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IN THE
SUPREME COURT OF VIRGINIA

Record Nos. 961426 and 961462

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

and
PETER W. SCHMIDT, DIRECTOR,

v.

Appellants,

Record No. 961462

RESIDENTS INVOLVED IN SAVING THE ENVIRONMENT, INC.;
SECOND MOUNT OLIVE BAPTIST CHURCH; WINIFRED BELDON;
JAMES ROBINSON; EDNA ROBINSON; MORVITZ JORDAN;
DOLLY JORDAN; PIEDMONT FARMS, INC.; ROGER CALHOUN;
STEVEN CALHOUN; CHRISTINE CALHOUN; WILLIAM HERRING;
ELISE HERRING; KENNETH BYRD, JR.; BETTY A. DUNGEE;
and FLORENCE S. MORRIS,

Appellees,

and

BROWNING-FERRIS INDUSTRIES OF SOUTH ATLANTIC, INC.,
Appellant,

v.

Record No. 961426

RESIDENTS INVOLVED IN SAVING THE ENVIRONMENT, INC.;
SECOND MOUNT OLIVE BAPTIST CHURCH; WINIFRED BELDON;
JAMES ROBINSON; EDNA ROBINSON; MORVITZ JORDAN;
DOLLY JORDAN; PIEDMONT FARMS, INC.; ROGER CALHOUN;
STEVEN CALHOUN; CHRISTINE CALHOUN; WILLIAM HERRING;
ELISE HERRING; KENNETH BYRD, JR.; BETTY A. DUNGEE;
and FLORENCE S. MORRIS,

Appellees.

JOINT APPENDIX

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VIRGINIA:

IN THE CIRCUIT COURT FOR THE CITY OF RICHMOND
JOHN MARSHALL COURTS BUILDING

RESIDENTS INVOLVED IN SAVING
THE ENVIRONMENT, INC.;
SECOND MT. OLIVE BAPTIST CHURCH;
WINIFRED BELDON;
JAMES ROBINSON AND EDNA ROBINSON;
MORVITZ JORDAN AND DOLLY S. JORDAN;
PIEDMONT FARMS, INC; ROGER CALHOUN,
STEVEN CALHOUN AND CHRISTINE CALHOUN;
WILLIAM HERRING AND ELISE HERRING;
BETTY A. DUNGEE; KENNETH BYRD, JR.;
AND FLORENCE S. MORRIS,

Appellants,

v.

COMMONWEALTH OF VIRGINIA DEPARTMENT
OF ENVIRONMENTAL QUALITY

AND

RICHARD N. BURTON,
DIRECTOR,

Appellees.

To: Mr. Richard N. Burton, Director
Department of Environmental Quality
Commonwealth of Virginia
101 North Fourteenth Street
James Monroe Building
Eleventh Floor
Richmond, Virginia 23219

Chancery
No. _____

RECEIVED & FILE
CIRCUIT COURT
JUL 30 1993
IVA R. PURDY, CLE
BY _____

PETITION FOR APPEAL

This is an appeal by a King and Queen County citizens' group incorporated under the laws of Virginia, the congregation of an historic African-American church, thirteen individual citizens

of King and Queen County, and a farming corporation incorporated under the laws of Virginia, of the agency action, case decision, rule, or regulation of Richard N. Burton, Director (the "Director") of the Virginia Department of Environmental Quality ("DEQ"), dated June 2, 1993, granting a solid waste facility permit for the construction, operation, and maintenance of a regional dump site in King and Queen County, Virginia, more specifically described as Solid Waste Facility Permit Number 554 (the "Permit") on the grounds that DEQ's action in granting the Permit was arbitrary and capricious and illegal and that DEQ and its Director failed to comply with the provisions of Va. Code Ann. § 10.1-1408.1 and DEQ regulations.

Va. Code Ann. § 10.1-1408.1D (1989 Repl. Vol., 1992 Cum. Supp.) states, in pertinent part, that:

D. No permit for a new solid waste management facility shall be issued until the Director has determined, after investigation and evaluation of comments by the local government, that the proposed facility poses no substantial present or potential danger to human health or the environment. . . .

The Director failed to comply with this provision of the Code in that no such investigation was conducted as required by law, notwithstanding the fact that evidence and testimony were presented by concerned citizens, including the plaintiffs, that the facility posed a substantial present or potential hazard to human health and the environment.

Environment:

The dump site is situated within the Dragon Swamp through the heart of which flows the Dragon Run, a 35-mile long waterway that flows into the larger Piankatank River. The Swamp was formed one million years ago when the waters of the Pleistocene Ocean receded and the Coastal Plain province emerged. The Swamp is unique among ecosystems because the same combination of remarkable features present in the Swamp are not found elsewhere in Virginia. It has been proclaimed by the Smithsonian Institute as the second most ecologically significant wilderness on the Chesapeake Bay. It certainly is the most significant in Virginia. The Dragon Swamp is one of the last remaining pristine hardwood and cypress swamps in Virginia, and it also serves as home to plentiful wildlife including otter, beaver, raccoons, muskrats, and deer. Birds such as mallards, ducks, and herons abound.

In the early days of Virginia's development, the Dragon Run was used to transport logs, hides, tobacco, and crops to landings along the Bay. It was the first Virginia river to receive detailed study under the Scenic Rivers Act of 1970. The Dragon Run forms the upper reaches of the Piankatank River, which flows into the Chesapeake Bay, and contains panfish, pickerel, perch, catfish, bass, and other fishes. The Piankatank River is a source of oysters for Virginia's watermen. In fact, the Virginia Marine Resources Commission plans to spend millions of dollars to replenish the oyster beds in the Piankatank. These oyster beds would be jeopardized by the upriver landfill, especially if the leachate containment system fails or proves to be inadequate.

Unless the Permit is revoked, irreparable damage will be done to the Dragon Run and ultimately to the Chesapeake Bay. Friends of the Dragon Run, a not-for-profit organization dedicated to the preservation of the Dragon Run, advised the Director on April 5, 1993, that any leachate material not successfully intercepted will enter the Dragon Run and will pass through the Piankatank River to the Chesapeake Bay. Notwithstanding this fact, the Director granted a variance to the applicant which provides for even less protection.

Human Health:

The location of the landfill requires that all truck traffic, which will consist of in excess of 400 trucks per day (round trip), utilize Routes 603, 614, 609, and 14. There are a number of schools on several of these roads, and all of the roads are frequented by school buses.

One of the Appellants, Residents Involved in Saving the Environment, Inc. (RISE), hired Woolpert Consultants, an engineering firm, to conduct a review of the roadways leading to the dump site to evaluate whether they can adequately and safely accommodate the large trucks hauling solid waste to the dump site. The consultant testified at a March 24, 1993, public hearing in King and Queen County that the roads are not adequate to safely handle the truck traffic. The consultant stated at the hearing that "based on the available information, the amount of heavy truck traffic that these roads will experience has not been taken into effect or into account. The volume is much more than what is

normally experienced on the rural-type road and it causes particular concern on several factors, one of them is the roadway width." The consultant pointed out that the roads in question have no shoulders and that there are deep ditches right against the roadway in many places.

In the consultant's report, which was submitted to the Director within the comment period, the consultant concluded the following:

1. State Route 14 and Secondary Route 603 and 614 will experience a higher than normal percent of truck traffic.
2. The lack of shoulders along State Route 14 and Secondary Route 603 and 614 is an undesirable condition for supporting the proposed truck traffic.
3. The pavement width of State Route 14 and Secondary Route 603 is marginal in capacity to safely and efficiently support the proposed truck traffic.
4. The pavement width of Secondary Route 614 is inadequate to safely and efficiently support the proposed truck traffic.
5. The pavement composition of Secondary Route 614 is inadequate to support the proposed truck traffic.

Truck traffic must travel along Routes 14, 614, 609, and 603 to reach the dump site. The consultant examined each roadway:

Route 614: Route 614 is 17 1/2 feet wide. There is not enough room for two vehicles, two heavy vehicles, a truck and a bus or two trucks to pass safely.

Route 14: Route 14 is a narrow, meandering, rural-serving road, serving farming and logging interests. Although approximately 11 miles of Route 14 has been upgraded to provide adequate sight distance and passing zones, there are still about two-thirds of road that only has 20-foot pavement with one- to two-foot shoulders. These sections can be characterized by fairly sharp curves and inadequate sight distances.

Route 603: Route 603 has a roadway width of 22.5 feet, with no shoulders. This roadway winds over rolling terrain and has several horizontal curves.

Route 609: Route 609 is an unpaved dirt road.

Since approval of the Permit and construction of the landfill began in June, 1993, the King and Queen County Sheriff's Department has been inundated with telephone calls from County residents complaining because they have been forced off the road or have narrowly avoided vehicular mishaps with the large landfill trucks traveling in a constant stream on the County's narrow roads hauling materials to and from the dump site. Exhibit 1 (See attached), prepared by the consultant, shows that a school bus and

large truck cannot safely pass in the opposite direction on Route 614.

Additionally, other health issues involve the dust (Route 609 is unpaved) and pollution from diesel trucks and equipment that will aggravate the condition of persons suffering from respiratory problems, and the noise that will emanate from the tremendous traffic that is being and will continue to be generated by the vehicular activity in and around the dump site.

Further, the water supply of the surrounding residents is jeopardized by a dump site in close proximity to their water supply. Also, nearby streams will be affected. As noted hereinafter, there are downstream farms which are dependent upon these streams as a source for drinking for their animals.

Historic Sites

There are at least 10 historic sites within the dump site. This has been confirmed by the Virginia Department of Historic Resources.

PARTIES

1. Florence S. Morris is a homeowner residing on Route 614 in King and Queen County, Virginia. Her husband suffers from a respiratory illness and her son underwent a tracheotomy, as a consequence of which he wears a tracheal tube. The Morrisses have lived in their home for most of their lives, and their home, which is located less than two miles from the landfill site, is on the rural road leading to the proposed landfill. The medical conditions

of Mrs. Morris's husband and son have been greatly affected and will continue to be affected by the enormous amount of dust created by more than 400 heavy trucks passing their home (round trip) each day. The number of trucks will more than double within the next year and will continue for the indefinite future.

2. Kenneth Byrd, Jr. is a homeowner residing in King and Queen County. The residence of Mr. Byrd and his family is near the landfill, and the Byrd family depends upon a shallow well for their drinking water and household needs. Their shallow well is approximately 1,000 feet from the landfill site.

3. Betty A. Dungee is a homeowner residing in King and Queen County, Virginia. The residence of Ms. Dungee is in close proximity to the landfill site. Ms. Dungee depends upon a deep well for her drinking water and household needs. Her well is approximately 1,000 feet from the landfill.

4. William Herring and Elise Herring are husband and wife who own a home in King and Queen County, Virginia. The Herrings reside approximately two miles from the dump site.

5. Steven Calhoun and Christine Calhoun are husband and wife who own and reside on Piedmont Farms, which is adjacent to the dump site. Their water supply comes from a deep well approximately 1,500 feet from the dump site. The Calhouns' cattle drink from a stream that runs through the dump site.

6. Roger Calhoun is the brother of Steven Calhoun. Roger Calhoun resides on Piedmont Farms, which is adjacent to the dump site. His water comes from a well approximately 1,500 feet

from the dump site, and his cattle drink from the stream that runs through the dump site.

7. Piedmont Farms, Inc. is a farming corporation incorporated under the laws of Virginia that owns land in King and Queen County adjacent to the dump site. Piedmont Farms grows corn, vegetables, and grass crops and raises beef cattle. The cattle drink from a stream that runs through the dump site. Their pasture is approximately 150 yards from the dump site.

8. Morvitz Jordan and Dolly Jordan are husband and wife who are retired individuals and who own a home in close proximity to the dump site on Route 614. Their son is a paraplegic who requires special care. The Jordans must stay home all day to care for their son. Their home is not air conditioned, and the Jordans need to keep their windows open in the summer. Because of the dust from the trucks, the Jordans are unable to keep their windows open and Mrs. Jordan is unable to hang her clothes on the line to dry. Her water supply is from a shallow well that is approximately 900 feet from the dump site.

9. James Robinson and Edna Robinson are husband and wife. They were born in King and Queen County, Virginia, but lived away for many years. Several years ago, they returned to the County and built a new home in the County which is adjacent to the dump site. They receive their water supply from a shallow well which is approximately 400 feet from the dump site.

10. Second Mt. Olive Baptist Church is an historic African-American Church located adjacent to the dump site. The

church has 225 active members and serves an important role in the African-American community. Since there are no recreational facilities in the community, the church also serves as a community center for both youth and adults. The church cemetery adjoins the church premises. The dump site is literally at the "back door" of the church. Only a 100-foot buffer separates the landfill from the church grounds. The church's shallow well, upon which the congregation relies for its drinking water, is only 300 feet from the dump site.

11. Residents Involved in Saving the Environment, Inc. is a non-profit Virginia corporation whose 300 members live within King and Queen County, Virginia, many of whom are adjacent landowners to the dump site, and are affected by the decision of the Director, which is the subject of the appeal.

STANDING

12. The Appellants are persons aggrieved and affected by the Director's decision to grant the Permit. A number of the Appellants are adjacent landowners or are a representative of adjacent landowners, whose property values and water supply may be affected by the Permit.

Each of the Appellants enjoys the aesthetic value of the pristine, undeveloped nature of the area where the landfill is being constructed.

13. The Appellants enjoy the fauna of the area and live in the community because of its freedom from development, noise,

and traffic congestion and all other benefits that are concomitant with residing in a rural area.

14. As set forth above in paragraphs 1 through 11, each of the Appellants has roots in the community and is individually, both presently and potentially, damaged by the construction and operation of the dump site.

15. The individual Appellants are landowners and their property values will be impaired by the dump site.

16. It affirmatively appears that each of the Appellants, in any individual or representative capacity, has a direct, immediate, pecuniary, and substantial interest in the outcome of this litigation.

INJURY AND DAMAGES

17. Each of the Appellants is directly and substantially injured by the construction of the landfill, and the harm they are suffering will continue and likely worsen when the landfill begins operation. The Appellants' quality of life, their water supply, and their real estate values have and will continue to be irreparably harmed by the construction of the landfill. Additionally, the Appellants' health has been and will continue to be adversely impacted by the dust and noise created by the construction of the landfill; their peace of mind has been and will continue to be disturbed by the loud drone of heavy dirt-removal equipment and the rumbling passage of large trucks traveling to and from the landfill; and their vehicular and pedestrian safety has

been and will continue to be jeopardized because of the huge trucks that travel to and from the landfill on the narrow, meandering rural roads that are unsuitable for accommodating such a heavy traffic load. Their water supply will be potentially affected. Also, the livestock and thus the income and livelihood of several of the Appellants will be potentially adversely affected by damage to streams, springs, and groundwater in proximity to the landfill.

18. The Plaintiffs and the citizens of the entire Commonwealth are and will continue to be damaged by the dump site because it is situated in the wetlands of the Dragon Swamp, a marshy area teeming with multifarious flora and fauna through which the Dragon Run flows. The Dragon Run feeds into the Piankatank River, which is a tributary to the Chesapeake Bay. Concerned citizens have observed that there already is damage from the landfill's construction to nearby streams. These streams and waterways all lead to the Chesapeake Bay, and ultimately, this damage will be irreparable.

JURISDICTION AND VENUE

19. This Court has jurisdiction over this appeal pursuant to (1) Va. Code Ann. § 9-6.14:16 (Virginia Administrative Process Act); (2) Va. Code Ann. § 62.1-44.24 (State Water Law); (3) Va. Code Ann. § 10.1-1457 (Judicial Review of Administrative Decisions), and (4) Rule 2A:2 of the Rules of the Supreme Court of Virginia.

20. The Appellants submitted, by counsel, on July 1, 1993, their Notice of Appeal of the Amendments to the Board's Executive Director, pursuant to Rule 2A:2 of the Rules of the Supreme Court of Virginia. The Notice of Appeal is attached and incorporated herein as Exhibit 2.

21. Venue is proper in this Court pursuant to Va. Code Ann. § 9-6.14:5, 9-6.14:16, 8.01-261(1)(a), and 8.01-263.

THE APPLICATION AND APPROVAL PROCESS

22. On September 18, 1990, Browning-Ferris Industries of South Atlantic, Inc. ("BFI"), 2490 Charles City Road, Richmond, Virginia 23231 filed a Notice of Intent with DEQ. The Notice of Intent is the first step in the permitting process for sanitary landfills.

23. BFI submitted Part A of its application for a Permit to DEQ on February 4, 1991, and DEQ approved it on July 29, 1991.

24. BFI filed Part B of its application on March 20, 1992, and it was approved by DEQ.

25. The facility is located on Route 609, approximately 400 feet east of the intersection of Route 609 and 614 in King and Queen County, Virginia. The facility encompasses 325 acres, of which 227 acres encompass the limits of waste disposal.

26. DEQ held a public hearing in King and Queen County on March 24, 1993. The hearing was attended by 400 to 500 persons. More than ninety percent of those who spoke at the hearing voiced strong opposition to the project. Most of the Appellants spoke at

the hearing. The transcript of the hearing reflects that the citizens raised the issues which are before this Court.

27. On June 2, 1993, the Director granted BFI Solid Waste Facility Permit No. 554, which gave BFI permission to "construct, operate, and maintain" a sanitary landfill in King and Queen County, Virginia. According to the Permit, solid waste will be delivered to the site by private automobiles and trucks, packer trucks, transfer trailers, and other commercial vehicles.

28. The landfill site is located within the Dragon Swamp which is within the watershed of the Dragon Run, a recreational river that qualified for scenic river designation. The Dragon Run flows into the Piankatank River, which runs into the Chesapeake Bay.

29. The site contains designated wetlands, which would be subject to a Federal permit, according to maps obtained from the U.S. Fish and Wildlife Service. Nothing in the record of decision shows the location of the delineated wetlands and how the owner plans to develop the site.

