serves to identify future needs of the Commonwealth in relation to the provision of recreational opportunities and shoreline access. Prior to initiating any project, consideration should be given to the proximity of the project site to recreational resources identified in the VOP.
- c. Parks, Natural Areas, and Wildlife Management Areas - Parks, Wildlife Management Areas, and Natural Areas are provided for the recreational pleasure of the citizens of the Commonwealth and the nation by local, state, and federal agencies. The recreational values of these areas should be protected and maintained.
- d. Waterfront Recreational Land Acquisition - It is the policy of the Commonwealth to protect areas, properties, lands, or any estate or interest therein, of scenic beauty, recreational utility, historical interest, or unusual features which may be acquired, preserved, and maintained for the citizens of the Commonwealth.
- e. Waterfront Recreational Facilities - This policy applies to the provision of boat ramps, public landings, and bridges which provide water access to the citizens of the Commonwealth. These facilities shall be designed, constructed, and maintained to provide points of water access when and where practicable.
- f. Waterfront Historic Properties - The Commonwealth has a long history of settlement and development, and much of that history has involved both shorelines and near-shore areas. The protection and preservation of historic shorefront properties is primarily the responsibility of the Department of Historic Resources. Buildings, structures, and sites of historical, architectural, and/or archaeological interest are significant resources for the citizens of the Commonwealth. It is the policy of the

**Attachment 2 con't**

Commonwealth and the VCRMP to enhance the protection of buildings, structures, and sites of historical, architectural, and archaeological significance from damage or destruction when practicable.

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 you comments. **If you use the space below, the form must be signed and dated.**

Please return your comments to:

Ms. Anne B. Newsom  
Dept. 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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SEP 05 2002

\_\_\_\_\_  
Anne B. Newsom  
Environmental Program Planner


DEQ-Office of Environmental  
Impact Review

Comments:

VWP: This project does not involve a proposed surface water withdrawal project, a proposed roadway construction activity by VDOT, a proposed power plant, or a proposed revision to a Federal or State program. Therefore, the DEQ Central Office defers to the appropriate DEQ Regional Office for comments.

VPDES/VPA: No comment

Name: Martin Ferguson

Signature: 

Date: September 4, 2002

Title:

Agency: DEQ - Water Permits Support

Project: 02-163F

If you cannot meet the deadline, please notify ANNE B. NEWSOM at 804/698-4135 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:

MS. ANNE B. NEWSOM  
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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Impact Review




Anne B. Newsom  
Environmental Program Planner

COMMENTS

NO COMMENTS

Virginia Dept. of Environmental Quality  
Northern Virginia Regional Office

(signed)  (date) 9/9/02  
(title) RPM-NVRO  
(agency) DEQ



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Secretary of Natural Resources

Robert G. Burnley  
Director

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1-800-592-5482

### MEMORANDUM

**TO:** Anne Newsom

**FROM:** Thomas Modena *JDM*

**DATE:** August 28, 2002

**COPIES:** Kevin Greene

**SUBJECT:** Environmental Assessment  
Commercial Demonstration of the Manufactured Aggregate Processing  
Technology Utilizing Spray Dryer Ash

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AUG 30 2002

DEQ-Office of Environmental  
Impact Review

The Office of Remedial Programs has reviewed the Environmental Assessment for the Commercial Demonstration of the Manufactured Aggregate Processing Technology Utilizing Spray Dryer Ash, Prince George County. We have the following comments concerning the waste issues associated with this project.

The report addressed hazardous waste sites and issues, but solid waste sites and issues were not addressed. The central office of the Waste Division did a cursory review of its data files and did not find any sites that might impact this project.

The VDEQ solid waste staff said that the spray dryer ash is excluded from classification as a solid waste because of its beneficial use in accordance with section 9VAC 20-80-150.E.2a(8) in the Virginia Solid Waste Management Regulations (VSWMR). However, storage of the ash feed stock needs to be addressed to assure that it is done in accordance with state regulations.

Since this is a construction project, any soil that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); VSWMR (9VAC 20-80); Virginia Regulations for the Transportation of Hazardous Materials (9VAC

and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Parts 107, 171.1-172.558.

Finally, pollution prevention was not addressed in the report. VDEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated.

If you have any questions or need further information, please let me know.