30. The landfill is located in a section of King and Queen County populated largely by African-Americans and is located only several hundred feet from the historic Second Mt. Olive Baptist Church, its water well, and its cemetery. It is the position of the African-American appellants that location of this dump site in the African-American community is environmental racism.

ISSUES ON APPEAL

31. The Appellants adopt and incorporate paragraphs 1 through 11 above, as set forth above.

32. The Appellants allege that the landfill will cause or contribute to significant degradation of wetlands.

33. The Appellants allege that the Permit violates § 5.1.A.7.C of VR 672-20-10, which prohibits a sanitary landfill disposal unit from extending closer than 500 feet from any groundwater source of drinking water. The shallow well of the Second Mt. Olive Baptist Church, one of the Appellants, is located approximately 300 feet from the landfill site, and several other wells are within 400 and 500 feet of the landfill.

34. The Appellants allege that the landfill will impact on and/or adversely affect historic sites in the area.

35. The Appellants allege that the Director and DEQ breached their responsibility and duty by failing to adequately examine or require the examination of the soil in and around the landfill site.

36. The Appellants allege that there will be inadequate on-site management, monitoring and testing of leachate.

37. The Appellants allege that there is potential adverse effect on the groundwater or drinking water supply.

38. The Appellants allege that the roads leading to the landfill site are unsafe and unsuitable for the increased truck traffic and will not be passable in all weather conditions.

39. The Appellants allege that the Director and DEQ failed to investigate whether the applicant knowingly or willfully misrepresented or failed to disclose a material fact in applying for the Permit or in his disclosure statement, or any other information, report or certification required by law or under the regulations of DEQ, or has knowingly or willfully failed to notify the Director of any material change to the information in the disclosure statement as required by § 7.12 of the Solid Waste Management Regulations.

40. The Appellants allege that the Director and DEQ failed to investigate whether the dump site will adversely affect the wetlands, the Dragon Swamp, the Dragon Run, and the Piankatank River, into which the Dragon Run flows, or the Chesapeake Bay.

41. The Appellants allege that the Director and DEQ, before allowing construction to proceed, failed to investigate whether the construction and/or operation of the landfill will create an adverse impact or a present or potential hazard to human health as required by Va. Code Ann. § 10.1-1408.1D.

42. The Appellants allege that the Director and DEQ, before allowing further construction to proceed, should investigate whether the landfill will create a substantial present or potential adverse impact on the environment.


43. The Appellants allege that the leachate or residue from the dump site poses a threat of contamination or pollution of the air, surface water, and/or groundwater resulting in a present or potential hazard to human health or the environment.

44. The Appellants allege that the action by the Director and DEQ in granting the Permit was arbitrary and capricious and illegal.

REQUEST FOR RELIEF

WHEREFORE, the Appellants respectfully pray for an Order (1) requiring the Director to revoke and set aside the Permit, pursuant to Va. Code Ann. § 10.1-1409, on the ground that the facility poses a substantial present or potential hazard to human health or the environment, and (2) compelling the applicant to restore the facility, as closely possible, to its original condition.

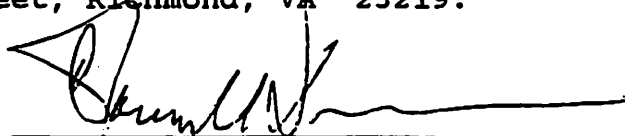
Respectfully submitted,

By 
Counsel

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PATRICIA A. SCALES
HILL, TUCKER & MARSH
509 NORTH THIRD STREET
RICHMOND, VIRGINIA 23219
(804) 648-9073

CERTIFICATE OF SERVICE

I hereby certify that, on this 30th day of July, 1993, the foregoing Petition for Appeal was mailed to Richard N. Burton, Director, Department of Environmental Quality, Commonwealth of Virginia, 101 North Fourteenth Street, Richmond, VA 23219.

A handwritten signature in black ink, appearing to be "Richard N. Burton", is written over a horizontal line.

LANE

LANE

ROUTE 614

17.5'

VIRGINIA:

IN THE CIRCUIT COURT OF THE CITY OF RICHMOND
JOHN MARSHALL COURTS BUILDING



RESIDENTS INVOLVED IN SAVING
THE ENVIRONMENT, INC.;
SECOND MT. OLIVE BAPTIST CHURCH;
WINIFRED BELDON;
JAMES ROBINSON and EDNA ROBINSON;
MORVITZ JORDAN and DOLLY S. JORDAN;
PIEDMONT FARMS, INC; ROGER CALHOUN,
STEVEN CALHOUN and CHRISTINE CALHOUN;
WILLIAM HERRING and ELISE HERRING;
BETTY A. DUNGEE,;
KENNETH BYRD, JR. and
FLORENCE S. MORRIS

Appellants,

v.

COMMONWEALTH OF VIRGINIA DEPARTMENT
OF ENVIRONMENTAL QUALITY

and

RICHARD N. BURTON, DIRECTOR,

Appellees.

TO: Mr. Richard N. Burton, Director
Department of Environmental Quality
Commonwealth of Virginia
101 North Fourteenth Street
James Monroe Building
Eleventh Floor
Richmond, VA 23219

NOTICE OF APPEAL

PLEASE TAKE NOTICE that pursuant to Va. Code Ann. §§
10.1-1457; and 9-6.14:16(1989 Repl. Vol), and Rule 2A:2 of the
Rules of the Supreme Court of Virginia, the Appellants herein note
their appeal of the agency action, case decision, or rule or
regulation of Richard N. Burton, Director, Virginia Department of

Environmental Quality, dated June 2, 1993, granting a solid waste facility permit for the construction, operation and maintenance of a sanitary landfill in King and Queen County, Virginia, more specifically described as Solid Waste Facility Permit Number 554.

The Appellants are:

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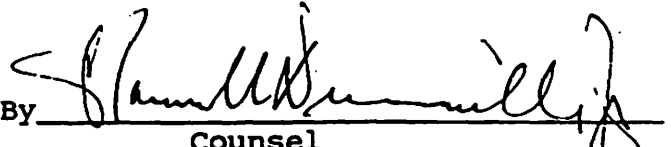
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Box 31A
Little Plymouth, VA 23091

The appeal shall be taken to the Circuit Court for the City of Richmond. There are no other known parties to this appeal.

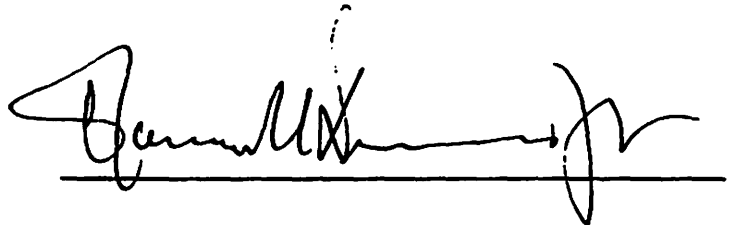
Respectfully submitted,

By 
Counsel

HENRY L. MARSH, III
CLARENCE M. DUNNAVILLE, JR.
HILL, TUCKER & MARSH
509 NORTH THIRD STREET
RICHMOND, VA 23219
(804) 648-9073

CERTIFICATE OF SERVICE

I hereby certify that on this 1st day of July, 1993, the foregoing Notice of Appeal was hand delivered to Richard N. Burton, Director, Department of Environmental Quality, Commonwealth of Virginia, 101 North Fourteenth Street, Richmond, VA 23219.



Circuit Court
OF THE
City of Richmond

May 4, 1995

MELVIN R. HUGHES, JR.
JUDGE

JOHN MARSHALL COURTS BUILDING
800 EAST MARSHALL STREET
RICHMOND, VIRGINIA 23219

Henry L. Marsh, III, Esq.
Clarence M. Dunnaville, Jr., Esq.
Hill, Tucker & Marsh
P. O. Box 27363
Richmond, VA 23261-7363

Deborah Love Feild, Esq.
Assistant Attorney General
900 East Main Street
Richmond, VA 23219

Timothy G. Hayes, Esq.
Williams, Mullen, Christian & Dobbins
P. O. Box 1320
Richmond, VA 23210-1320

Re: Case No. HD-822-1
Residents Involved In Saving the Environment, Inc., et al
v.
Commonwealth of Virginia Department of Environmental
Quality, et al.

Dear Counsel:

This case is an appeal of a state agency decision by the Director of the Virginia Department of Environmental Quality (DEQ) to award a permit to operate a landfill to Browning-Ferris Industries (BFI) in King and Queen County.

The parties are R.I.S.E. and others, appellants, and DEQ and its director, appellees. BFI became a party later in the proceedings by intervention. R.I.S.E. is an acronym for Residents Involved In Saving the Environment, Inc. R.I.S.E. is composed of concerned citizens of King and Queen County. It along with other named individuals, a church and a farming corporation, comprise the appellants (collectively R.I.S.E.).

In its appeal R.I.S.E. argues that according to Title 10.1 of the Code of Virginia relating to Conservation, which embodies several statutes designed to conserve natural resources and protect the environment, the Director of DEQ failed to conduct an "investigation and evaluation" to determine that no substantial present or potential danger to human health or environment exists before issuing the landfill permit to BFI. Specifically R.I.S.E. contends that the Director of DEQ did not investigate and evaluate

Henry L. Marsh, III, Esq.
Deborah Love Feild, Esq.
Timothy G. Hayes, Esq.
Page 2
May 4, 1995

as required by § 10.1-1408.1. This code section provides

No permit for a new solid waste management facility shall be issued until the Director has determined, after investigation and evaluation of comments by the local government, that the proposed facility poses no substantial present or potential danger to human health or the environment. (emphasis added).

R.I.S.E. also contends that, to the extent the landfill facility damages property, the DEQ permit grant is a taking violative of due process of laws.

First, R.I.S.E. suggests that by reason of the § 10.0-1408.1 statutory requirement the director of DEQ should have independently conducted an investigation and made an evaluation of no adverse human health or environmental impact before issuing the landfill permit. An examination of the statute does not indicate a requirement of such an investigation and finding. By the statutory language in § 10.1-1408.1 the "investigation and evaluation" is not by itself but, as written, modifies "comments by local government." In other words the Director is required to investigate and evaluate the comments of the local government authority to see that the proposed facility has or has not any impact on human health or the environment. So, as a matter of statutory construction the statute R.I.S.E. relies on does not prescribe the kind of independent investigation suggested.¹

Secondly, R.I.S.E. cites various instances of human health and environmental implications surrounding the issuance of the landfill permit. These include: air, dust, gas, the character of the area where the landfill is located, wildlife, endangered species, surface and ground water, water supplies, wetlands, noise, roads and roads use and historic resources and sites.

The DEQ operates under solid waste regulations promulgated by the Virginia Waste Management Board. These govern landfill matters covering both procedures for landfill permit applications and substantive standards for landfill operations. These same

¹There is no dispute that King and Queen County certified that the location and operation of the landfill complied with applicable ordinances.

Henry L. Marsh, III, Esq.
Deborah Love Feild, Esq.
Timothy G. Hayes, Esq.
Page 3
May 4, 1995

regulation control and set standards for siting, design, construction, operation, monitoring and closure of landfills. Steps in the permit process are governed by regulations as well. The process includes the permit application, permit review, draft permit and the final issuance. Before construction the regulations allow for public participation by way of a public meeting after notice when there is an opportunity for public comments, which occurred in this case. R.I.S.E. points out that most of the persons attending the public comment meeting opposed the landfill, an assertion DEQ does not contest. The question for the court in this appeal is, on the points raised, was there a failure of the agency to comply with the scope of authority conferred by the legislature as a matter of law. Muse v. Virginia Alcohol Beverage Control Bd., 9 Va. App. 74, 78 (1989).

DEQ argues that since "investigation" and "evaluation" is not defined, either procedurally or substantively, it has to approach its charge by the legislature with the tools given according to the area of expertise reserved to it. It contends that the things R.I.S.E. points out affecting the environment and human health are covered by the waste management regulations. DEQ also contends that it has control over some of the concerns raised and others it does not. In those instances where it does not have control appropriate checks were made with other appropriate agencies, state and federal, that do.


The record supports this in large part and in other parts there is no indication one way or the other. There is no other suggestion that the DEQ agency action here did not otherwise comply with the applicable regulations or law governing the concerns the appellant raises. For example, the regulations and the landfill permit itself in this case require BFI to have a gas management system for the control of migration of decomposition gases. In this appeal R.I.S.E. does not contest any other requirement in the regulations relating to the application process or operations under the permit. There is nothing in the record showing that any of the regulations that could address the concerns R.I.S.E. point to were not considered in the process required by any applicable regulation. The court has to confine its attention to the points raised.

While the court is aware of complaints of citizens to projects like this as "not in my back yard", on present law, there is no support in the record that DEQ acted other than in compliance with it.

Henry L. Marsh, III, Esq.
Deborah Love Feild, Esq.
Timothy G. Hayes, Esq.
Page 4
May 4, 1995

For the foregoing reasons, it0 is not necessary to address the "taking" claim. Counsel for DEQ shall prepare and submit a suitable draft for order affirm the DEQ grant of the permit in this instance. The order should note the appellant's exceptions.

Very truly yours,



Melvin R. Hughes, Jr.

MRH, JRn

IN THE CIRCUIT COURT OF THE CITY OF RICHMOND
John Marshall Courts Building

RESIDENTS INVOLVED IN
SAVING THE ENVIRONMENT, INC., *et al.*,

Appellants,

v.

Chancery No. HD-822-1

COMMONWEALTH OF VIRGINIA DEPARTMENT
OF ENVIRONMENTAL QUALITY

and

PETER W. SCHMIDT, DIRECTOR,

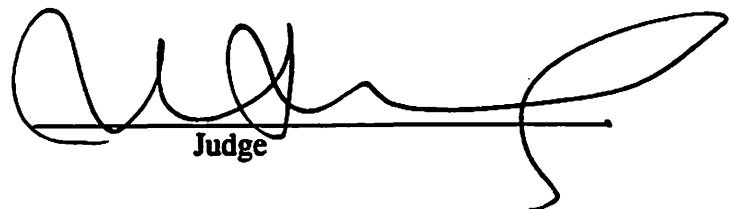
Appellees.

FINAL ORDER

The Court has considered the briefs and argument of counsel, and the agency record submitted in this matter. For reasons stated in its letter opinion of May 4, 1995, the court affirms the decision of the Director of the Department of Environmental Quality to issue a solid waste management facility permit to Browning-Ferris Industries of South Atlantic, Inc.

The clerk shall send certified copies of this order to counsel.

Enter: 5/30/95


Judge

I ask for this:



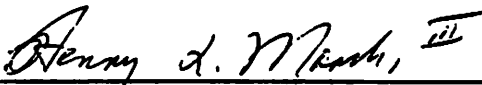
Deborah Love Feild
Assistant Attorney General
Office of the Attorney General
900 East Main Street
Richmond, Virginia 23219
(804) 786-0098
Counsel for Commonwealth of Virginia
Department of Environmental Quality and
Peter W. Schmidt, Director

Seen and agreed:



Timothy G. Hayes, Esquire
Williams, Mullen, Christian & Dobbins
1021 East Cary Street
Post Office Box 1320
Richmond, Virginia 23219-1320
(804) 783-6499
Counsel for Browning-Ferris Industries of South Atlantic, Inc.

Seen and objected to:



Henry L. Marsh, III, Esquire
Hill, Tucker & Marsh
509 North Third Street
Post Office Box 27363
Richmond, Virginia 23261-7363
(804) 648-9073
Counsel for R.I.S.E. *et alia*

VIRGINIA: IN THE CIRCUIT COURT OF THE CITY OF RICHMOND
John Marshall Courts Building

RESIDENTS INVOLVED IN
SAVING THE ENVIRONMENT, INC., et al.,

1407-95-2

Appellants,

v.

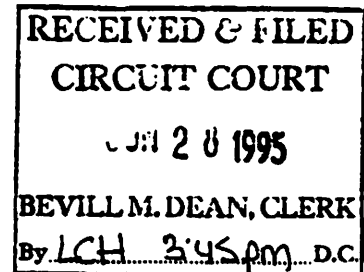
Chancery No. HD-822-1

COMMONWEALTH OF VIRGINIA DEPARTMENT
OF ENVIRONMENTAL QUALITY

and

PETER W. SCHMIDT, DIRECTOR,

Appellees.

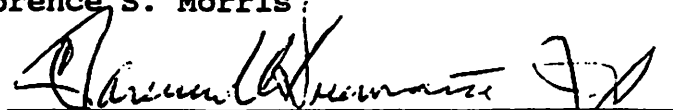


NOTICE OF APPEAL

The appellants, Residents Involved in Saving the Environment, Inc., Second Mt. Olive Baptist Church, Winifred Beldon, James Robinson, Edna Robinson, Morvitz Jordan, Dolly S. Jordan, Piedmont Farms, Inc., Roger L. Calhoun, Steven Calhoun, Christine Calhoun, William Herring, Elise Herring, Kenneth Byrd, Jr., Betty A. Dungee and Florence S. Morris, hereby appeal to the Court of Appeals of Virginia from the final order of this Court entered on May 30, 1995, and further give notice that the Statement of Facts, and other incidents of the case will be filed, all in compliance with the Rules of the Supreme Court of Virginia.

Residents Involved in Saving the Environment, Inc., Second Mt. Olive Baptist Church, Winifred Beldon, James Robinson, Edna Robinson, Morvitz Jordan, Dolly S. Jordan, Piedmont Farms, Inc., Roger Calhoun, Steven Calhoun, Christine Calhoun, William Herring, Elise Herring, Kenneth Byrd, Jr. Betty A. Dungee and Florence S. Morris.