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Impact Review

## COMMONWEALTH of VIRGINIA

### CHESAPEAKE BAY LOCAL ASSISTANCE DEPARTMENT

W. Tayloe Murphy, Jr.  
Secretary of Natural Resources

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FAX: (804) 225-3447  
September 9, 2002

C. Scott Crafton  
Acting Executive Director  
  
(804) 225-3440  
1-800-243-7229 Voice/TDD

Ms. Anne B. Newsom  
Department of Environmental Quality  
Office of Environmental Impact Review  
629 East Main Street, Sixth Floor  
Richmond, VA 23219

**RE: Demonstration of the Manufactured Aggregate Processing Technology  
CBLAD Project Review No. FSPR-DOE-01-02**

Dear Ms. Newsom:

As you requested, we have reviewed the Environmental Assessment (EA) for the proposed commercial demonstration project of the manufactured aggregate processing technology utilizing spray dryer ash. Provided the performance criteria of the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations) are followed, including the stormwater quality provisions, the project should be consistent with the Regulations. From information contained in the EA document, it appears that the project proponent is cognizant of the stormwater requirements and the fact that there is a nearby Resource Protection Area (RPA), which must be avoided. We recommend that the RPA boundary be flagged in this area so that there is no inadvertent encroachment into this area.

We appreciate the opportunity to provide our comments on this project. Please do not hesitate to contact us at 1-800-CHESBAY should you have any questions.

Sincerely,

Catherine M. Harold  
Environmental Engineer

Nancy Miller  
Senior Planner

Cc: Scott Crafton, CBLAD  
Shawn E. Smith, CBLAD

If you cannot meet the deadline, please notify ANNE B. NEWSOM at 804/698-4135 prior to the date given. Arrangements will be made to extend the date for your review if possible. An agency will not be considered to have reviewed a document if no comments are received (or contact is made) within the period specified.

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- 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:

MS. ANNE B. NEWSOM  
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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AUG 29 2002

DEQ-Office of Environmental  
Impact Review

  
Anne B. Newsom  
Environmental Program Planner

COMMENTS

*If the proposed potable water well will serve 25 or more persons 60+ days/year it is classified as a public water system, and must be permitted by the Virginia Dept of Health. The applicant should contact VDH's Culpeper Engineering Field Office for additional information on well siting, construction, etc.*

(signed) A. E. Douglas (date) 8-26-02  
(title) acting Field Services Engineer  
(agency) Virginia Dept. of Health

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17934

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629 EAST MAIN STREET, SIXTH FLOOR  
RICHMOND, VA 23219  
FAX #804/698-4319

  
Anne B. Newsom  
Environmental Program Planner

COMMENTS

We do not anticipate any adverse impacts to species under our jurisdiction

(signed) Raymond T. Farnell (date) 9/12/02  
(title) Environmental Manager  
(agency) Department of Game and Inland Fisheries

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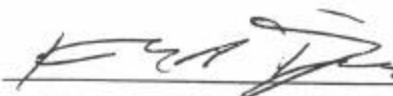
SEP 13 2002

Office of Environmental  
Impact Review

  
Anne B. Newsom  
Environmental Program Planner

COMMENTS

Statements in the project document concerning endangered species were reviewed and compared to available information. Correspondence with state agencies responsible for preservation of endangered species is lacking. Expansion of construction activity into adjacent wooded area for staging areas, etc., may affect listed species. Precautions should be taken to avoid such activity.

(signed)  (Keith R. Tignor) (date) September 10, 2002  
(title) Endangered Species Coordinator  
(agency) VDACS, Office of Plant and Pest Service

W. Tayloe Murphy, Jr.  
Secretary of Natural  
Resources



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SEP 12 2002

DEQ-Office of Environmental  
Impact Review

Joseph H. Maroon  
Director

COMMONWEALTH of VIRGINIA  
DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street  
Richmond, Virginia 23219-2010  
TDD (804) 786-2121

MEMORANDUM

DATE: 10 September 2002  
TO: Charles H. Ellis, III, Virginia Department of Environmental Quality  
FROM: Derral Jones, Planning Bureau Manager  
SUBJECT: DEQ#02-163F: Commercial Demonstration of the Manufactured  
Aggregate Processing Technology Utilizing Spray Dryer Ash

The Department of Conservation and Recreation (DCR) has searched its Biological and Conservation Data System (BCD) 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.

BCD documents the presence of natural heritage resources in the project vicinity. 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.

Any absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources. New and updated information is continually added to BCD. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

Lastly, the proposed project is not anticipated to have any adverse impacts on existing or planned recreational facilities. Nor will it impact any streams on the National Park Service Nationwide Inventory, Final List of Rivers, potential Scenic Rivers or existing or potential State Scenic Byways. Please contact DCR for an update on this information if a significant amount of time passes before it is utilized.

Thank you for the opportunity to offer comments on this project.

*An Agency of the Natural Resources Secretariat*

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR PROGRAM COORDINATION

RECEIVED

ENVIRONMENTAL REVIEW REPORT APPLICABLE TO AIR QUALITY SEP 06 2002

TO: Anne B. Newsom

DEQ-OEIA PROJECT NUMBER: 02-163F

DEQ Office of Environmental  
Impact Review

PROJECT TYPE:  STATE EAVEIR/FONSI  FEDERAL EAEIS  SCC  
 CONSISTENCY DETERMINATION/CERTIFICATION

PROJECT TITLE: COMMERCIAL DEMONSTRATION OF THE MANUFACTURED AGGREGATE  
PROCESSING TECHNOLOGY UTILIZING SPRAY DRYER ASH

PROJECT SPONSOR: DEPARTMENT OF ENERGY

PROJECT LOCATION:  OZONE NON-ATTANMENT AREA  
 OZONE MAINTENANCE AREA  
 STATE VOLATILE ORGANIC COMPOUNDS & NITROGEN  
OXIDES EMISSION CONTROL AREA


REGULATORY REQUIREMENTS MAY BE APPLICABLE TO:  CONSTRUCTION  
 OPERATION

STATE AIR POLLUTION CONTROL BOARD REGULATIONS THAT MAY APPLY:

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

COMMENTS SPECIFIC TO THE PROJECT:

For any permit requirement that is needed (it is expected that the plant would continue operation beyond the demonstration period), our Northern Virginia Regional Office may be contacted.

  
(Kotur S. Narasimhan)  
Office of Air Data Analysis

September 6, 2002

## Newsom, Anne

---

**From:** Michael Foreman  
**Sent:** Monday, September 16, 2002 4:28 PM  
**To:** Newsom, Anne  
**Subject:** RE: DEQ # 02-163F

No comment on this project. Sorry for the lateness of this message.  
JMF

-----Original Message-----

**From:** Newsom, Anne [mailto:abnewsom@deq.state.va.us]  
**Sent:** Friday, September 13, 2002 9:13 AM  
**To:** Keith Tignor (E-mail); Mike Foreman (E-mail); Catherine Harold (E-mail); Steve Manster (E-mail)  
**Subject:** DEQ # 02-163F

Reviewers,

The Office of Environmental Impact Review is finishing its review period for the following project:

Commercial Demonstration of the Manufactured Aggregate Processing Technology Utilizing Spray Dryer Ash  
(comments due September 10, 2002)

If you would like to participate in the review, I need comments from you on your letterhead.

Thank you. If you have any questions, please email me or give me a call.

Anne

Anne Newsom  
629 East Main Street  
Richmond, Virginia 23219  
(804) 698-4135  
(804) 698-4319 (fax)


If you cannot meet the deadline, please notify ANNE B. NEWSOM at 804/698-4135 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:

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Please return your comments to:

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 OFFICE OF ENVIRONMENTAL IMPACT REVIEW  
 629 EAST MAIN STREET, SIXTH FLOOR  
 RICHMOND, VA 23219  
 FAX #804/698-4319

  
 Anne B. Newsom  
 Environmental Program Planner

COMMENTS

We have previously commented that no historic properties will be affected by this project.

(signed)  (date) 8.27.02  
 (title) Archaeologist & Historian  
 (agency) DHR



King George County, Virginia



RECEIVED

SEP 10 2002

DEQ-Office of Environmental  
Impact Review

A. TRAVIS QUESENBERY, P. E.  
COUNTY ENGINEER

COUNTY ENGINEER'S OFFICE  
10459 Courthouse Drive, Suite 201  
King George, Va. 22485  
Telephone: (540) 775-1657  
Fax: (540) 775-5560

August 30, 2002

Ms. Anne B. Newsom  
Department of Environmental Quality  
Office of Environmental Impact Review  
629 East Main Street, Sixth Floor  
Richmond, VA 23129

Re: Draft Environmental Assessment - Commercial Demonstration of the Manufactured  
Aggregate Processing Technology Utilizing Spray Dryer Ash, King George County,  
Virginia; Project 02-163F

Dear Ms. Newsom,

At its meeting on July 9, 2002 the King George County Planning Commission took action on the rezoning request of the Mirant Birchwood Power Facility and their request to amend the existing Special Exception Permit. The purpose of the rezoning and amendment was to allow Universal Aggregates, LLC to use the fly and bottom ash produced as a residual of the electric production process of the coal fired power plant to manufacture a lightweight aggregate. The Planning Commission approved the rezoning request, with proffers, and the amendment to the Special Exception Permit and forwarded the case to the King George County Board of Supervisors with a recommendation for approval. At its August 21, 2002 meeting the King George Board of Supervisors approved the rezoning request, with proffers, and the amendment to the Special Exception Permit.