By



of Counsel

Henry L. Marsh, III
Clarence M. Dunnaville, Jr.
Hill, Tucker and Marsh
509 North Third Street
Post Office Box 27363
Richmond, Virginia 23261-7363
(804) 648-9073

CERTIFICATE

The undersigned certifies as follows:

(1) The names and addresses of appellants are:

Residents Involved in Saving the Environment
P.O. Box 1124
West Point, VA 23181

Second Mt. Olive Baptist Church
Little Plymouth, VA 23091

Winifred Beldon
Route 602, Box 20E
Little Plymouth, VA 23091

James Robinson and Edna Robinson
HCR 74, Box 23, Little Plymouth, VA 23091

Morvitz Jordan and Dolly S. Jordan
HCR 1, Box 23A, Little Plymouth, VA 23091

Piedmont Farms, Inc.
HCR 67, Box 1418, Church View, VA 23032

Roger L. Calhoun
HCR 67, Box 1418, Church View, VA 23032

Steven Calhoun and Christine Calhoun
HCR 67, Box 1418, Church View, VA 23032

William Herring and Elise Herring
HCR 74, Box 7B, Mascot, VA 23108

Kenneth Byrd, Jr.
Little Plymouth, VA 23091

Betty A. Dungee
Box 24
Little Plymouth, VA 23091

Florence S. Morris
Box 31A
Little Plymouth, VA 23091

(2) The names, addresses, and telephone numbers of counsel for appellants are:

Henry L. Marsh, III
Clarence M. Dunnaville, Jr
Hill, Tucker and Marsh
509 North Third Street
Post Office Box 27363
Richmond, Virginia 23261-7363
(804) 648-9073

(3) The names and addresses of appellees are:

Commonwealth of Virginia
Department of Environmental Quality
629 East Main Street
Richmond, VA 23219

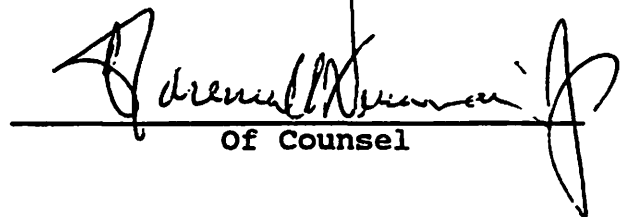
Peter W. Schmidt
629 East Main Street
Richmond, VA 23219

(4) The names, addresses, and telephone numbers of counsel for appellees are:

Deborah Love Feild,
Assistant Attorney General
Office of the Attorney General
900 East Main Street
Richmond, VA 23219
(804) 786-0098

Timothy G. Hayes, Esquire
Williams, Mullen, Christian & Dobbins
1021 East Cary Street
Post Office Box 1320
Richmond, VA 23219-1320
(804) 783-6499

(5) A copy of this Notice of Appeal has been mailed to all opposing counsel and delivered to the Clerk of the Court of Appeals this 28th day of June, 1995.

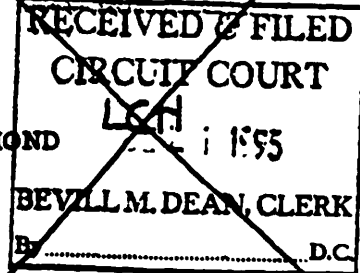


Of Counsel

Henry L. Marsh, III
Clarence M. Dunnaville, Jr.
Hill, Tucker and Marsh
509 North Third Street
Post Office Box 27363
Richmond, Virginia 23261-7363

V I R G I N I A:

IN THE CIRCUIT COURT OF THE CITY OF RICHMOND
John Marshall Courts Building



RESIDENTS INVOLVED IN SAVING
THE ENVIRONMENT, INC., et al.,

Appellants,

v.

COMMONWEALTH OF VIRGINIA DEPARTMENT
OF ENVIRONMENTAL QUALITY, et al.,

Appellees.

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Chancery No. HD-822-1

WRITTEN STATEMENT IN LIEU OF TRANSCRIPT

On September 18, 1990, Browning-Ferris Industries of South Atlantic, Inc. ("BFI") filed a Notice of Intent with the Department of Environmental Quality, ("DEQ") initiating the application process for a permit to construct and operate a sanitary landfill in King and Queen County. The notice of Intent included a certification by the governing body of King and Queen County that the location and operation of the landfill were consistent with applicable local ordinances. Following submittal of the Notice of Intent, BFI submitted its permit application in two parts. The application was found by DEQ to be complete. Part A of the application, which incorporated data concerning the site of the landfill, was made on February 4, 1991 and approved on July 29, 1991. Part B of the application, which covered design, construction and operating information, was submitted on March 20, 1992.

Prior to the issuance of a permit, DEQ held a public hearing on March 24, 1993 in the King and Queen County High School. Following the close of the hearing, DEQ allowed an additional time for submittal of public comments. A permit, specifically designated as Permit No. 544 ("Permit") was issued by DEQ to BFI on June 2, 1993 for the construction, operation, and maintenance of the facility.

The site, comprises approximately 420 acres, of which, under the permit, approximately 220 acres will be used for disposal of waste. It is located in King and Queen County, Virginia on Route 609, approximately 400 feet east of its intersection with Route 614. Waste is transported to the landfill site by commercial waste haulers and other transporters. The facility has a design life of 26 years, a maximum height of one hundred feet and a maximum daily volume of four thousand tons.

The landfill site is within the watershed of the Dragon Run, a 35 mile waterway that flows into the Piankatank River. The Piankatank River in turn flows into the Chesapeake Bay. The Virginia Department of Historic Resources confirmed, prior to the issuance of the Permit, that there are archaeological artifacts located on the site.

The appellants Residents Involved in Saving the Environment. Inc. (hereinafter "RISE"), Second Mt. Olive Baptist Church, Winifred Beldon, James Robinson, Edna Robinson, Morvitz Jordan, Dolly S. Jordan, Piedmont Farms, Inc., Roger Calhoun, Steven Calhoun, Christine Calhoun, William Herring, Elise Herring,

Betty A. Dungee, Kenneth Byrd, Jr., and Florence S. Morris, timely appealed from the decision of the Director issuing the permit (Case HD-822-1). Neither the Notice of Appeal nor the Petition for Appeal named BFI as a party to the appeal.

BFI filed a Motion for Leave to Intervene in the appeal. BFI also objected that the venue selected by appellants was improperly laid in Richmond and that the preferred venue was in King and Queen County. BFI's Petition to intervene was granted but its objection to venue was overruled on January 31, 1994. The Commonwealth of Virginia had not objected to venue.

The appellants, alleging present or potential danger to human health and the environment, claimed on appeal that the Director's action in granting the Permit was unlawful in that he failed to comply with § 10.1-1408.1.D. of the Code of Virginia, 1950, as amended and that to the extent that the landfill facility damages property, the DEQ permit grant is a taking without due process of laws.

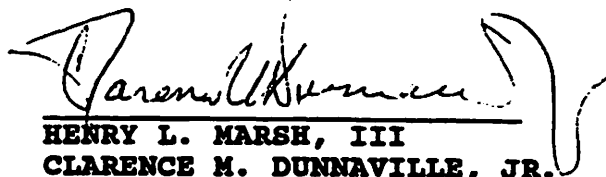
The parties appeared by counsel before this Court on October 20, 1994 to be heard in oral argument on the appeal. The record had previously been duly certified and filed with this Court. By agreement, the parties had previously filed memoranda and exhibits in support of their positions. No new evidence, witnesses, or other materials were introduced. After hearing oral argument, the Court took the case under advisement, rendering a decision by letter dated May 4, 1995. A final order dismissing the appeal was entered on May 30, 1995. In lieu of transcript, the

foregoing serves as a written statement of pertinent facts, testimony and other incidents of the above-captioned appeal, in accordance with Rule 5A:8 of the Rules of the Supreme Court of Virginia.

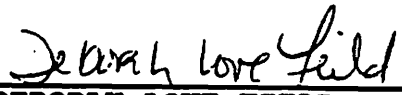
Enter 9/5/95


M. R. HUGHES, JR., JUDGE

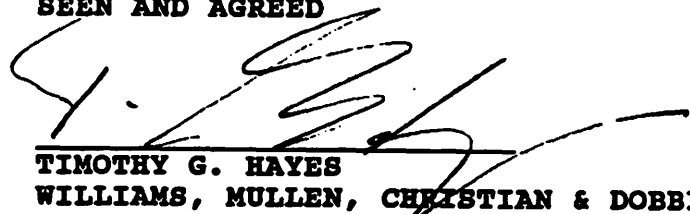
I ASK FOR THIS:


HENRY L. MARSH, III
CLARENCE M. DUNNAVILLE, JR.
HILL, TUCKER AND MARSH
509 North Third Street
P. O. Box 27363
Richmond, VA 23261-7363
(804) 648-9073

SEEN AND AGREED:

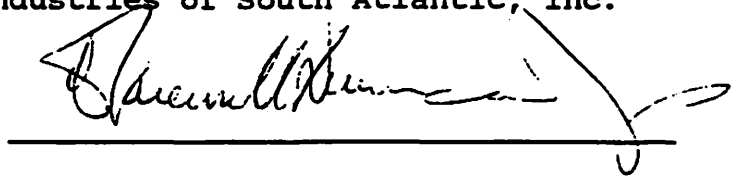

DEBORAH LOVE FIELD, FIELD
Assistant Attorney General
900 East Main Street
Richmond, VA 23219

SEEN AND AGREED


TIMOTHY G. HAYES
WILLIAMS, MULLEN, CHRISTIAN & DOBBINS
P. O. Box 1320
Richmond, VA 23210-1320

CERTIFICATE

I hereby certify that on this 21st day of July, 1995, a true and exact copy of the foregoing Written Statement In Lieu of Transcript was mailed, first-class and postage pre-paid, to Deborah Love Feild, Esquire, Office of the Attorney General, 900 E. Main Street, Richmond, Virginia 23219, counsel of record for DEQ, and to Timothy G. Hayes, Esquire, Williams, Mullen, Christian & Dobbins, 1021 E. Cary Street, P. O. Box 1320, Richmond, Virginia 23219, counsel for Browning-Ferris Industries of South Atlantic, Inc.





COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT

11th Floor, Monroe Building

101 N. 14th Street

Richmond, VA 23219

(804) 225-2667

TDD (804) 371-8737

JUL 29 1991

Mr. Jeffrey C. Southard
BFI of South Atlantic, Inc.
2490 Charles City Road
Richmond, Virginia 23231

RE: Part A Application -

Part A Permit Application; Browning
Ferris Industries of South Atlantic,
Inc.; King and Queen County

Dear Mr. Southard:

A review of the Part A Application submitted on February 4, 1991 has been performed. The review was performed in accordance with the Virginia Solid Waste Management Regulations (VR 672-20-10), Parts V and VII. The review specifically addressed the criteria stated in § 7.3 of the Regulations. The Part A Application is deemed complete and is hereby approved.

Should you have any questions concerning this correspondence, please contact Russell Dudley at (804) 371-0522.

Sincerely,

A handwritten signature in cursive script, appearing to read "W. Gulevich".

Wladimir Gulevich PhD., P.E.

Director

Division of Technical Services

cc: Hassan Vakili, VDWM DTS
Kevin Greene, VDWM, DTDS
Russell Dudley, VDWM, DTS
Marty Rief, CHM Hill



COMMONWEALTH of VIRGINIA

WILLIAM L. WOODFIN, JR.
DIRECTOR

DEPARTMENT OF WASTE MANAGEMENT

(804) 225-2667
TDD (804) 371-8737

Mr. Bruce J. Larson
Department of Historic Resources
221 Governor Street
Richmond, Virginia 23219

Subject: Proposed King & Queen County Sanitary Landfill
VDHR File No. 90-1276-S

Dear Mr. Larson:

I have been asked to respond to your letter to Mr. Woodfin, dated March 9, 1993, regarding the subject landfill. Please find enclosed page 5-5 of the Part A permit application for the proposed landfill, as you have requested. Item eight, on page 5-6, consists of the applicant's statements regarding historic areas on the proposed landfill site. Also enclosed for your reference is page 7-4 of the Virginia Solid Waste Management Regulations, VR 672-20-10 (1988). § 7.3.C.9 of VR 672-20-10 requires the applicant to identify all historic areas in the application.

The applicant, Browning-Ferris Industries, has been sent a copy of your March 9, 1993 letter and they have indicated they will be responding directly to the Department of Historic Resources in order to resolve any issues regarding historic areas on the proposed landfill site.

If we may be of further assistance, please contact me at 371-0517.

Sincerely,

A handwritten signature in cursive script that reads "Dean E. Starook".

Dean E. Starook, E.I.T.
Environmental Engineer, Sr.
Office of Permits

cc: Alice Reiter
Hassan Vakil
Kevin Greene
Leslie Romanchik

93-0382.b4




COMMONWEALTH of VIRGINIA

Hugh C. Miller Director

Department of Historic Resources

221 Governor Street
Richmond, Virginia 23219

TDD (804) 786-1934
Telephone (804) 786-3143
FAX (804) 225-4261

DATE: March 24, 1993
TO: Reverend Keith Parham, RISE, Inc.
FROM: Bruce J Larson, Project Review Supervisor 
RE: Proposed Landfill in King and Queen County
VDHR File No. 90-1276-S

As you requested in your telephone conversation with Ethel R. Eaton of our staff of today's date, I am writing to confirm that our inventory shows that ten archeological sites and one historic structure are located within the boundaries of the proposed landfill. These sites were found as a result of a Phase Ia cultural resource survey conducted in 1990 by the firm of MAAR Associates, Inc.

SECOND MT. OLIVE BAPTIST CHURCH

**Box 25
Little Plymouth, Virginia 23091**

March 24, 1993

**Department of Waste Management
James Monroe Building
101 North 14th Street
Richmond, Virginia 23219**

Once again a small rural minority community is about to fall prey to the will of an industrial giant. Much too often when a site must be found to place an ecologically devastating project, the communities of those with the least amount of power and influence is chosen.

The Second Mt. Olive Baptist Church has stood at the intersection of routes 614 and 609 for 125 years. Over the years, the church has grown in membership to its present 225 active members. We serve as an important entity in the Little Plymouth community and in the county at large. Since there is very little nearby recreational outlet, we serve as not only a place for worship, but also as a community center.

The church, and the surrounding property owners, have concerns over the long-term effects on the environment that a landfill of this magnitude will present. This church, as well as every household in the immediate vicinity, depends on shallow wells or a few deep wells as sources of drinking water. The well on the church property is situated in direct line of the site of this landfill.

We all have seen and read about the devastation that can be caused by so called "state of the art" projects. The area of waste disposal is still in a state of trial and error, therefore our concerns over the long-term effects on the environment remain. Will there be toxins in our water supply? Will there be contaminated runoff onto our property? These and other long-term environmental issues remain unanswered.

With the increase in vehicular traffic bringing waste to the landfill, there will be an increase in noise, odor, and trash pollution. We feel that these likely manifestations of this landfill will pose a hinderance to us in maintaining a safe and worshipful atmosphere for our members and friends.

The Second Mt. Olive Baptist Church stands firm in its opposition to the placement of this landfill at our church's back door. We trust every consideration will be given to our concerns and you will decide not to grant a final permit to Browning-Ferris Industries for the placement of this landfill.

Thomas C. Rubino
HCR2, Box 25-D
King & Queen Courthouse, VA 23085

April 2, 1993

Commonwealth of Virginia
Department of Waste Management
Mr. Dean E. Starook, E.I.T.
11th Floor Monroe Building
101 North 14th Street
Richmond, VA 23219



Dear Mr. Starook and Associates:

In developing the following conclusions many professionally qualified individuals were consulted to verify my findings, to whom I am most grateful. They are listed at the end of this letter. The staff at DWM was most helpful, particularly Mr. Starook, who encouraged my attempts at investigation and made me feel that substantive citizen input has a place in the permitting process at DWM. My endeavor is to help protect the public health and environment from a clear and present danger.

Delicate Ecosystem Particularly Vulnerable

Proposed King & Queen Sanitary Landfill is located in a precarious site. Allens Millpond stream is situated 60' below undisturbed grade to the S.W. of the site. This stream leads directly into the Mataponi River which is presently designated for a water source for the King William Reservoir project. The Mataponi is a confirmed habitat for the endangered species, Sensitive Joint Vetch *Aeschynomene Virginia*. Also put at risk is the delicate ecosystem of the Dragon Run, a fresh water tidal estuary and headwaters of the Piankatank River. The threat to this ecosystem is best described in the permit text by the permittee, "generally, groundwater in the uppermost aquifer flows toward the unnamed creek (tributary to Dragon Swamp) to the north and east of the site." (GP 2-3). Two wetland areas are situated in the very heart of the proposed facility - one labeled "to Dragon Tributary" (sheet 3 #3-1) further endanger this delicate ecosystem.

The Dragon Run was designated in a Smithsonian Institute study as second in ecological significance and vital to the health of the Chesapeake Bay. This study encompassed 12,600 square miles and examined 232 separate areas considered significant. Ecological significance of Dragon Run has been recognized internationally for centuries. Early documentation was provided by John Clayton, Clerk of the Colonial Court before the American Revolution. His world famous "Herbarium" is, this very week, on review from its European homeplace, at William and Mary College in the company of a noted British botanist. Bald Eagles, an endangered species, are common visitors to the site area, and have recently been spotted by an amateur ornithologist mating over the site. I have personally identified bald eagles, one 3 miles Northeast, two individuals 3 miles west, two

individuals in paired flight nearly atop the site proper, and a multitude of sightings 10 miles south. Lorna Wass, who spent many years identifying bald eagles with her noted ornithologist husband was, this month, inspecting a former nest at Meg's Bay several miles downstream of the site. She believes it likely that adolescents from that nest have relocated locally, not unlikely, close to the site area. It is Mrs. Wass' opinion that Bald Eagles would be likely to feed on poisoned mice and rats at the site even if their nests were over 5 miles away. Dr. Mitchel Byrd, ornithologist, biology dept. of William & Mary is presently conducting a bald eagle nest survey which includes the proposed site area as probable environment to support this endangered species.