Copies of minutes of the Planning Commission and Board of Supervisors meetings are attached, as are copies of the Proffer Statement and Special Exception Permit.

Sincerely,

A. Travis Quesenberry, P.E.  
County Engineer

Cc: Mr. Dennis Kerns, County Administrator  
Mr. Jack Green, Director of Community Development

King George County, Virginia

Department of  
Community Development  
10459 Courthouse Drive, Suite 104  
King George, VA 22485



Jack Green, AICP, Director  
Michael Clift, CBO, Building Official  
(540) 775-7111 (office)  
(540) 775-3139 (fax)

August 21, 2002

Julie A. Caiafa, Vice President  
Birchwood Power Partners, LP  
Mirant Birchwood, Inc.  
10900 Birchwood Drive  
King George, Virginia 22485

RE: Rezoning Application: 91-03-Z01a (w/proffer statement); and to  
Amend to Special Exception Permit 91-03-E02  
Tax Map 21, Parcel 50

Dear Ms. Caiafa:

At its August 21, 2002 meeting, the King George County Board of Supervisors approved your request to rezone, with proffers, Tax Map 21, Parcel 50 and to amend Special Exception Permit 91-03-E02.

The Proffer Statement as accepted by the Board of Supervisors and the Special Exception Permit as amended by the Board of Supervisors is attached. The Proffer Statement must be recorded in the Clerk's office along with the Special Exception Permit.

The amended Special Exception Permit must be fully executed by yourself and King George County and then recorded in the Clerk's Office amongst the land records of King George County. Upon your signature, please return the Special Exception Permit for execution by the County. The permit will then be returned to you for recordation.

If you have any questions, please contact me.

Respectfully,

A handwritten signature in black ink, appearing to read "Jack Green", is written over a printed name.

Jack Green, AICP  
Director of Community Development

Cc: Dennis Kerns, County Administrator  
Chron. File  
Parcel File

Proffer Statement

REFERENCE: Rezoning Application No. 91-03-Z01a  
Tax Map 21, Parcel 50

APPLICANT: Mirant Birchwood Power Facility

DATE: August 8, 2002

Pursuant to Section 15.2-2298, Et. Seq. of the Code of Virginia as amended, the owner, hereinafter referred to as applicant, and its successors in title to the land subject to Zoning Map Amendment No. 91-03-Z01a do hereby proffer the following conditions contingent upon the approval by King George County of this proffer statement.

These proffers shall run with the land and shall be binding upon the applicant and the property, which is the subject of this application.

1. Use of the property shall be limited to a power production facility and a power switching facility and a manufactured aggregate facility and uses incidental thereto, as well as such uses as are permitted in the Rural Agricultural (A-2) Zoning District. Any future steam host not within such permitted uses shall require a special exception permit pursuant to the normal procedures for issuance of such permits.
2. The portion of the property north of the RF&P rail spur (approximately 110 acres) shall not be disturbed nor its timber removed except for the extension of power lines and other utilities through such area.
3. Two high pressure fire hydrants will be constructed outside the site fence line along Route 665, giving the volunteer fire department pump trucks access to the project's fire protection system water supply.

Any proposed amendments to this proffer statement shall be considered in conformance with the same legal procedures as required for its initial acceptance.

The applicant hereby proffers that the development of the subject property of this application shall be in strict accordance with the conditions set forth in this submission. The applicant further represents that it is the owner of all the property included within this application and that the signatures below constitute all the necessary signatures of record owners of the property to subject the land within this application to these proffers. These proffers shall be binding upon the applicant, its successors and assigns.

By: Julie Caiafa

Given under my hand this 7<sup>th</sup> day of Aug., 2002.

Commonwealth of Virginia, County of King George, To Wit:

I, the undersigned, a Notary Public in and for the State and County aforesaid, do hereby certify that Julie Caiafa whose name is signed to the foregoing bearing the date of 8/7, 2002, has this day personally appeared before me in my State and County aforesaid and acknowledged the same.

Notary Public: Anne C. McDermott. My Commission Expires: 7/31/04

Given under my hand this 7<sup>th</sup> day of Aug., 2002.

**AMENDED  
SPECIAL EXCEPTION PERMIT  
CASE NUMBER 91-03-E02**

Pursuant to Article 5, Section 5.4 of the King George County Zoning Ordinance, SEI Birchwood, Inc., "the Owner", is hereby granted an amended Special Exception Permit, "the Permit", to construct and operate a 220 Megawatt Coal-Fired Electrical Generating Facility, "the Facility" on Tax Map Parcel Numbers 21-25A and a portion of 21-50, consisting of 212.71942 acres.

This Permit is effective as of May 20, 1997 and as amended on August 2, 1995, September 3, 1996, May 7, 1997, and August 28, 2002.

This permit is issued with the following conditions to which the undersigned Owner does agree to comply. Failure to comply with these conditions may result in suspension or revocation of this Permit without regard to whether any other State or Federal Permit issued for this Facility is revoked or suspended.

1. Ash shall not be disposed in any manner, including use as cover material in the King George County Landfill prior to the execution of a written agreement between the County, SEI and Garnet of Virginia regarding tipping fees or any other fees generated by the disposal of said ash in the King George Landfill. Ash generated at the site may be used beneficially within King George County by the Owner or by third parties.
2. Route 665 shall be upgraded from the intersection of Route 605 to Route 3, including whatever crossing improvements are determined necessary at the railroad to current Virginia Department of Transportation industrial access standards as described in the "Guide to the Industrial Access Roads Program of the Virginia Department of Transportation, Secondary Roads Division memorandum SR-46-89" (July, 1989). The right of way for the upgraded Route 665 shall be 70 feet. The Owner shall not be responsible for obtaining any additional right of way not already owned or contracted for purchase by the Owner, the County or the Department of Transportation. In the event additional right of way is obtained and the cost of such right of way is not covered by state industrial access funds, the Owner will pay just compensation for such additional right of way. The County will make a good faith effort with the Owner to apply for and obtain industrial access funds through the Virginia Department of Transportation to assist in the upgrading of Route 665.
3. The Stormwater runoff collection pond shall be designed for a 10 year 24-hour storm. The coal pile run-off pond shall be designed to store a 100 year 24-hour storm.
4. The County, through the Department of Community Development, shall be provided with copies of all Federal and State permits necessary for the operation of the power plant facility prior to the issuance of a building permit.

5. The Owner, during construction and operation of the Facility, shall provide the County, through the Department of Community Development, with copies of all federal and state environmental monitoring reports and any notices of violation.
6. The Owner agrees to comply with all applicable federal and state laws regulating air quality or air pollution control, including those requiring any future upgrade in standards under such laws.
7. The Owner shall develop with the County an Emergency Operations Plan for chemical and/or fire hazards at the Facility. Said plan shall include training and information regarding the resources available on site. The Emergency Operations Plan shall be coordinated through the King George County Emergency Services Coordinator; King George County Volunteer Fire Departments; King George County Rescue Squads and any fire and/or rescue squads located outside the County that participate through a mutual aid agreement in providing emergency services within King George County.
8. The Owner shall construct the Facility to conform in all respects with Section C.4 "Dust Control During Construction and Operation" as set forth in the "SEI Birchwood Power Facility, King George County Virginia, Applications and Information Package for Rezoning and Special Exception Permit" dated March 21, 1991 (revised April 29, 1991 and May 2, 1991) and Exhibit A attached hereto and entitled "Railroad Car Handling, Coal Handling System and Ash Handling System Description."

The Owner acknowledges acceptance of these conditions as herein described and does affix his signature hereto seals to assure a guarantee of compliance.

\_\_\_\_\_  
President  
SEI, Birchwood, Inc.

\_\_\_\_\_  
County Administrator  
King George County, Virginia

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

EXHIBIT A  
RAILROAD CAR HANDLING, COAL HANDLING SYSTEM  
AND ASH HANDLING SYSTEM DESCRIPTION

Material Handling Description

- Railroad Car Handling

A unit car train will deliver coal from the mine to the plant site. The train will be scheduled to arrive at the plant approximately every 4 to 5 days. The locomotive will pull the bottom dump cars to the turnover car dumper to unload the train. The pneumatic discharge cars that haul fly ash will be positioned after the unit car train leaves. A trackmobile or engine will move these cars for unloading coal and loading ash. These cars with the ash will then be moved into position to leave with the next unit train.