At Natural Heritage I spoke with Tim O'Connell who made the point that although his computer shows no endangered species on record, he believed the Dragon Run Ecosystem within effectual range of proposed site may well indeed include several endangered species. He believed this ecosystem may support Sensitive Joint Vetch, *Aeschynomene Virginica*; Small Whorled Pogonia, *Isotria Medeoloides*; Swamp Pink, *Helonias Bullata*; Mabee's Salamander, *Ambystoma Mabeei*; Tiger Salamander, *Ambystoma Tigrinum*, the Cane Break Rattlesnake; Dwarf Wedge Mussel, *Alasmidonta Herodoti*, as well as Bald Eagles. Although the Natural Heritage computer shows no endangered species, it is essential to note that no official study has ever been conducted by any known state, federal or private source regarding endangered species within this threatened sensitive ecosystem.

However, several qualified experts feel assured that this ecosystem is likely to contain several endangered species. Several years ago Dr. James E. Perry, a qualified botanist with Virginia Institute of Marine Science was convinced that the freshwater tidal ecosystem immediately downstream of the Tributary to the Dragon Swamp into which the "...groundwater in the uppermost aquifer flows..." (G.P. 2-3) was likely to contain Sensitive Joint Vetch. He was so sure of this he spent a day in the above ecosystem searching for the endangered plant. Although the brief inspection secured no specimen, it further convinced him that the environment is likely to support this endangered life form. Sensitive Joint Vetch is known to exist on the Tidal Mataponi which also sits exposed to Westerly flow of contaminants from proposed facility. Dr. Thomas Wiebolt, Dept. of Biology, Va. Tech. was consulted to help establish this point.

In conversations with Dr. Donna Ware, Dept. of Biology at William & Mary it was brought to my attention that the sensitive ecosystem of the Dragon, perhaps even within the site area, is a probable environment to support another endangered species, the small Whorled pogonia, *Isotria Medeoloides*. This point was agreed on at Natural Heritage by Tim O'Connell and verified by Cindy Schulz, U.S. Fish and Wildlife Service, White Marsh.

In conversation with Dr. Maurice Lynch, Director of Chesapeake Bay National Estuarine Research Reserve in Virginia and professor at V.I.M.S. it became clear that a major activity relative to the rehabilitation of the oyster population in the Bay is expected to be located on the Piankitank River downstream of proposed landfill. It is his opinion that it would be incumbent upon a permitting agency to incorporate advanced design features into

a landfill facility located in so precarious a location to assure leakage into a vital internationally appreciated pristine estuary is eliminated. Dr. James Wesson, the Oyster Replenishment Officer on this project described an artificial reef 1000' x 100' x 7' deep that will be located downstream of the proposed facility. This project represents one of the most significant statewide & baywide programs to replenish the disastrous depletion of the Chesapeake Bay Oyster population. Dr. Lynch is currently conducting activities to designate the Piankitank site as a Research Reserve. Dr. Lynch stressed the point that the highest level of protection against leakage must be assured to secure this project against unnecessary risk.

The sensitivity of this fresh water tidal ecosystem is in a particularly vulnerable position from this proposed facility because the water does not flush the way a flowing stream does. The tidal nature of this estuary will pulsate any suspended pollutants over pool areas and enhance their tendency to settle onto the tributary floor. Enhanced toxicity levels are likely to result.

Any landfill placed 4.5' above the groundwater level in an aquifer with a natural flow toward this estuary is literally an accident waiting to happen. Only the highest level of engineering skill and design requirements, construction and monitoring, must be enforced at all levels, if this ecosystem is not to be damaged. The single liner landfill cannot meet the requirements this environment demands.

Engineering Analysis Based on Flawed Model

Serious errors exist regarding the model on which the entire foundation calculations are based. The model is grossly undersimplified and cannot produce calculations that can satisfy loading to the base grade. The model represents the landfill footprint (sheet 3, C-1) as a rectangle with uniformly angled sideslopes which hardly "...approximates the critical loading condition for settlement of the proposed landfill design,....." (DR 4-18) assuming that an overly simplified model can be substituted for a "complex loading situation" (DR 4-18, 4.2.4.1) is erroneous. The shifting loads assumed by 60 million tons of waste down 14 complex downgrades in an interconnected matrix under varying loads over great expanses of time onto a base consisting of "poorly graded sand/silt" (Table DR 4-6) with a highly irregular footprint are simply not addressed with this model.

If the dynamics of the loads are not fully understood one cannot simply assume that since "...tensile strain was estimated at less than 0.1 percent. The conclusion was that no threat existed to the lining system, because 1.0 percent is the minimum threshold of strain currently established for a possibility of distress to any type of lining system." (DR 4-19) This is not good science. Guesswork may not withstand the scrutiny of 60 million tons. The cross-sectional model is equally oversimplified. "The cross-section chosen....for the analysis represents the most critical slope geometry at the end of construction." (DR 4-19 4.2.4.2) Apparently, only one cross-sectional view is used! And one load criteria. On that singular simulated cross-section the entire design rests. The interrelationship between 14 complex interconnected loads applied over long term to an unstable sandy base is never addressed in the model.

A model conforming to the shape of the actual facility must be used. Although a challenge to a computer simulation, it is hardly outside the capability of "state of the art" computation. No other shape can produce accurate calculations. This design is likely to be dangerously miscalculated.

Of greatest concern is the apparent absence in the design model and the calculations as they apply to overall base expansion. It is the physical nature of a particular mass, approximately shaped in a cone, to decrease in elevation and expand along its base perimeter in time. Every structure natural or manmade suffers from this physical stress, from the pyramids in the Yucatan jungles to the pile of gravel in the local VDot yard, even entire mountain ranges suffer this fate.

The complexity of the actual load is impacted by the variability of the 14 base grade "cone" shapes, whose wedges slant toward the outer extremities of the footprint. In the model the sideslopes "were uniformly taken as 400' wide and constituted a linear transition between maximum load and zero load." (DR 4-18, 4.2.4.1) In fact, however, loads extremely higher than "zero load" will be impacted on the outer edges of the design. It is the nature of a particular mass placed in a pile to widen at its base perimeter in time. The base contour's outward facing slopes will promote that event. The problem with base expansion is left insufficiently addressed by the flawed model, and, conversely misaddressed in the design. Leakage will result.

As this design stands, there would be no perimeter expansion containment wall. Merely berming the existing eroded hillside along its downward slope and providing an underside surface liner does not address the problem of base expansion as the entire 60 million tons settles with time. The outer perimeter of this design assumes no substantial side load will occur, and this is in error. The perimeter runoff channel exacerbates the rupture of the narrow earthen band surrounding the perimeter (see sheet 35 C-33 top).

Should leakage occur along ruptured perimeter, monitoring wells below or adjacent to them may not detect pollutants, particularly along North and Northeast Face "generally, groundwater in the uppermost aquifer flows toward the unnamed creek (tributary to Dragon Swamp) to the north and northeast of the site." (GP 2-3) A leak above a well would flow horizontally out of reach of detection. This point has been corroborated by a specialist at DWM.

The model is dangerously oversimplified. All calculations based on it are suspect. The aquifer, the ecosystem, and the public health are clearly at risk.

Monitoring Wells Isolated From Meaningful Readings

In the following references, the permittee assures the state where the monitor well screens will be located and why -- and then contradicts that assurance in the engineering data, by placing monitors out of reach of meaningful readings.

"The purpose of the groundwater monitoring system at the proposed King & Queen Sanitary Landfill is to monitor the uppermost water-bearing zone underlying the landfill." (See GP-2-1 2.0) "Monitoring wells will be installed within the shallow part of the Columbia/Upper Yorktown Aquifer" (See GP 2-6 2.2) "The landfill will be founded primarily on the Columbia Aquifer soil." (See DR 4-16 4.2.2) This layer is classified as "silty sand/sandy silt, poorly graded, dense" (See table DR 4-6) The permeability of this layer encourages horizontal migration of leakage material. ".....most of the horizontal ground water flow is expected to occur in the shallow part of the aquifer" (See GP 2-5 2.1.2) Although the permittee assures the state that monitoring is to be located at the "...uppermost water-bearing zone..." (GP 2-1, 2.0), and that "...wells will be installed within the shallow part of the Columbia/Upper Yorktown Aquifer" (GP 2-6, 2.2) This is not what is indicated upon further scrutiny of the permit. According to engineering data in this permit 10 out 11 of the monitoring wells will be located securely locked within the dense clay confines of the Yorktown Confining Unit. (See figure GP 2-1 and compare depths to Table GP 2-2) This layer is described as, "lean to fat clay, stiff" (See Table DR 4-6) The dense limited permeable nature of this layer would isolate the monitoring wells from meaningful measurement. Although proper depths were assured - dangerous depths were engineered.

(The Table GP 2-2 and figure GP 2-1 need to be consulted here.) The range of the "...shallow part of the Columbia/Upper Yorktown Aquifer" (see GP 2-6 2.2) also referred to in the permit as "...uppermost water-bearing zone underlying the landfill." (see GP 2-1 2.0) into which "...monitoring wells will be installed..." (see GP 2-6 2.2) is limited approximately to the following range; from about 14 below surface level to about 32' below surface level. (see Figure GP 2-1) Of Course this level varies. However, these depths are more accurately documented in Table GP 2-2. Now examine next column, "Estimated Depth Interval for Well Screen." (Table GP 2-2) The depths indicated would bury 10 out 11 well screens securely into the stiff clay of the Yorktown Confining Unit. The average depth of the monitoring wells is 75' below surface grade. The average depth to the "shallow part of the Columbia/Upper Yorktown Aquifer" (see GP 2-6 2.2) is about 20'. This places all but one of these monitoring wells 55' below the level which the permit text claims. In fact, well intakes will miss the aquifer entirely. They will pierce the Yorktown Confining Unit surface and travel about 15' inside it. The designed bentonite seals would seal the well heads inside the Yorktown Confining Unit. Expansive cement would permanently seal the monitoring wells from any meaningful aquifer level readings whatsoever. Readings of a pollution free environment would be enjoyed by the permittee for an estimated total of 56 years. During that time the only functioning well would be located - not at the perimeter of the waste area, at all - but at the outer end of the access road in the SW. corner most distant from the natural flow of the "groundwater in the uppermost aquifer which flows toward the unnamed creek (tributary to Dragon Swamp) to the north and northeast of the site."

The permittee assures the state that the monitoring wells will be located at a specific, appropriate, elevation. The engineering data, however, assures that 10 of 11 wells would be virtually useless, and the last, ineffectual. This substantive contradiction in the text and major errors in engineering should disqualify this proposed design from obtaining a permit. These errors are gross, substantive, and negligent to the point of being unbelievable, and may be systemic throughout the design.

Summary

There are 22 landfills in Virginia that are in Phase II — they are leaking. These include the new "lined" landfills.

The entire premise of placing a landfill in a porous aquifer 4-1/2' above groundwater in an area surrounded by shallow drinking water wells at the headwaters of two significant estuaries is precarious, at best.

This landfill is demonstrated to have substantive systemic errors in the Engineering Analysis regarding Settlement Potential, Bearing Capacity, and Slope Stability; as well as severe errors in the engineering of the Groundwater Monitoring System.

Placing THIS landfill on THIS site would be irresponsible. Deny this permit.

Sincerely,



Thomas C. Rubino
Citizen

cc: William Pruitt, Director, Virginia Marine Resource Com.
Dr. Maurice Lynch, Dir., Ches. Bay Nat'l Estuarine Research Reserve in VA, VIMS
Hon. Elizabeth H. Haskell, Secy. of Natural Resources
Ms. Cindy Schulz, U.S. Fish & Wildlife Service
Mr. Ray Fernald, U.S. Dept. Game & Inland Fisheries
Leo Snead, VA State Water Control Board
Timothy O'Connell, Va. Dept. of Natural Heritage
Kay Slaughter, Southern Environmental Law Center
Sen. Henry L. Marsh, III, Richmond, Va.
Dr. James Wesson, Va. Marine Resource Commission
Dr. Donna Ware, Dept. of Biology, William & Mary
Dr. Thomas Wiebold, Dept. of Biology, Va. Tech.
Dr. James E. Perry, Botanist, Virginia Inst. Marine Science
Brecht Montague, Board of "Friends of Dragon"
John Dameron, Geologist, "Friends of Dragon"
Lorna Wass, "Friends of Dragon"
James E. Sears, Board of Supervisors, K&Q County
Rev. Keith Parham, Spokesperson, R.I.S.E.

ADDITIONAL CONSIDERATIONS

Contradictory Daily Tonnage Capacities

Daily tonnage capacity listed by the permittee for proposed facility is 800 tons for 8 years followed by 1500 tons/day for periods totaling 18 years. This is in contradiction to the 4000 ton/day capacity contracted with the county. Which number is the controlling capacity? Will this be subject to amendment throughout the operational life of facility? The 500% discrepancy would have significance. In addition to the pollution, noise, and traffic associated with a five times vehicle load, the daily operational capacity at 800 tons would be overwhelmed by an increased of 500%. Consider that, with a 5000 ton capacity mandated by the county – if the permittee can legally increase to that, from a design criteria, it must be assumed he will increase to 4000 tons/day. The incentives are clearly in support of this conclusion. The permit should only be considered and the design approved with the full awareness by the permitting entity that these figures contradict each other – and must be resolved before permitting.

Extra-Post Closure Responsibility

The entity responsible for the landfill after post closure falls on the county of King and Queen. As a design criteria this seems unrealistic. If the county can't afford to deal with its own 10 acre dumpsites how can it be expected to repair a 230 acre site? If left in place, this design criteria will promote a dangerous situation in the event of an emergency. Questions over long term catastrophic events and responsibilities must be realistically addressed and mandated now as part of the design requirements. If a party incapable of repairing the facility is left responsible for its repair, the public health and environment may be unnecessarily exposed to danger, perhaps for years or even decades as the courts settle the issue of responsibility.

Considering the unique aspects of this site, the Dragon Run Ecosystem cannot accept a long term dangerous leakage while the courts debate over who can realistically afford to clean it up. The realistic safety of public health and environment must be assured far longer than 30 years. The Dragon has been left pristine for a million years. Her link to the vitality of the Bay is documented. She must be preserved in perpetuity, by an entity to whom this care can be realistically entrusted.

Vehicular Routing/Access Road

Clear, strict routing must be contracted between BFI and the county. Two types of vehicles will drive daily to the site. The routing requirements must address both types. I'll refer to the 1st group as primary vehicles. These are the garbage trucks owned by BFI. They will be likely to carry a single load/day their drivers will likely be salaried workers and the vehicle liability likely to be insured through BFI. These vehicles should respond easily to strict routing requirements over designated roads.

However, the secondary vehicles will be likely to have a separate orientation. These are being defined, here as primarily privately owned dump trucks and maintenance vehicles driven by workers who are paid per load. Their incentive will be to unload as many loads per day as quickly as possible. Therefore, they will profit by using direct routes from their point of origin and to get to the dump site as quickly as possible. Since their liability will be privately assumed, and BFI will profit from inexpensive dirt loads, there will be no incentive for these secondary vehicles to use the designated roadways assumed by BFI primary vehicles.

666 yards per day of fill dirt will be trucked to the site per day for about 15 years of the landfills projected operational life. (DR 2-4, 2-8) Most dirt will originate from BFI's facilities in Richmond. Their incentive will be to route these vehicles from the North -- not from the South as their primary vehicles are routed. Once long term bids for dirt loads are accepted, we can hardly require them to use a slower, more expensive route. The safety of the roadways clearly demand that singular routing must also apply to secondary vehicles.

If the access road needs to mandate separate lanes for secondary vehicles to speed their delivery -- this should be addressed before permitting.

Thomas C. Rubino
HCR2, Box 25-d
King & Queen Courthouse, VA 23085

Addendum :

Essential engineering errors have been proven of so basic a nature that all engineering data is suspect. The failure of the Settlement / Bearing / Slope Model to support Engineering Analysis and the dysfunctional groundwater Monitoring System are systemic in nature. Accurate Engineering data securing the design for this plan can only be remedied by originating a new engineering study.

although this puts D.W.M. in the untenable position of having to deny this permit, no other solution can assure the state that an effective design is being permitted.

If D.W.M. cannot see the validity of denying this permit, at the very least, consider an uninterrupted perimeter slurry wall keyed into the Yorktown Confining Unit to protect this sensitive site from unnecessary destruction.

Sincerely,

Thomas C. Reberio
April 5, 1993



Dear Dean,

Enclosed are 4 copies of "addendum"
to my report. These replace last handwritten
page. Please forward 3 of these to
Borran Valadi, James Adams, and Howard
Freeland, who have copies of the report
addressed to you.

Thank you.

Sincerely,
Tom

ADDENDUM:

To study the model further examine landfill footprint (Sheet 5, C-3) consider perimeter length. Examine simplified rectangular model (DR 4-18) consider perimeter length. The ratio of perimeter to area in these shapes do not equate.

This model cannot mathematically address this shape. To multiply an erroneous number by a factor of 10 produces an erroneous number. (DR 4-19) Guesswork is an inappropriate criteria on which to calculate a 60 million ton load of potentially toxic material on a flexible base suspended over a sensitive ecosystem. With luck the structure may remain intact for the permittee's operational period. But the state must realize that the probability of this miscalculated load rupturing its base is extremely high. (See "King & Queen Technical Comments" - Settlement Potential, for independent corroboration on this point.)

Essential engineering errors have been proven of so basic a nature that all engineering data is suspect. The failure of the settlement/bearing/slope model to support engineering analysis and the dysfunctional Groundwater Monitoring System are systemic in nature. Accurate engineering data securing the design for this plan can only be remedied by originating a new engineering study.

Although this puts DWM in the untenable position of having to deny this permit, no other solution can assure the state that an effective design is being permitted.

If DWM cannot see the validity of denying this permit, at the very least, consider an uninterrupted perimeter slurry wall keyed into the Yorktown Confining Unit to protect this sensitive site from unnecessary destruction.