- Hauling System

Coal (approximately size 2" x 0") will be delivered by unit car train with bottom dump cars. The material handling system will be sized to unload the unit train in approximately 4 to 6 hours. Coal will be unloaded using a turnover car dumper.

The turnover car dumper will unload the coal into a receiving hopper. The discharge of the hopper will have associated slide gates and belt feeders. The coal from the belt feeders will transfer to a collecting conveyor. The radial stacker will have a capacity of up to two train loads with an unloading rate of approximately 2500 tph.

The live storage pile will be sized for approximately 30 days, based on design operating conditions. The reclaim system will include either a single or redundant conveyors into the boiler house. These conveyors will have vibrating pile discharges with belt feeders that will reclaim coal from under the live storage pile. These conveyors will have self-cleaning magnetic separators at the discharge chutes. Both conveyors will then transfer the coal into the coal crushers to reduce the coal to approximately 1-1/4" to 0".

The coal from the crushers will discharge onto conveyors which will transport the coal into the boiler house silo bay. A conveyor with a traveling belt tripper will discharge into the silos.

The boiler house coal silos will be sized for a total of approximately 26 hours storage at design operating conditions. The fuel handling system will be fitted with a dust suppression system at the turnover car dumper and at the radial stacker. A dust collection system will be used at the transfer points in the reclaim tunnel, the crusher building, and the traveling belt tripper.

The lime handling system will be designed to receive lime delivery by either rail or truck for unloading into the lime storage silo.

#### Ash Handling System

- Bottom Ash

The bottom ash system includes a submerged drag chain, which will convey the bottom ash directly to the rail cars or to trucks. Rejects from the pulverizers will be collected in a dry storage bin for manual removal.

- Fly Ash

The fly ash system will consist of individual airlocks on each hopper feeding into pneumatic conveying lines going directly to the fly ash storage silo. A spare air blower will be supplied to provide redundancy.

- Silo Equipment

The storage silo will receive only the fly ash. The silo will be positioned over the railroad track for loading through a dry unloading spout directly into pneumatic discharge rail cars, properly tarped dump trucks, or pneumatic discharge trucks. The rail cars or trucks will be vented back through the unloading spout. The silo aeration system will have two blowers for redundancy. The silo will also be equipped with the appropriate bin vent filter and vacuum/pressure relief doors.

A pug mill wet ash conditioner may be installed on the silo. If so, the conditioned ash will be loaded directly into properly covered dump trucks.

All trucking options listed above will be for purposes of beneficial use of the ash generated at the site.

**PLANNING COMMISSION**

**July 9, 2002**

**7:00 p.m.**

Mr. John Donegan called the regular meeting of the King George County Planning Commission to order at 7:00 p.m. in the Board Room of the Revercomb Building. A quorum was present.

**STAFF PRESENT:** Mr. Jack Green, Director of Community Development  
Mr. Kyle Conboy, GIS Coordinator/Planner  
Mr. Matthew J. Britton, County Attorney

**MEMBERS PRESENT:** John Donegan, Chairman  
Carolyn Daniels  
William G. Eschmann, II  
Stephen Eckel  
Karla Frank  
Gary Kendrick  
David Kitterman  
Thomas Poland  
Elmore Tyler

**MEMBERS ABSENT:** Whit Turner, Vice-Chairman

Mr. Poland led the Pledge of Allegiance.

Mr. Tyler provided the Invocation.

Mr. Donegan introduced Mr. David Kitterman as the newly appointed member to the Planning Commission. Mr. Kitterman was appointed to fill the position previously held by Mr. John King.

The consensus of the Commission members was to send a letter to Mr. King expressing their appreciation for his service and dedication to the County as a Planning Commission member and a term as Chairman of the Commission.

**Approval of Minutes:**

On a motion by Ms. Frank, seconded by Mr. Eckel, and carried by a 7-0-2 vote, each member voting as follows: Mr. Donegan Aye; Ms. Daniels Aye; Mr. Eschmann Aye; Mr. Eckel Aye; Ms. Frank Aye; Mr. Kendrick Aye; Mr. Poland Aye; Mr. Kitterman Abstaining and Mr. Tyler Abstaining, the King George County Planning Commission approved the minutes of the June 6, 2002, work session, as amended.