Sincerely,

Thomas C. Rubino

Thomas C. Rubino

HCR 2 Box 25-D

King & Queen C.H.

VA 23085



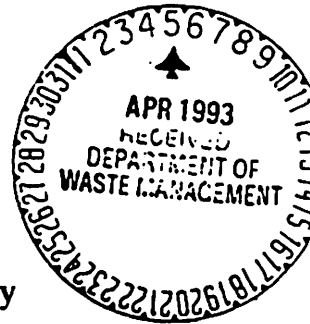
Friends of Dragon Run

Box 882

Gloucester, Va. 23061

April 5, 1993

Commonwealth of Virginia
Department of Waste Management
11th Floor, Monroe Building
101 North 14th Street
Richmond, Virginia 23219



RE: King and Queen County/ Browing-Ferris Industries Sanitary
Landfill "Part B" Permit Application.

Dear Sir or Madam:

Friends of Dragon Run is a not for profit organization dedicated to the preservation, protection and wise use of the Dragon Run and its watershed. As an owner of a 200 acre conservation area we have made a sincere effort to be a responsible neighbor to other landowners, hunters and others with an interest in the swamp and its watershed. As an organization we consider ourselves to be a moderate rather than an extremist environmental group.

Until the "Part B Permit" public hearing on March 24, 1993, we had refrained from public participation in this issue. However from what was stated at that hearing and from what we have been made aware of since, especially the allegations of Mr. Thomas C. Rabino in his letter to the Department of Waste Management of April 2, 1993, have raised a number of serious questions regarding the siting of the proposed facility and the engineering work done in preparation for the issuance of "Part B Permit."

Given the unique qualities of the Dragon Run to contain unique species as recognized by the Smithsonian Institution and other well known naturalists and scientists, a thorough inventory of species must be done before the granting of a permit that might forever adversely affect the flora and fauna that could be located there. Such efforts as these are currently being planned by the State Department of Natural Heritage. In addition a land use study of the Dragon Run by the Middle Peninsula Planning Commission is being proposed. Our organization has commissioned a study of bird life which is expected to be completed by February 1, 1994. It is also worthy of note that the Dragon Run has been submitted to the State

Water Control Board to be declared a "Significant Water" . We simply do not know what could be lost if this proposed facility is permitted to operate.

The proposed site is in the watershed of the Dragon Run. Any leachate material not successfully intercepted by the leachate collection system will enter the Dragon Run and will pass through the Piankitank River into the Chesapeake Bay. A number of eminent scientists cited by Mr. Rubino are sufficiently concerned about the possible effects of the dump that a thorough reconsideration of off-site impacts must be done, and in far greater detail than that presented by the applicant.

It is inconceivable that the design has changed through the issuance of a variance for the liner. The liner is the primary barrier between the waste entombed at the site and the ecosystems located downgradient from the site. All liners leak. Why has the applicant been permitted to half the protection when the technology is so flawed that protection cannot be assured?

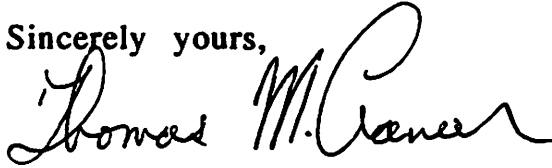
The placement of monitoring wells must be reviewed: both to address the well screen interval question raised by Mr. Rubino and to substantially increase the number of downgradient wells planned. Even if the monitoring wells are properly situated and constructed, the clear groundwater flow toward a tributary of the Dragon Run (Part B Application, page GP-2-3) would demand that more downgradient wells be installed. If four upgradient wells are necessary, clearly more than five to six downgradient wells are required to monitor the groundwater quality. Further, the lower member of the Yorktown Formation Aquifer must be monitored as well as the Lower Yorktown/Eastover Aquifer. To do less would abrogate our (your) responsibility to provide a minimum assurance that leachate is not moving toward the Dragon Run and the Chesapeake Bay system.

There are too many open questions regarding adequate protection for an ecosystem as productive and unique as the Dragon Run. The Board of the Dragon Run urge you to deny a "Part B Permit" at this time and to require the submittal of a complete application that

April 5, 1993

adequately addresses the serious deficiencies that may result in a failure to provide protection for the Dragon Run.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Thomas M. Cramer". The signature is fluid and cursive, with a large, stylized initial "T" and "C".

Thomas M. Cramer, Chairperson

STATEMENT FOR PRESENTATION AT PART B PERMIT HEARING
ON KING AND QUEEN COMMERCIAL LANDFILL
CONDUCTED BY VA. DEPT. OF WASTE MANAGEMENT
CENTRAL HIGH SCHOOL, KING AND QUEEN COURTHOUSE
March 24, 1993, 7:00 p.m.

38

Friends of Dragon Run is an organization dedicated to the preservation, protection and wise use of Dragon Run and its watershed.

As owner of a 200-acre conservation area, Friends of Dragon Run has made a sincere effort to be a responsible neighbor to other landowners, hunters and others with an interest in the swamp and its watershed.

As an organization, we consider ourselves a moderate rather than extremist environmental group and, therefore, have refrained heretofore from public participation in this issue.

We know that every community has a responsibility to provide for its own solid waste disposal. We must trust that any community landfills that you approve will be subject to all of the safeguards for the protection of the public health and the environment that current state-of-the-art technology allows.

However, this proposal is not a "local" landfill.

We have chosen to appear at this hearing because of our concern about the impact the large volume of foreign waste from unknown sources, that this proposed "commercial" landfill anticipates, may inflict on Dragon Run and on the future of one of the last remaining pristine hardwood and cypress swamps in the Commonwealth.

Dragon Run is unique among ecosystems because this unspoiled waterway supports a treasury of animal, plant and aquatic life not duplicated anywhere. It has been acclaimed by the Smithsonian Institution as the second most ecologically significant wilderness area on Chesapeake Bay (232 areas were studied covering an area of 12,500 sq. miles). Actually, it is the most significant in Virginia and has been nominated by the Chesapeake Bay Foundation for designation as one of Virginia's exceptional waters. In fact, the Virginia Commission of Game and Inland Fisheries, in a study, revealed the delicate nature of that unique ecosystem. Certainly, it's preservation is worthy of our concern; therefore, any threat to the health of Dragon Run is cause for alarm.

That landfills leak is a fact. Experts, including waste company officials, acknowledge the fact that they leak. The potential to poison the pure water of Dragon Run from the mass tonnage generated by a commercial landfill such as this is horrifying. This landfill will forever entomb 10 million tons of waste. This waste will not degrade and will remain toxic.

Inevitably, these toxins will affect the Dragon Run. Toxic and heavy metal leachate undoubtedly will kill or severely impair the more than 30 species of fish, as well as the lush and abundant aquatic plant life. Animals and birds, supported by the stream and which make the Dragon their home, may die or be forced away. Dragon Run and all of its natural splendor have flourished for over a million years, and virtually overnight we could kill it. Your approval of this landfill will begin that dying process.

The proposal has been designed to safeguard against such a scenario; nevertheless, experience has shown that safeguards do not always work. In fact, given enough time, even the best invariably fail. No safeguards exist which can protect this treasure.

When they fail, THEN, IT'S TOO LATE! Can we, as responsible stewards, take this chance?

For the benefit of our future generations, the sensible answer must be, NO ...
NO, WE CANNOT!



DEPARTMENT OF
WASTE MANAGEMENT
EXECUTIVE DIRECTOR

APR 6 1993

REFERRED TO _____

COPY TO _____

5 APR 10 1993 BY _____

201 West Main St., Suite 14
Charlottesville, VA
22902-5065
804-977-4090
FAX 804-977-1483

North Carolina Office
137 E. Franklin Street,
Suite 404
Chapel Hill, NC 27514-3628
919-967-1450
FAX 919-929-9421

William L. Woodfin, Jr., Director
Dept. of Wastes Management
James Monroe Building, 11th Floor
101 North Fourteenth Street
Richmond VA 23219

BY FAX

Dear Mr. Woodfin:

The Southern Environmental Law Center ("SELC") has been asked to comment on the impact of the Browning-Ferris Industries ("BFI") permit application for construction of a solid waste disposal facility at the Piedmont site in King and Queen County. Specifically, we have been asked to review the information relating to the impact, if any, on nearby wetlands.

After a preliminary review of the available data, we are seriously concerned that there is insufficient documentation by BFI of the landfill's effect on wetlands. We feel strongly that any permit decision should be delayed until the applicant submits the necessary information and the public has an opportunity to review it. It is essential, given the unique environment of the landfill, that its effect on the wetlands and surrounding ecosystems be fully considered.

According to the BFI application, a wetlands delineation was conducted at the site between October 15 and 17, 1990 and delineated wetlands were confirmed by an Army Corps of Engineers site visit on January 17, 1991. BFI claims it will avoid wetlands within its site. However, the application contains no verification by the Corps of the extent of the wetlands within the site or any materials that would allow us to evaluate the protection afforded these wetlands or those adjacent to the site. Without such information the decisionmakers (and the public commentators) are unable to determine if BFI complies with all aspects of relevant wetlands law under the Clean Water Act.

The National Wetlands Inventory Map for the Truhart, Virginia, USGS 7.5-minute quadrangle indicates that wetlands exist along two runs that flow to the north from the central portion of the site. The western run is classified as a seasonally flooded area (PF01C) and the eastern run is classified as a temporarily flooded area (PF01A).

Given this topography, any surface water runoff from the landfill will go directly into Dragon Run without any monitoring. Such runoff would necessarily have a detrimental effect on the surrounding wetlands and on Dragon Run. The surface water system in this area is interdependent, causing the effects of any leakage or runoff to be far reaching indeed. Contamination would flow from Dragon Run into the Piankatank River, which in turn feeds into the Chesapeake Bay.

In addition to wetlands within the proposed site, there appear to be widespread wetlands in the midst of a precious natural resource, the Dragon Run Wilderness, an area which is highly valued not only by the community but also by scientists and ecologists. Citizens groups such as the Friends of Dragon Run and the Chesapeake Bay Foundation have long been concerned with preserving this area, which not only is enjoyable due to its scenic beauty, but also is quite significant from an ecological standpoint.

In a Smithsonian Institution study which covered 12,600 square miles of the Chesapeake Bay region, the Dragon wilderness was ranked second in ecological significance among 232 areas investigated. (Survey of Natural Areas of the Atlantic Coastal Plain: Ecological Themes, Center for Natural Areas, Office of International and Environmental Programs, Smithsonian Institution, June 1974.) While there are no known endangered species in the area of the proposed site, the Dragon wilderness is an integral part of a diverse ecosystem that supports an abundance of wildlife. Dragon Run is the habitat of, among others, beaver, white tail deer, otter, muskrat, raccoon, bald eagles, ospreys, hawks, herons, owls, and song birds. One study revealed over 25 varieties of fish in the stream. The ecosystem also includes diverse vegetation: The swamp is primarily composed of hardwoods and includes bald cypress trees, some of which are eight or nine feet in diameter.

King and Queen County falls under the jurisdiction of the Chesapeake Bay Preservation Act, which requires a Resource Protection Area ("RPA"). While the disposal limits shown on the near-vicinity map identify some wetlands within the site and a 100-foot RPA buffer adjacent to Dragon Run, we are concerned that this does not sufficiently protect the widespread network of wetlands.

It appears from the soils maps obtained from the U.S. Soil and Conservation Service that the permeability of the soils is consistent with that found in wetlands areas and thus it is essential that a delineation of wetlands be available for public review prior to a decision on the issuance of the permit.


In addition to preservation of the Dragon's unique ecosystem, we are also concerned that the area adjacent to the

proposed facility is historically significant. The historic Second Mt. Olive Baptist Church is threatened by this project. The church, founded in 1869 by recently freed slaves, operated an African American school across the road for many years. We understand that there are ten archeological sites on the area of the proposed landfill, and the landfill's impact on these has not been addressed in the permit application. (See Memorandum from Bruce Larson, Department of Historic Resources, to the Rev. Keith Parham, March 24, 1993.)

While the operation of the landfill would leave the church intact, its impact on the church as well as on other neighbors has not been thoroughly addressed. While the application notes merely that no responses were received from adjacent landowners about the location of water supply wells, this is an insufficient basis from which to conclude that the landfill will not impact nearby water supplies. At the public hearing, a number of citizens raised these and other questions that should be answered prior to a permit decision. In most cases, the answers -- such as the location of wetlands and wells -- then pose issues for study, such as whether or not the applicant's site plan adequately protects those resources from contamination. (See V-§5.1A(4), 5.7, Solid Waste Management Regulations.)

Overall, SELC is concerned that there is insufficient data to demonstrate that there has been a rigorous scientific examination of the environmental effects of the proposed landfill on the surrounding unique ecosystem of wetlands, Dragon Run, and water wells of adjoining properties. Therefore we strongly urge the Department of Waste Management to request additional information about the location of wetlands, water supply wells, and archaeological sites as well as BFI's plan to protect these resources; and to allow the public to comment on this documentation prior to making a decision about the issuance of a permit.

Sincerely,



Katherine E. Slaughter
Staff Attorney

KES/cs



United States Department of the Interior

FISH AND WILDLIFE SERVICE
FISH AND WILDLIFE ENHANCEMENT
MID-COUNTY CENTER, U.S. ROUTE 17
P.O. BOX 480
WHITE MARSH, VIRGINIA 23183



(804) 693-6694

FAX Number - (804) 693-9032

Date: 4-5-93

To: Dean Starook

Desk Phone: _____

Fax Number Called: _____

From: Cindy Schulz

Remarks:

⑥ King + Queen County
Landfill Comments.

Total Pages (including transmittal sheet) 4

If there are problems with this transmission, please notify sender at above number.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
FISH AND WILDLIFE ENHANCEMENT
MID-COUNTY CENTER, U.S. ROUTE 17
P.O. BOX 480
WHITE MARSH, VIRGINIA 23183
April 5, 1993

Mr. Dean Starook
Virginia Department of Environmental Quality
Division of Solid Waste
11th Floor Monroe Building
101 N. 14th Street
Richmond, Virginia 23219

Re: Proposed Landfill in King and Queen
County, Virginia

Dear Mr. Starook:

This responds to our recent notification that Browning-Ferris Industries of South Atlantic, Inc. has redesigned their project to avoid wetlands impacts at the proposed landfill site in King and Queen County, Virginia. We have reviewed the information that Browning-Ferris Industries sent us when they were planning to apply for a U.S. Army Corps of Engineers permit.

From the map they submitted, it appears that habitat for the small whorled pogonia (*Isotria medeoloides*), Federally listed endangered, may exist within the project site. Appropriate habitat for the pogonia includes mature upland forests with an open understory on terrain that is almost level or gently to moderately sloping (Ware 1991). If this type of habitat is found at the project site, the U.S. Fish and Wildlife Service recommends that a survey for this plant is conducted. If it is determined that a survey will be conducted, please contact the Virginia Field Office at the phone number given below for information regarding individuals qualified to conduct such a survey and the extent of the survey. We also recommend that your agency coordinate this project with the Virginia Department of Agriculture and Consumer Services which has management authority for endangered and threatened plants and insects in Virginia. They may be contacted at:

Plant Protection
Virginia Department of Agriculture & Consumer Services
P.O. Box 1163
Richmond, VA 23209
(804) 786-3515

Mr. Dean Staruck

Page 2

Thank you for the opportunity to comment on this proposed landfill. If you have any questions or need further assistance, please contact Cindy Schulz of this office at (804) 693-6694.

Sincerely,

A handwritten signature in cursive script that reads "Karen L. Mayne".

Karen L. Mayne
Supervisor
Virginia Field Office

Literature Cited

Ware, D. M. E. 1991. Small whorled pogonia. Pages 95-97 in K. Terwilliger, ed. Virginia's Endangered species, Proceedings of a Symposium. McDonald and Woodward Publishing Co., Blacksburg, VA.

James D. Sears
Board of Supervisors
Stevensville District
General Delivery
Little Plymouth, VA 23091

April 5, 1993



Mr. William L. Woodfin, Jr.
Director
Department of Waste Management
101 North Fourteenth Street
Richmond, VA 23219

*Rec'd. in the Waste
Mgt. office mailbox
4-5-93
LLW*

Dear Mr. Woodfin:

In reviewing the Draft Permit for the Proposed Landfill in King and Queen County, I noticed that there was one area of Wetlands that I believe have not been identified by B. The Chart C-1, "Existing Site Conditions" detail the area of Wetlands and Chart C-3 "Base Grade/Excavation Plan" identifies the location of the cells.



In the Spring of 1991, a person from the Chesapeake Bay walked the proposed landfill site with another citizen of the County and myself. At that time, the Chesapeake Bay person showed us the areas on the site that would be classified as Wetlands.

In reviewing the Chart C-1, this area of Wetlands is not shown. The area of Wetlands that I am concerned about would be destroyed by Cell No. 6 on Chart C-3.

I am requesting that this area of Wetlands should be inspected by the Army Corp of Engineers. I was on the site on Saturday, April 3, 1993, and there are minnow living in this section of wetlands.

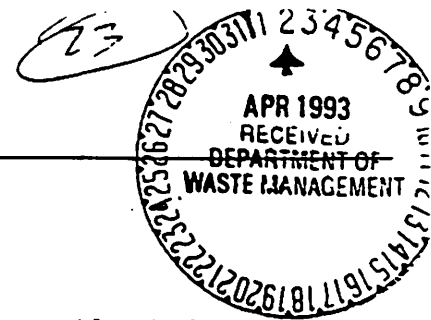
Sincerely,

James D. Sears
Stevensville District

cc: Senator Elmo G. Cross, Jr.
Senator Henry L. Marsh, III
Delegate Shirley F. Cooper



The College Of
WILLIAM & MARY



Department of Biology

P.O. Box 8795
Williamsburg, Virginia 23187-8795
804/221-5433, Fax 804/221-6483

1 April 1993

Mr. Dean E. Starook, E. I.T.
Dept. of Waste Management
13th Floor, Monroe Bldg.
101 N. 14th St.
Richmond, VA 23219

Dear Mr. Starook:

I am writing to you in regard to the proposed landfill to be located within the watershed of the Dragon Run in King and Queen Co. I have two major concerns. Has adequate work been done to determine whether rare plant and/or animal species occur in this area or would be affected by its downstream effects? Are the plans for the facility and its monitoring system adequate to protect the priceless Dragon Run ecosystem?

Several rare plant species are known to occur in King and Queen Co. (See Terwilliger, 1991, Virginia's Endangered Species). Among these, the Virginia Dept. of Natural Heritage (1993 list) shows the following species in one of the two top ranking categories for rarity (S1 and S2): stalkless yellow cress (Rorippa sessiliflora), Columbian watermeal (Wolffia columbiana), northern pitcher plant (Sarracenia purpurea), hidden-fruit bladderwort (Utricularia geminascapa), water violet (Hottonia inflata) and the northern joint vetch (Aeschynomene virginica). The northern joint vetch is federally listed as endangered. It and nearly all of the other species listed above are elements of the aquatic flora, and therefore would be particularly vulnerable to the potential downstream effects of the planned facility, if they are present. [Is it correct that the construction plans allow the overflow from 25-year rains to enter the Dragon Run watershed?]

If appropriate upland habitat occurs on the site, it should be checked for the federally listed small whorled pogonia, Isotria medeoloides. This rare native orchid is not recorded from King and Queen County, but it is (or has been) known from four counties more or less bordering it: Gloucester, James City, New Kent and Caroline counties.

93-0500

2.

The Dragon Run is no ordinary swamp. It is a remarkably pristine, extensive stream/swamp system that merits strong protection. Botanical studies have been done in the area, but to my knowledge, the type of field work necessary to check for the presence of rare species has never been done. I strongly urge that appropriate steps be taken to adequately check the project site and adjacent areas downstream for the presence of rare species and to adequately assess the downstream effects of this project.

Sincerely yours,

Donna M. E. Ware

Donna M. E. Ware
Curator, Herbarium
Adj. Assoc. Prof.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

WASTE DIVISION OFFICE OF PERMITS

MEMORANDUM

TO: James C. Adams
Director, Waste Division

THRU: Hassan Vakili *EPH*
Acting Office Director

FROM: Dean E. Starook *DES*
Environmental Engineer, Senior

DATE: May 19, 1993

SUBJECT: Permit #554 for Issuance
Browning Ferris Industries of South Atlantic, Inc.
King & Queen Sanitary Landfill
King & Queen County

The availability of the draft permit for public review and the notice for public hearing was advertised on February 22, 1993. The public hearing was held by the Department on March 24, 1993, and the draft permit's public participation period ended on April 5, 1993.

Upon a review of the comments regarding local highways, and § 5.1.B.2 of VR 672-20-10, it was necessary to modify the permit to require Route 609 to be upgraded to ensure compliance with the regulations. Section I.D.4 of Permit Module I was modified to require the geologic boring logs to be submitted for all new monitoring wells in order to ensure that they are properly located. The permit was also modified to require submittal of a surface water monitoring sampling and analysis plan for review and approval. Mr. Brian Wagner of the Chesapeake Bay Local Assistance Department has indicated that they have approved King & Queen County ordinances regarding resource protection areas. CBLAD is also involved in the review of the erosion and sediment control plan with the Department of Conservation and Recreation.

The applicant and all persons who commented during the public participation period will be sent a response to their comments. Minor editing of the draft permit was also necessary to comply with the requirements of VR 672-20-10, Amendment 1, effective March 15, 1993. With these modifications, the application appears to comply with VR 672-20-10.

Mr. James C. Adams
May 19, 1993
Page 2

Attached is Permit #554 for the BFI Sanitary Landfill, King & Queen County, Virginia, prepared for signature following the public participation period. Your signature will constitute modification of the draft permit and issuance of Permit #554 (§7.2.E, VR 672-20-10).

JCA-des1.554



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

MEMORANDUM

TO: Richard N. Burton, Director

THROUGH: William L. Woodfin, Jr.
Deputy Director of Operations

FROM: James C. Adams *James C. Adams*
Director, Waste Division

DATE: May 21, 1993

SUBJECT: BFI, King & Queen County, Sanitary Landfill,
Permit #554 for Issuance

Staff has resolved outstanding issues as we discussed during our meeting on May 12, 1993. The concerns and issues regarding the Part A and Part B application have been adequately addressed in accordance with § 10.1-1402, Title 10.1, Code of Virginia and Virginia Solid Waste Management Regulations (VR 672-20-10). Based on my inquiries and staff responses, I recommend that the above referenced permit be issued.

JCA/cgn



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Subject: Issuance of Permit No. 554 - BFI King & Queen Sanitary Landfill

To all who commented during the public participation period:

Thank you for your recent letters and for taking an active role in the public participation process regarding the subject landfill. Numerous phone calls, letters, video tapes, maps, etc., were received during the public comment period which ended April 5, 1993. The citizens of King & Queen County are to be commended for organizing and informing themselves to express their concerns regarding this landfill. At the public hearing, and during the public comment period that followed, the citizens of King & Queen County raised many concerns and questions that were relevant and well-informed. Every statement made at the public hearing and written comment submitted has been reviewed by our staff of scientists and engineers to ensure that the final permit is in full compliance with Virginia laws and regulations regarding the siting, design, operation, closure and post-closure of solid waste management facilities.

Prior to addressing site specific concerns and issues, it may be helpful to briefly describe the permitting process for solid waste management facilities in Virginia. To initiate the permit application process, a "notice of intent" is filed with the Department which must include a certification (without qualifications, conditions, or reservations) from the local governing body which states that the location and operation of the facility are consistent with all applicable ordinances. The applicant is then notified that he may submit his application for a permit. This application is submitted in two parts, identified as Part A and Part B.

The Part A application provides the geotechnical, hydrogeological and other information essential for assessment of the site suitability for the proposed facility. The Part A provides information on all siting criteria applicable to the proposed facility. Once the applicant receives written approval of the Part A from the Director, the Part B application may be submitted.

The Part B application consists of the detailed engineering design and operating plans for the proposed facility. Once the application is found to be in full compliance with the regulations, a draft permit is developed by the Department. A public hearing is then held in the locality where the facility is to be located. The public comment period extends for ten days after the conclusion of the public hearing. The Director renders a final decision on the permit within 30 days of the close of the public hearing comment period.

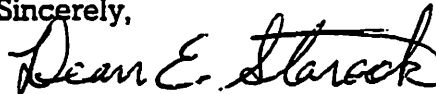
The notice of intent for the BFI King & Queen Landfill is dated September 18, 1990, and included the certification of consistency with local ordinances dated September 10, 1990. The Part A permit application was received on February 4, 1991 and approved on July 29, 1991. The Part B permit application was received on March 20, 1992. After numerous revisions, the application was found to be in full compliance with the Virginia Solid Waste Management Regulations. The draft permit was then prepared and a public hearing held on March 24, 1993. The public comment period ended at 5:00 pm on April 5, 1993.

All comments spoken at the public hearing and received during the public comment period (and most received after the public comment period) have been reviewed and considered in making the decision to issue this permit. Staff from the Department's Part A, Part B, and Groundwater permitting sections have been consulted to ensure that the comments were evaluated and the final permit is in full compliance with the Virginia Solid Waste Management Regulations. Permit No. 554 has also been written to ensure that the permittee complies with all the Water Division's regulations concerning surface water monitoring and stormwater runoff.

Attached is a question and answer document resulting from the review and evaluation of the input received during the public participation period. Please understand that the Department may not be able to provide a satisfactory answer to all of the difficult questions asked during the public comment period, particularly those issues over which the Department has no regulatory authority. The Department does have the ability to ensure that facilities located in Virginia abide by the regulations, which are written in an effort to protect human health and the environment. The operation of any sanitary landfill, even in full compliance with the strictest regulations, entails some degree of uncertainty or risk. This is true of many activities in our society today.

Thank you for your keen interest and involvement in the permitting process for this landfill. If the Department may be of any assistance in understanding the design and operation of this landfill, or the state and federal regulations pertaining to it, please contact me at (804) 371-0517.

Sincerely,



Dean E. Starook, E.I.T
Environmental Engineer, Sr.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Issues Expressed During The Public Participation Period

And Department of Environmental Quality Response

BFI Sanitary Landfill, King & Queen County, Virginia

I. Issues concerning the Part A application:

A. *Why must the landfill be located so close to the pristine Dragon Run and the Chesapeake Bay?*

This was a concern expressed by nearly all who commented. It must be understood that zoning and land use decisions regarding a particular site are made at the local level. Furthermore, the siting criteria found in the state regulations do not vary region by region, but apply to all sites in Virginia, from the Appalachians to the eastern shore, in order to provide a minimum and adequate level of protection to human health and the environment. Once an applicant complies with the siting criteria found in § 5.1.A of the Virginia Solid Waste Management Regulations, VR 672-20-10, the Department of Environmental Quality cannot deny the application.

The water quality of the tributary to Dragon Run, adjacent to the proposed landfill, will be monitored. Permit Condition I.E.4 requires a surface water monitoring plan to be submitted and approved prior to the operation of the landfill. The same permit condition also requires the surface water run-off from the landfill property to be monitored.

B. *The certification of consistency with local ordinances is invalid because it violates local zoning ordinances and the county's comprehensive plan. The permit should therefore be denied.*

This issue was raised by several commenters. The certification referred to is dated September 10, 1990 and is included as Appendix I. It was signed by the County Administrator on behalf of the Board of Supervisors and advises that the

location and operation of the landfill are consistent with all applicable ordinances and the County's comprehensive plan. It also expresses Board support for BFI's permit application. The Department of Environmental Quality has no authority to interpret or enforce local ordinances. The certification letter dated September 10, 1990 has not been withdrawn and is valid for the purpose of compliance with § 10.1-1408.1.A.1 of the Code of Virginia, and § 7.2.B of VR 672-20-10.

- C. *The presence of wetlands on the site should disqualify it from consideration for a landfill. The wetlands were not accurately delineated in the Part A application.*

These and similar issues were raised by many who commented. One commenter claimed that Cell No. 6 is located in wetlands. § 5.1.A.4 of VR 672-20-10 prohibits locating sanitary landfills in wetlands.

It is true that there are significant wetlands within the property boundaries, however, there are no plans to disturb any delineated wetlands. As described in the Part A and Part B permit application documents, a detailed wetlands delineation was conducted at the site between October 15 and 17, 1990, using the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. The wetlands delineation was confirmed by an Army Corps of Engineers site visit on January 17, 1991. The Corps of Engineers official notification dated February 7, 1991, confirmed the wetland delineation on the 420 acre site and indicated that a Department of the Army permit may be required pending submittal and review of a plan of development for the site. Upon review of the plan of development, the Corps of Engineers official notification dated March 1, 1991 indicated that no Department of the Army permit is required for the plan of development mentioned above. These documents are included in Appendix II. Copies of the wetlands demonstration are required [Permit Condition I.E.1] to be submitted to this Department.

Therefore, the Department of Environmental Quality has no basis to deny the wetlands delineation and the permit cannot be denied because of the presence of undisturbed wetlands on the property. Please note, however, that a one hundred foot Resource Protection Area has been established between all delineated wetlands and disposal areas, in accordance with the Chesapeake Bay Preservation Act and the approved County ordinances.

- D. *The Permit should be denied until a full Environmental Impact Study (EIS) is conducted for this site.*

Demonstrating compliance with the siting criteria of § 5.1.A, VR 672-20-10, and additional design, operation and monitoring requirements of § 5.1 through the permitting procedures of § 7.3 and § 7.4 is intended to ensure minimal impacts to

the environment by the operation of any sanitary landfill in Virginia. An Environmental Impact Statement is a federal requirement for some projects involving federal funds. It is not required by the federal EPA regulations governing solid waste landfills nor is it a requirement of the Virginia solid waste management regulations. The Department of Environmental Quality will not therefore arbitrarily require an EIS for this site.

E. *The Permit should be denied because there may be historical areas present within the site.*

Please note that there are no siting restrictions in VR 672-20-10 concerning parks, recreation areas, dams, historic areas, monument areas, cemeteries, wildlife refuges, or unique natural areas. § 7.3.C.9 of VR 672-20-10 does require these areas, within 500 feet of the property, to be identified in the Part A application. These areas may be governed by regulations of other state or federal agencies. The Part A application indicated that there were no significant archaeological sites present. Since there has been some controversy on this issue, we have encouraged BFI to work with the Virginia Department of Historic Resources to identify and preserve any significant sites or artifacts that may be encountered. A recent letter which addresses this issue, from the Virginia Department of Historic Resources to BFI and dated March 20, 1993, is included as Appendix III.

F. *The Permit should be denied because there may be endangered species present at the site.*

As indicated above, there are no siting restrictions in VR 672-20-10 regarding endangered plant and animal species. The protection of endangered species is regulated by other state and/or federal agencies. The Part A application indicates that there are no rare, threatened, or endangered species or unique or exemplary natural communities recorded for the proposed landfill site. The United States Department of the Interior (National Park Service and Fish and Wildlife Service), the Virginia Department of Conservation & Recreation, Division of Natural Heritage, the Virginia Department of Game and Inland Fisheries, and the Virginia Department of Agriculture & Consumer Services have all been contacted to ensure that the applicable regulations are complied with during the development of this site.

G. *The presence of numerous shallow drinking water wells in the project vicinity that may become contaminated should be cause for permit denial.*

§ 5.1.A.7.C of VR 672-20-10 prohibits a sanitary landfill disposal unit from extending closer than 500 feet from any groundwater source of drinking water. The well nearest the disposal area that has been identified by the applicant and any commenter is that of the Second Mount Olive Baptist Church. This well is approximately 600 feet from the disposal area, and the location of the landfill

therefore complies with this section of the regulations. All shallow wells in the one mile radius of the landfill are either upgradient of the landfill or are hydraulically separated from groundwater underneath the landfill; and BFI has amended the contract with the county to develop a plan within one year that addresses monitoring and replacement of adjacent shallow wells.

The groundwater monitoring requirements within the permit are designed as an early warning system to detect any contamination that may occur before it leaves the property, in order to allow swift corrective action.

H. *The hydrogeological investigation is inadequate because the tests were not checked with a barometer.*

Appendix II-F of the Part A application presented groundwater pump test data which included barometric efficiency data. This data demonstrated that the upper and lower aquifers were not interconnected.

I. *Why not recycle or incinerate the waste rather than landfill it?*

Several commenters expressed this concern. A hierarchy of waste management practices, listed in order of preference, has been developed as follows (from § 2:1 of VR 672-20-10): Planning, Source Reduction, Reuse, Reclamation, Resource Recovery, Incineration, Landfilling. While landfilling is the least preferred option, even with optimal recycling efforts, it will always be necessary as long as waste is generated. Even incinerators generate ash which must be landfilled. However, the decision to locate a landfill, incinerator, or recycling facility is primarily a land use decision of local government.

II. Issues regarding the Part B application (excl. groundwater):

A. *Roads in King & Queen County are unsafe and inadequate for landfill traffic.*

This concern was expressed by virtually all those who commented. Safety of traffic, volume of traffic, and the condition of public roads are regulated primarily by the Virginia Department of Transportation and local governments. This has been expressed in writing numerous times during the permitting process.

BFI has committed to King & Queen County that the primary route for tractor-trailer traffic will be along Route 17 to Route 33 to Route 14 to Route 609 and the landfill. In addition, BFI is working to upgrade and re-locate Route 609 by the time the landfill opens. The new Route 609 will intersect route 614 about 0.5 miles south of the Second Mt. Olive Baptist Church and will join existing Route 609 0.25 miles east of the current intersection of Routes 609 and 614. BFI will also be

heavily involved with VDOT and King & Queen County efforts to upgrade and improve Route 614 within two to three years. The Virginia Department of Transportation has addressed the safety of the roads, pursuant to their statutory obligations and has cooperated with the County and BFI for a road improvement project. Appendix IV contains relevant correspondence concerning this issue.

§ 5.1.B.2 is the only section of VR 672-20-10 that addresses the issue of access roads. This section requires access roads to the entrance of a facility or site to be all weather, with a base capable of withstanding anticipated vehicle loads. To ensure compliance with § 5.1.B.2, BFI will be required to upgrade (or relocate and upgrade) Route 609 from Route 614 to the entrance of the facility prior to operation of the landfill.

B. *Given the proximity of this site to the Dragon run and the Chesapeake Bay, why must a variance from the double liner requirements be granted? Why not require three liners, or a 15 foot thick clay liner?*

In March of 1992, when the Part B application was submitted, the Virginia regulations required a double liner and leachate collection system. The Federal subtitle D of RCRA regulations (promulgated October 9, 1991) mandate a single composite liner design for all sanitary landfills in the United States. This design consists of a synthetic liner above and in direct contact with a clay liner. The EPA deemed their single composite design superior to Virginia's double liner requirement. During the application process, BFI had to apply for a variance from Virginia's double liner requirements in order to comply with the Federal single composite liner requirements, which superseded Virginia's requirement.

Virginia has since revised the Virginia solid waste regulations VR 672-20-10 to comply with the Federal mandates. This was done in amendment one to VR 672-20-10 which became effective March 15, 1993. These regulations no longer require a double liner and therefore a variance to Virginia's regulations is not necessary and none is granted in this permit.

The Department cannot arbitrarily require additional design measures for liners (such as three liners, or one 15 foot thick clay liner) than those specified in the regulations. The design submitted meets the requirements of VR 672-20-10.

C. *What will happen to property values adjacent to the landfill?*

Recent studies have suggested that a landfill, if well-designed and managed, can be a good neighbor and have no statistically measurable negative impact on surrounding property values. One such study is included as Appendix V. A significant factor in this study is that the disposal area was not visible from neighboring homes.