On a motion by Mr. Tyler, seconded by Ms. Frank, and carried by a 6-0-3 vote, each member voting as follows: Mr. Donegan Aye; Ms. Daniels Aye; Mr. Eschmann Aye; Mr.



Eckel Aye; Ms. Frank Aye; Mr. Tyler Aye; Mr. Kendrick Abstaining; Mr. Poland Abstaining; and Mr. Kittermann Abstaining, the King George County Planning Commission approved the minutes of the regular meeting of June 11, 2002, as amended.

**Public Hearing:**

The Chairman, Mr. Donegan, called the public hearing to order, noting that it had been advertised in accordance with provisions of the Code of Virginia, 1950, as amended. Mr. Donegan stated that the purpose of the public hearing was to receive comments concerning the following case: Request by Mirant Birchwood, Inc. to Modify Proffer Statement Rezoning Application: 91-03-Z01 and to Amend Special Exception Permit 91-03-E02, Tax Map 21, Parcel 50.

**Request by Mirant Birchwood, Inc. to Modify Proffer Statement Rezoning Application: 91-03-Z01 and to Amend Special Exception Permit 91-03-E02, Tax Map 21, Parcel 50:**

Mr. Green provided a staff report on this request and stated that Ms. Julie A. Caiafa, Vice President Manager, Birchwood Power Partners, L.P., was requesting an amendment to the Proffer Statement associated with Rezoning Application 91-03-Z01 and Special Exception Permit 91-03-E02. The purpose of the amendment would be to allow Universal Aggregates (UA), LLC of Bridgeville, PA (UA) to use the fly and bottom ash produced as a residual of the electric production process of the coal fired power plant to manufacture a light weight aggregate. Mr. Green reported that UA had received a \$7.2 million grant from the U.S. Department of Energy (DOE) to help augment its start up cost in developing a plan to reuse fly ash to make lightweight aggregate for concrete masonry blocks or concrete. The proposed facility would have nine employees.

Mr. Green provided background information concerning Birchwood's rezoning application, with proffers, and special exception permit granted on August 6, 1991 and subsequent amendments to the special exception permit on August 2, 1995; September 3, 1996, and May 20, 1997.

Mr. Green stated that this request was to allow the on-site beneficial use of ash generated in the power production process. He further explained that Birchwood was a coal-fired power plant, that the fly ash was generated as a by-product of burning coal, and that the fly ash currently was being disposed of in the King George County Landfill.

Mr. Green explained that Birchwood and Universal Aggregates had developed a proposal in which UA would develop an aggregate plant on three acres of the existing Birchwood Power Plant site. If the permit were approved, UA would construct their plant on the north side of the Birchwood Plant, near the existing ash silo. The UA plant would consist of a 48-foot by 72-foot two-story building to house the equipment, a modular office, and a 24-foot by 35-foot two-story building for the crushing and screening operations.

Mr. Green stated that the proposed project would not impact a Resource Protection Area and storm water would be detained for quality and quantity in a facility specifically designed to serve the proposed aggregate facility. UA would also develop its own potable water supply and septic system to treat wastewater.

Mr. Green shared the results of a traffic impact analyses study done by Universal Aggregates and explained that currently an average of 60 trucks per day were carrying ash from the Birchwood Facility to the Landfill. Once the aggregate plant was operational, the truck traffic on the road would decrease from 60 trucks per day to 20-30 trucks per day and would generate a turning action at the intersection of Route 3 and 605 of additional 2-3 trucks per hour.

Regarding water use, Mr. Green stated that Birchwood Power Facility, through its Rappahannock River water withdrawal permit, would provide the minimal amount of water necessary for Universal Aggregate to process the ash to aggregate. Universal Aggregate would not discharge water as a by-product of the ash processing, because all of the water used in the process would be absorbed.

Mr. Poland expressed his concern about the possible loss of revenue to the County in that the County landfill was currently receiving the ash from Birchwood. Mr. Green concurred that there would be some monetary loss to the County but there would also be monetary gain to the County with the establishment of this new facility.

The Chairman opened the floor for public comment regarding this case.

Three Members of the Project Development Team of Universal Aggregates, Mark Williams, Compliance Manager of Birchwood Power Facility; Roy O. Scandrol, Manager of Engineering with Universal Aggregates; and Douglas Fraser of GeoEnvironmental Services, Inc., addressed the Commission and provided a comprehensive overview of their proposal which included extensive detail related to the process of aggregate production using the fly and bottom ash from the Birchwood Power Facility, the benefits of such a project, a technical description of the facility and a detailed impact assessment.