- D. *Is there a bonding requirement for this landfill project? What will happen if BFI abandons the site? Who is responsible for this landfill? How long is the Post-Closure period?***

These, and similar questions were asked by many commenters. The Virginia Financial Assurance Regulations of Solid Waste Facilities, VR 672-20-1 require each facility to obtain financial responsibility for the full costs of closure and post-closure. In addition each facility must obtain liability coverage for sudden and non-sudden accidental occurrences (typically called "Pollution Legal Liability insurance").

The amended regulations VR 672-20-10 increased the post-closure period from 10 years to 30. Therefore, the 10 year post-closure period option listed in the draft permit has been removed, and the 30 year period remains. The total cost estimate for closure and post-closure for this facility is \$10,374,700.00. BFI must establish a mechanism in accordance with VR 672-20-1 (bond, trust fund, financial test, etc.) that covers this amount at least 60 days prior to facility operation. BFI is also in the process of obtaining liability coverage in the amount of \$1,000,000 (\$2,000,000 aggregate). This also must be obtained at least 60 days prior to facility operation. The amount is much greater than the minimum coverage our financial assurance regulations require.

In the unlikely event this facility is abandoned, VR 672-20-1 stipulates that the funds for closure/post-closure care will be forfeited to the state to be paid over to King & Queen County as necessary to restore and maintain the facility in accordance with the closure/post-closure plan.

BFI is responsible and liable for this landfill through the closure/post-closure period. Please note that the 30 year post-closure plan will be extended if the Director determines that the lengthened period is necessary to complete corrective measures or to protect human health and the environment.

- E. *How will liner leaks be detected? Will the liner be spark tested? How will the clay liner be tested?***

The landfill will be built according to a detailed construction quality assurance plan which is part of the final permit. For the clay component of the composite liner, this plan outlines detailed borrow source testing, evaluation of the subgrade, full scale construction of a "test pad" and construction of the actual liner. The liner will be tested at frequent intervals with a sealed, double ring infiltrometer or a two-stage borehole (Boutwell) permeameter.

The synthetic liner components will be warranted by the manufacturer and

installer as specified. The liners will be overlapped and welded (no solvent or adhesive). All seams will be tested under pressure to ensure there are no leaks. The liner will be tested for seam strength and peel adhesion strength in accordance with ASTM standard test methods by independent laboratories.

More detailed information on construction quality assurance is contained in the final permit, which is available for viewing in our file room.

F. *How will surface water leaving the site be controlled? Will the surface water be monitored before it enters the Dragon?*

All surface run-off from the site will be collected in a series of perimeter drainage channels and routed through one of five sediment basins before exiting the property. The sediment and erosion control features of the site have been designed in accordance with the Virginia Sediment and Erosion Control Handbook and VR 672-20-10. The top of embankment for each sediment basin is a minimum of one foot above the high water level for 25-year, 24-hour storm event. More detailed design information is included as part of the final permit document.

Virginia solid waste regulations VR 672-20-10 do not require surface water monitoring. However, BFI has indicated that the discharge from each of the sediment basins will be monitored, and the tributary to Dragon run will be monitored upstream and downstream of the landfill.

In response to the public comments, the final permit has been changed to require BFI to submit to the Department of Environmental Quality, Waste Division, a surface water monitoring sampling and analysis plan for review and approval at least 60 days prior to receiving waste. A surface water Virginia Pollution Discharge Elimination System (VPDES) permit application must also be submitted to the water division.

G. *Will the landfill receive hazardous wastes?*

This landfill is not permitted to receive waste that is classified as a hazardous waste according to the Virginia Hazardous Waste Regulations. There are no landfills authorized to receive hazardous waste in Virginia at this time. The operations manual included in the final permit contains a detailed waste quality assurance plan to assure that inappropriate waste is not accepted at the landfill. The plan includes visual inspection of the waste and a rigorous manifesting and testing program of all waste other than readily identified municipal solid waste.

H. *What Wheel load is the liner designed for?*

The maximum projected wheel stress that may occur at the site is associated

with a wheel loader (CAT 988 or similar) during construction of the drainage layer and over side slopes. The tire load used in these analysis was 23,480 pounds. The factor of safety in these analysis was greater than 1.5.

- I. *The settlement analysis is flawed because of a simplified, rectangular model. The final slopes will fail sometime after closure, pushing out the perimeter berm, due to a flawed analysis. The stress under the leachate manhole sumps will be too great, causing failure.*

A number of commenters questioned the geotechnical engineering settlement and slope stability analysis performed as part of the Part B application. It is agreed that a simplified model was developed for the settlement analysis. However, the analysis performed appears to be a conservative one, since it involved a combination of the greatest load change (the highest sideslope), and the widest application of that load. The entire liner design was indeed based upon this "worst case" analysis.

Extensive slope stability calculations were performed in order to determine the critical slope configuration, and its associated factor of safety against failure. The analysis determined the most critical potential failure surface to be one through the waste mass itself (as opposed to failure through the underlying, native soils). A slope stability analysis was also performed for potential failure surfaces within each interface of the liner design. These analyses were performed for both static and dynamic conditions and indicated factors of safety of 1.3 or greater.

- J. *The leachate storage area (LSA) should provide a seven day storage capacity. The secondary containment for the LSA should provide storage for the volume of both tanks.*

The leachate storage tanks have been designed to accommodate the average flow of leachate from a 30 day period from all inactive cells plus the peak daily flow from the active cell.

Regulations governing leachate control systems and monitoring are found in § 5.5 of VR 672-20-10. This section does not require secondary containment for leachate storage tanks. However, the secondary containment for the LSA will accommodate 110 percent of the largest tank capacity plus the 25-year, 24-hour storm.

III. Issues regarding the groundwater portion of the Part B application:

- A. *Has the interconnection between the upper and lower aquifers been evaluated? How was this done?*

These questions were asked by numerous commenters. A very rigorous set of field tests for aquifer interconnectivity were performed at the site by the consulting firm of CH2M Hill. The tests included barometric efficiency and aquifer pump tests. The results of these tests indicated no hydraulic communication occurring locally between the Columbia/Upper Yorktown aquifer and the Lower Yorktown/Eastover aquifer. This conclusion is supported by the following results from the testing regimen:

- Water level elevations at well cluster WC-5 showed significant hydraulic head differences (greater than 19 feet) across the Yorktown Confining Unit under natural conditions. This is potentially indicative of at least two different hydraulic units.
- Drawdowns were not observed in wells screened within the upper aquifer in response to pumping within the deeper aquifer during a 48-hour pump test. This is potentially indicative of little or no hydraulic communication between the two distinct aquifers.
- The storage coefficient for the lower aquifer was calculated to be 2.7×10^{-4} . This is typical of a confined aquifer.
- The vertical hydraulic conductivity of the Yorktown Confining Unit was determined to be 1.6×10^{-8} cm/sec (4.6×10^{-5} ft/day). This is typical of a very low permeability confining layer. This unit therefore separates and retards flow between the aquifers.

The conclusions above are sufficient to indicate to the Department of Environmental Quality that the lower Yorktown/Eastover Aquifer is indeed confined above by the Yorktown Confining Unit and that no significant hydraulic communication is present between the upper and lower aquifers.

B. *Will BFI be doing the groundwater testing in their own laboratories or an independent lab? How frequently will testing be done? Where will these reports be sent? Will the citizens of King and Queen County be notified in the event of health hazard conditions?*

VR 672-20-10 does not specify what type of laboratory must do the analysis of groundwater monitoring samples. However, § 5.1.D.4.b of VR 672-20-10 requires the sampling, analysis and quality control/quality assurance methods to be performed in accordance with EPA document SW-846. The Department can require re-sampling if it believes the samples were not properly sampled or analyzed.

BFI has indicated that they will be using an independent laboratory to test

the groundwater quality. Please note that Article X of the Deed of Lease between BFI and King and Queen County states that BFI shall pay the County \$100,000.00 per lease year for an Environmental Contingency Fund. This fund can be used at the discretion of the County for confirmatory testing or other environmental testing and inspection services deemed necessary.

Testing to determine whether the facility may be impacting groundwater must be done at least semiannually during the operating life of the facility and through the post-closure care period in accordance with the facility Permit and § 5.1.D.b.(3).(b) of VR 672-20-10.

Reporting requirements are very explicit in the regulations. Results of laboratory testing and subsequent statistical tests must be kept in the facility operating record and submitted to the Department at least annually under normal conditions in accordance with the permit and § 5.1.D.8.a.(2) of VR 672-20-10. In the event that potential groundwater contamination is discovered, the facility must report to the Department within 14 days that it may be impacting groundwater quality and implement a much more stringent testing program (Assessment Monitoring), within 60 days, in order to determine the nature and extent of the contamination.

In the event that the assessment monitoring in accordance with § 5.1.D.6 of VR 672-20-10 triggers a need for corrective action, those owning or residing on land adjacent to the landfill will be notified and a public meeting held to solicit input prior to selecting a remedy that will protect human health and the environment and clean up the groundwater. For information on the specifics and timeframes associated with assessment monitoring and corrective action, please refer to § 5.1.D.6 and § 5.7 of VR 672-20-10.

It is anticipated that for a landfill that is properly designed, constructed and operated, groundwater corrective action will not be necessary.

C. If four upgradient wells are necessary, wouldn't more than five or six downgradient wells be required to adequately monitor the facility? Shouldn't the lower member of the Yorktown Formation Aquifer be monitored as well as the Lower Yorktown/Eastover Aquifer?

§ 5.1.D of VR 672-20-10 require a minimum of one upgradient well and four downgradient wells. The greater number of upgradient wells at this facility will likely reduce the potential spatial variability in groundwater data from those wells, which are used to determine "background" data for the facility. This background data is then compared to data from each downgradient well in the statistical analysis in order to determine if there is potential groundwater contamination.

Based upon the site hydrogeologic characterization presented by CH2M Hill, the number of downgradient wells appears adequate to monitor groundwater in the uppermost significant aquifer.

The lower member of the Yorktown Formation Aquifer is the same unit as the Lower Yorktown/Eastover Aquifer. In addition, this aquifer unit is not the uppermost aquifer at the site but is confined by the clayey Yorktown Confining Unit. The uppermost aquifer at the site is the Columbia/Upper Yorktown aquifer. In accordance with § 5.1.D.3.a. of VR 672-20-10, only the uppermost aquifer must be monitored. Furthermore, given the thickness of the Yorktown Confining Unit and the extremely low hydraulic conductivity of this formation, potential releases of contaminants from the facility should be detected in the uppermost monitored aquifer long before any contaminants seep through the confining unit and impact the deeper aquifer.

- D. *In comparing well screen depth intervals in Table GP-2-2 on page GP-2-6 with the hydrogeologic strata elevations illustrated in Figure GP-2-1 of the Draft Permit, it appears that monitoring wells MW-2 through MW-11 are screened and sealed within the Yorktown Confining Unit, thus making the well network virtually useless.*

BFI was contacted on this issue and a typographical error was identified within Table GP-2-2. The column labeled "Estimated Depth Interval for Well Screen" should correctly read "Estimated Interval for Well Screen" (Elevation, ft). As a result, if the elevation of the well screen intervals illustrated in revised Table GP-2-2 is compared with the hydrogeologic units illustrated on Figure GP-2-1, it is evident that the wells are appropriately screened within the upper aquifer.

Please note that item I.D.4 of the Permit requires BFI to submit the as-built plans and geologic logs of each monitoring well that is to be installed in order to ensure that the wells are properly located and designed.

cmnt-DEQ.554

APPENDIX I

Local Certification

Appendix I of the Local Certification and Accreditation Act, 1997

King and Queen County

KING AND QUEEN C.H., VIRGINIA 23085

OFFICE OF
CHARLES W. SMITH
COUNTY ADMINISTRATOR

September 10, 1990

Ms. Cynthia V. Bailey
Executive Director
Department of Waste Management
Commonwealth of Virginia
11th Floor, Monroe Building
101 North 14th Street
Richmond, Virginia 23219

Re: Landfill to be Located and Constructed on 420 Acre
Parcel at Intersection of State Routes 614 and 609,
Buena Vista Magisterial District, King and Queen
County, Virginia ("Landfill")

Dear Ms. Bailey:

It is our understanding that Browning-Ferris Industries ("BFI") is about to submit to the Department of Waste Management a notice of intent to apply for a permit to construct and operate the referenced Landfill.

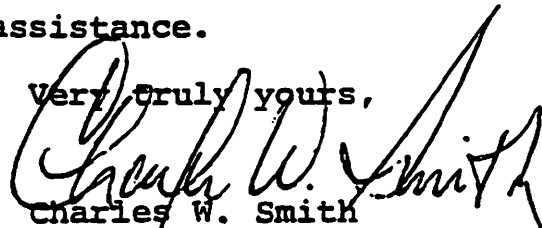
In accordance with the provisions of §10.1-1408.1 of the Code of Virginia, this is to advise in behalf of the Board of Supervisors of King and Queen County ("Board") that the location and operation of the Landfill are consistent with all applicable ordinances of King and Queen County and the County's Comprehensive Plan.

Pursuant to an agreement with BFI, the Board will lease the referenced parcel to BFI for purposes of the construction and operation of the Landfill and thus supports BFI's application for a permit for the Landfill.

In the event you have any questions or need anything further from the County in this matter, please feel free to let us know.

Thank you for your time and assistance.

Very truly yours,


Charles W. Smith
County Administrator

kdg

cc: Jeffrey C. Southard

APPENDIX II

Wetlands



U.S. Army Corps
Of Engineers
Norfolk District
Northern Neck Field Office

February 7, 1992

Project Number: 90-6894 - 50

Waterway: Unnamed

1. Property Owner's Name and Address:
Browning - Ferris Industries, Inc.
Richmond, VA

2. Authorized Agent's Name and Address:
Anita A. Allen
CH2M Hill
625 Herndon Parkway
Herndon, VA 22070

3. Address of Job Site if Different than Owner's Mailing Address:
VSH 609, near Second Mount Olive Church,
King & Queen County, Virginia

4. Project Description: Confirmation of wetland delineation on 420 acre site of proposed sanitary landfill. scope of work has been reviewed regarding the proposed landfill.

In accordance with Section 10 of the River and Harbor Act (33 U.S.C. 403) and/or the Clean Water Act (33 U.S.C. 1344), this shall serve as official notification that your project as described above, and in accordance with any special conditions as noted below,

- ☐ 1. does not require a Department of the Army permit.
☐ 2. satisfies Corps of Engineers Nationwide Permit number

This verification will be valid until the nationwide permit is modified, reissued, or revoked. All the nationwide permits are scheduled to be modified, reissued or revoked prior to January 13, 1992. It is incumbent upon you to remain informed of changes to the nationwide permits. We will issue a public notice announcing the changes when they occur. Furthermore, if you commence or are under contract to commence this activity before the date the nationwide permit is modified or revoked, you will have twelve months from the date of the modification or revocation to complete the activity under the present terms and conditions of this nationwide permit.

- ☐ 3. qualifies for Norfolk District's Regional Permit number
☒ 4. may require a Department of the Army permit.

However, before starting work, you should obtain all required permits from the Virginia Marine Resources Commission, P.O. Box 756, Newport News, Virginia, telephone 804-247-2200 and/or your local municipal authorities. King and Queen Building Official

Conditions: 1. The wetland delineation is considered to be performed in accordance with the methodology set forth in the Federal Manual for Delineating and Identifying Wetlands (1989).
2. Before any decision can be reached a Department of Army permit, a plan of development must be forwarded to this agency for its review.

Adrian R. Jennings 804/462-5382
Corps Representative

88

Sincerely,

Bruce F. Williams

Chief, Northern VA Regulatory Section

Property Owner/Agent



U.S. Army Corps
Of Engineers
Norfolk District
Northern Neck Field Office

March 1, 1991

Project Number: 90-6694 - 50

Waterway: Unnamed

1. Property Owner's Name and Address:

Browning-Ferris, Inc.
Richmond, Virginia

2. Authorized Agent's Name and Address:

Anita A. Allen
CH2M Hill
625 Herndon Parkway
Herndon, Virginia 22070

3. Address of Job Site if Different than Owner's Mailing Address:

VSH 609, near Second Mount Olive Church
King & Queen County, Virginia

4. Project Description: Construct sanitary landfill within the limits depicted on the drawing titled "Plan of Development - King and Queen Sanitary Landfill - King and Queen County". This plan shows no construction activity within the delineated wetlands.

In accordance with Section 10 of the River and Harbor Act (33 U.S.C. 403) and/or the Clean Water Act (33 U.S.C. 1344), this shall serve as official notification that your project as described above, and in accordance with any special conditions as noted below,

- ☒ 1. does not require a Department of the Army permit.
☐ 2. satisfies Corps of Engineers Nationwide Permit number

This verification will be valid until the nationwide permit is modified, reissued, or revoked. All the nationwide permits are scheduled to be modified, reissued or revoked prior to January 13, 1992. It is incumbent upon you to remain informed of changes to the nationwide permits. We will issue a public notice announcing the changes when they occur. Furthermore, if you commence or are under contract to commence this activity before the date the nationwide permit is modified or revoked, you will have twelve months from the date of the modification or revocation to complete the activity under the present terms and conditions of this nationwide permit.

- ☐ 3. qualifies for Norfolk District's Regional Permit number
☐ 4. may require a Department of the Army permit.

However, before starting work, you should obtain all required permits from the Virginia Marine Resources Commission, P.O. Box 756, Newport News, Virginia, telephone 804-247-2200 and/or your local municipal authorities. King & Queen Building Official.

Conditions: None. However, please be advised that any change in plan which would involve impacts to the wetlands may require review by this agency for permit considerations prior to implementation of the impact.