If approved, the proposed construction schedule for the project would begin with a groundbreaking ceremony in mid to late October 2002; contractor mobilization in mid-November 2002, with construction completed July 2003 and plant startup, with production beginning in September 2003.

There being no further public comment, the Chairman closed that portion of the public hearing.

There were several questions from the Commission members regarding specific operations of such a facility, i.e. noise level during production, truck traffic and timing of transport, hours of operation, contingency plans in the event of plant failure, safety issues etc., as well as questions relating to the economic impact to the County with respect to the landfill no longer receiving the ash from the power plant.

On a motion by Mr. Eckel, seconded by Ms. Daniels, and carried unanimously, each member voting as follows: Mr. Donegan Aye; Ms. Daniels Aye; Mr. Eschmann Aye; Mr. Eckel Aye; Ms. Frank Aye; Mr. Kendrick Aye; Mr. Kitterman Aye; Mr. Poland Aye; and Mr. Tyler Aye, the King George County Planning Commission forwarded the Rezoning Request with Proffers by Mirant Birchwood, Inc. , Case No. 91-93-Z01 to the King George County Board of Supervisors with a recommendation for approval.

On a motion by Mr. Tyler, seconded by Mr. Poland, and carried unanimously, each member voting as follows: Mr. Donegan Aye; Ms. Daniels Aye; Mr. Eschmann Aye; Mr. Eckel Aye; Ms. Frank Aye; Mr. Kendrick Aye; Mr. Kitterman Aye; Mr. Poland Aye; and Mr. Tyler Aye, the King George County Planning Commission forward the Amendment to Special Exception Permit 91-03-E02, Tax Map 21, Parcel 50, to the King George County Board of Supervisors with a recommendation for approval.

**Old Business:**

Mr. Green provided copies of the most recent Draft Revisions to the King George County's Subdivision Ordinance in which he had incorporated comments received from Commission members. He also provided a copy of the Virginia Code Requirements for management of common facilities or property owners associations. Section 6.1, Access Standards, had been revised to add standards for additional entrances and inter-parcel connectors.

Mr. Donegan asked Mr. Green to provide a summary sheet highlighting the proposed revisions to the Subdivision Ordinance that the Commission members could use in meeting with various groups and organizations throughout the County prior to the public hearing on this issue. Mr. Green would provide that tutorial document available at the August Planning Commission meeting.

There was continued discussion about the proposed changes and the legal issues relating to some of those amendments. Mr. Donegan inquired of Mr. Britton about a legal review of the Draft Revision to the Subdivision Ordinance. Mr. Green stated that the document had not been formally sent to Mr. Britton for review.

Mr. Donegan also asked that, in an effort to make the public more aware of these proposed changes, that the draft Subdivision Ordinance be placed on the County's website for easy access to County residents as well as place draft copies in the public library.

Mr. Britton expressed his concern about the proposed timeframe for a public hearing on the Subdivision Ordinance changes vs. the amount of time involved for a legal review of the document

After considerable discussion, the consensus of the Commission was to allow time for the legal review, continue to provide comments on the Ordinance to Mr. Green, and reassess

at the August meeting the need for additional work sessions as well as the date for a public hearing on the Draft Revisions to the Subdivision Ordinance based on the completion of the legal review

**Public Comment:**

The Chairman opened the floor for public comment.

Mr. Alan West addressed the Commission regarding the proposed changes to the Subdivision Ordinance from the vantage point of the development community and hoped that the local builders and developers would have a chance to review the proposed changes and perhaps be invited to participate in a future work session on the document. He did say that the Builders Association had seen a copy of the original draft of the Revisions to the Subdivision Ordinance.

Mr. Robert VanValzah expressed his concern over the rights of landowners in King George County and asked that careful consideration be given to the issue of dividing family owned property.

There being no further public comment, the Chairman closed that portion of the meeting.

There being no further business to come before the Commission, the meeting adjourned on a motion by Mr. Eschmann, seconded by Mr. Poland, and carried unanimously, each member voting as follows: Mr. Donegan Aye; Ms. Daniels Aye; Mr. Eschmann Aye; Mr. Eckel Aye; Ms. Frank Aye; Mr. Kendrick Aye; Mr. Kitterman Aye; Mr. Poland Aye; and Mr. Tyler Aye.