Adrian R. Jennings 804/462-5382
Corps Representative

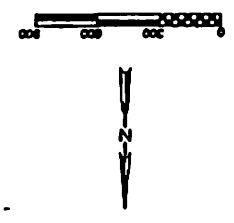
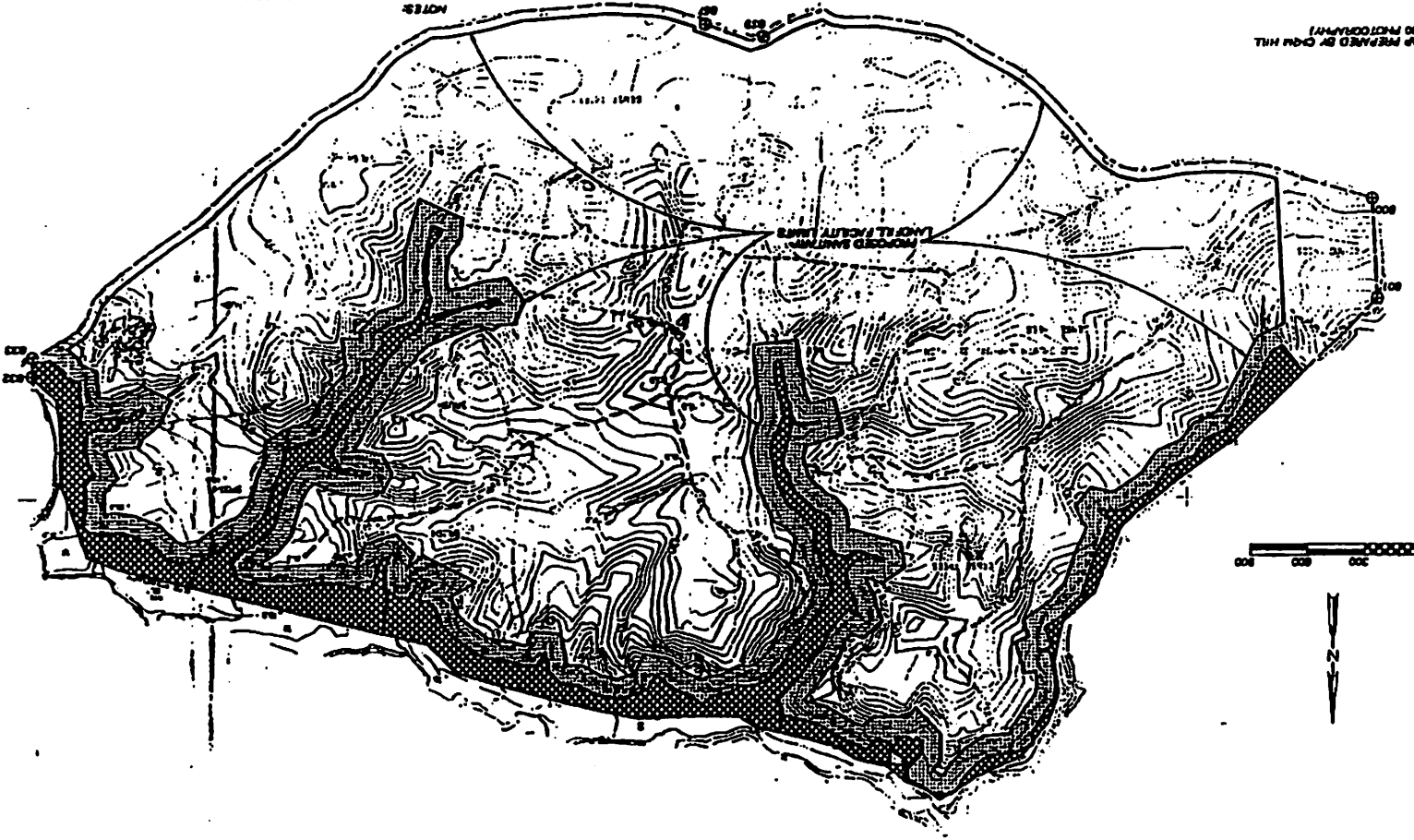
89

Sincerely,

Bruce F. Williams, Chief
Northern Virginia Regulatory Section

Property Owner/Agent

REFERENCED IN
3/1/91 COE LETTER



06

SOURCE
TOPOGRAPHIC MAP PREPARED BY COE HILL
(BASED ON 1:12,500 PHOTOGRAPHY)

LEGEND

- ① HORIZONTAL CONTROL POINT
- SITE BOUNDARY AND STUDY LIMITS
- - - DELINEATION BETWEEN 20 AND 30 FT TREE HEIGHT
- WETLANDS DELINEATION LINE
- WETLANDS
- RESOURCE PROTECTION AREA

HORIZONTAL CONTROL TABLE	
POINT	DESCRIPTION
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1198	1198.00
1199	1199.00
1200	1200.00

NOTES:
1. HORIZONTAL CONTROL BASED ON NET COORDINATE SYSTEM
2. VERTICAL CONTROL BASED ON MSL
3. WETLANDS DELINEATION BASED ON MSL
4. ALL SITE DEVELOPMENT WILL BE CONDUCTED WITHIN THE
PROPOSED SANITARY LANDFILL FACILITY LIMITS.
KING AND QUEEN SANITARY LANDFILL
KING AND QUEEN COUNTY, VIRGINIA
PLAN OF DEVELOPMENT

6. **Parks and Recreation Areas:** Correspondence with the Department of Conservation and Recreation, Division of State Parks, indicates that there are no parks or recreation sites within 500 feet of the proposed site.
7. **Dams:** The Department of Conservation and Recreation, Division of Soil and Water Conservation, indicates that the Allens Mill Dam is the closest documented dam, with a latitude of 37° 39' and a longitude of 76° 48', and is located approximately 6,000 feet southwest from the proposed sanitary landfill site (see Key Map, Section 5.1). This dam impounds water in the watershed immediately to the west of the proposed landfill site. Two small dams are located on the western drainage divide of the watershed in which the proposed landfill will be located (see Figure 8-15, Section 8).
8. **Cemeteries and Historic Areas:** The Second Mount Olive Church cemetery is the closest cemetery to the proposed sanitary landfill facility. Research of literature and archival information, property title search, and review of existing maps indicate that there are no sites or structures listed on the Virginia Landmarks Register or the National Register of Historic Places for the proposed site. Contacts with various agencies indicate they are unaware of any historic areas within 500 feet of the proposed sanitary landfill disposal limits. An archaeological background study and field reconnaissance, including a walkover of the project site, was conducted. Based on the data collected to date, no significant archaeological sites could be identified at the present time.
9. **Wetlands Areas:** The National Wetlands Inventory Map (Appendix I-B) for the Truhart, Virginia, USGS 7.5-minute quadrangle indicates that wetlands exist along two drainageways that flow to the north from the central portion of the site. The western drainageway is classified as a seasonally flooded area (PF01C), and the eastern drainageway is classified as a temporarily flooded area (PF01A). A detailed wetlands delineation was conducted at the site between October 15 and 17, 1990, using the *Federal Manual for Identifying and Delineation Jurisdictional Wetlands*. Delineated wetlands were confirmed by an Army Corps of Engineers site visit on January 17, 1991.

King and Queen County falls under the jurisdiction of the Chesapeake Bay Preservation Act, which requires a Resource Protection Area (RPA). The disposal limits shown on the near-vicinity map take into consideration delineated wetlands boundaries and a 100-foot RPA.

10. **Wildlife Refuges and Unique Natural Areas:** Conversations and correspondence with the Virginia Department of Conservation and Recreation, Division of

Natural Heritage, and the Virginia Department of Game and Inland Fisheries indicate that there are no rare, threatened, or endangered species or unique or exemplary natural communities recorded for the proposed landfill site. Two separate field reconnaissances of the site by CH2M HILL confirm that no wildlife refuges or unique natural areas exist at the proposed sanitary landfill site.

WDCR204/109.51

APPENDIX III

Historic Areas



COMMONWEALTH of VIRGINIA

Hugh C. Miller, Director

Department of Historic Resources

221 Governor Street
Richmond, Virginia 23219

TDD (804) 786-1934
Telephone (804) 786-3
FAX (804) 225-4261

March 20, 1993

Jeffrey C. Southard
Vice President
Browning-Ferris Industries of South Atlantic, Inc.
2490 Charles City Road
Richmond, VA 23231

RE: Proposed Sanitary Landfill
King and Queen County
VDHR File No. 90-1276-S

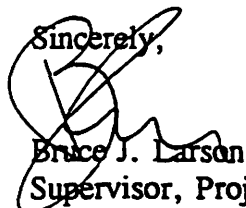
Dear Mr. Southard:

Thank you for your letter of March 18, 1993 indicating the commitment of Browning Ferris Industries (BFI) to ensure that historic resource issues resulting from the development of the proposed landfill are addressed.

As you noted in your letter, there are several archaeological sites recorded in the project area. It is likely that additional archaeological sites are present in the project area which have not yet been identified. I agree that a meeting is appropriate between BFI and this Department to determine the most prudent and feasible options to deal with historic resource issues. I am confident that we will be able to have a productive discussion concerning the best way to identify, assess, and treat all historic resources that may be affected by this project. While our office no longer has standing to comment on your project under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended), I am happy to arrange a meeting with you with staff members outside of my section who can provide you with the assistance you need.

Please contact me directly to arrange a meeting. I can be reached at (804) 786-6329 or through our main office telephone number. I look forward to meeting with you in the near future.

Sincerely,


Bruce J. Larson
Supervisor, Project Review

94

cc: Dean E. Starook, Virginia Department of Waste Management

92-0470

APPENDIX IV

Public Roads



DEPARTMENT OF
WASTE MANAGEMENT
EXECUTIVE DIRECTOR

MAY 20 1993

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1401 EAST BROAD STREET
RICHMOND, 23219

REFERRED TO: Dean Starn
COPY TO _____
RESPONSE DUE BY _____

RAY D. PETHTEL
COMMISSIONER

DAVID R. GEHR
ASSISTANT COMMISSIONER
OPERATIONS

May 19, 1993



Mr. James C. Adams
Director, Waste Division
Department of Environmental Quality
101 N. 14th Street
James Monroe Building
11th Floor
Richmond, Virginia 23219

Dear Mr. Adams:

Your understanding of the December 14, 1992 and March 24, 1993 letters from the Department of Transportation is correct. The initial operation of the landfill, as we understand it, will not generate sufficient traffic to render the existing roads unsafe. Planned road improvements should address any increases in traffic as the facility approaches full operating capacity in the future.

Sincerely,

David R. Gehr

David R. Gehr
Assistant Commissioner
Operations

MAY 24 1993

Post-it routing request pad 7664

ROUTING - REQUEST

Please

- ☐ READ
- ☒ HANDLE
- ☐ APPROVE
- and
- ☐ FORWARD
- ☐ RETURN
- ☐ KEEP OR DISCARD
- ☐ REVIEW WITH ME

Date 5-20-93

From Gehr

To: Dean Starn
Pls add to
Appendix IV
of Responses to
Public Comment



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

May 17, 1993

Mr. David R. Gehr
Assistant Commissioner of Operations
Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

Re: BFI Landfill in King and Queen County


Dear Mr. Gehr:

I would like to thank you and your staff for the assistance provided regarding the various transportation issues raised during the permit application process for the BFI landfill in King and Queen County. The draft permit has been through a thirty-day public comment period and subsequently, the Department is now responding to the questions asked and issues raised during that public comment period.

Numerous comments received voiced concerns about traffic volume and safety on Routes 614 and 619. It is our understanding, from the two letters dated December 14, 1992 and March 24, 1993 from the Department of Transportation (copies attached), that the operation of the landfill will not adversely affect traffic safety. That is, the initial operation will not generate sufficient traffic to render existing roads unsafe, and planned road improvements will adequately address any increases in traffic as the facility approaches full operating capacity in the future.

If our interpretation is incorrect in any way, please let me know immediately. Thank you for your assistance.

Sincerely,


James C. Adams
Director, Waste Division

JCA/cgn



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

P.O. BOX 184
SALUDA, 23148RAY D. PETHTEL
COMMISSIONERD. M. Wagner
RESIDENT ENGINEER

March 24, 1993

Mr. Robert C. Rogers
Route 1, Box 67A
Walkerton, Virginia 23177RE: Route 614
Project: 0814-048-140, PE101
From Route 14 to Route 809
King & Queen County

Dear Mr. Rogers:

The purpose of this letter is to provide you with an update on efforts between the Virginia Department of Transportation, King and Queen County and BFI to improve access to the proposed landfill which will be located on Route 809 in King and Queen County. As a result of our efforts to coordinate and provide necessary improvements at the earliest possible date, we have tentatively agreed that \$500,000 will be provided through the County to be matched by the Department's Revenue Sharing Program in order to expedite construction of the Route 614 project between Route 14 at Little Plymouth and Route 809 where the proposed landfill will be located. In addition, we are working with BFI toward the development of plans to relocate Route 809 to connect with Route 614 approximately 0.3 mile west of the intersection of Route 809. This effort will serve two purposes, the first and foremost being to relocate the proposed traffic away from the church at the intersection of Route 809. The second purpose would be to reduce the cost of construction of Route 614 by approximately \$200,000 as we would propose to end the Route 614 project at the connection to the landfill.

The cost of construction, right of way and engineering work for the 3.0 mile section of Route 614 is estimated at \$2,210,000. We have previous allocations toward this project of \$755,000 and anticipate allocating another \$225,000 toward this project in July 1993, bringing the total funding to \$980,000. The addition of the \$500,000 from the County would be matched by \$500,000 in revenue sharing funds will bring that total to \$1,980,000 which will allow VDOT to advertise the total 3.0 mile project in the summer of 1994. Construction of this project will take approximately 15 months to complete and we can anticipate the total length of the project to be open to traffic in the fall of 1995.

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P. 03


Mr. Robert C. Rogers
March 24, 1993
Page 2 . . .

In addition, we will be looking at making spot improvements along Route 14 to improve sight distance, vertical and horizontal curves, and strengthen pavements in order to handle the additional traffic which may be generated by the landfill.

As we have discussed with King and Queen County and BFI, BFI will route traffic to the landfill from Route 33 in King and Queen County north on Route 14 to Route 814 at Little Plymouth. By requiring landfill traffic to follow this route we will be able to concentrate landfill traffic to these specific routes and will better be able to utilize the limited funding we have available for improvements.

If you or any of the other Board members have any questions or wish to discuss this further at any time, please give me a call.

Sincerely,


D. M. Wagner
Resident Engineer

DMW/as

xc: J. S. Hodge
D. R. Gahr
J. G. Browder, Jr.
R. F. Alsop
H. L. Chandler, Jr.
M. G. Drexler
J. D. Sears
C. W. Smith
Daniel Siegel
Steve Yob
Jeff Southard
Dan Spikula



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

P. O. BOX 184
SALUDA, 23149

RAY D. PETHTEL
COMMISSIONER

D. M. Wagner
RESIDENT ENGINEER

December 14, 1992

Mr. Robert C. Rogers
Route 1, Box 67A
Walkerton, Virginia 23177

RE: Route 614
Project: 0614-049-140, PE101
From Route 14 to Route 609
King & Queen County

Dear Mr. Rogers:

This is in reference to our meeting of November 3, 1992, at the King and Queen County Courthouse to discuss funding and scheduling priorities for Secondary Highway Improvement Projects in King and Queen County. For your reference, those in attendance were Robert C. Rogers and James D. Sears of the King and Queen Board of Supervisors; L. W. Dickerson and D. M. Wagner of VDOT; Charles W. Smith, County Administrator; Charles M. Culley, County Zoning Administrator; Daniel Siegel, County Attorney; and Jeff Southard, Steve Yob and Dan Spikula of BFI.

At that meeting, you and Mr. Sears expressed concern that, if all goes as presently scheduled, the proposed landfill on Route 609 off Route 614 will begin operation in the Fall of 1993 and that road improvements will not have been completed to accommodate the additional truck traffic to the landfill.

I explained to the group that an interim public hearing had been held by myself and the King and Queen County Board of Supervisors on December 10, 1990, to update the King and Queen County Six Year Secondary Improvement Program to reflect the need for replacing the Route 629 Bridge at Walkerton and improving Route 614 between Route 14 and Little Plymouth and Route 609 where the proposed landfill would be located. As a result of that public hearing and as confirmed at the Public Hearing for the Six Year Plan held on March 9, 1992, the scheduling priorities were established as follows:

Priority #1

Route 614 from Route 14 at Little Plymouth to 1.6 miles northeast of Route 14

100

Estimated Cost	\$1,293,000
Previous Allocations	755,000
Additional Funds Required	538,000

DW/ae
Attachments

xc: R. F. Alsop
H. L. Chandler, Jr.
M. G. Drexler
J. D. Sears
C. W. Smith
C. M. Culley
Daniel Siegel, et al
Steve Yob
Jeff Southard
Dan Spikula

APPENDIX V

Property Values

Schedule:

Location & Design Public Hearing	Summer 1993
Transportation Board Approval	Fall 1993
Right of Way Acquisition	Fall 1993/Spring 1994
Advertise for Construction Bids	Summer 1994

Priority #2

Route 629, Walkerton Bridge and Approaches

Estimated Cost:	\$2,700,000 Total Cost
	1,450,000 K&Q share
Previous Allocations	250,000
Additional Funds Required	1,200,000*

Schedule:

Location & Design Public Hearing	December 15, 1992
Transportation Board Approval	Spring 1993
Acquisition of Right of Way	Begin June 1993
Advertise for Construction Bids	March 1994

*(By previous agreement, due to the critical need to replace this bridge, the project will be deficit financed by allocating \$150,000 per year each from King William County and King & Queen County until such time as deficit is paid. This will allow counties to continue financing other projects.)

Priority #3

Route 614 from 1.6 miles northeast of Route 14 to Route 609

Estimated Cost	\$1,724,000
Previous Funding	60,000
Additional Allocations Required	1,164,000

Schedule:

Location & Design Public Hearing	Summer 1993
Transportation Board Approval	Fall 1993
Right of Way Acquisition	1998
Advertise for Construction Bids	Summer 1999*

*70% of estimate cost of construction is required to be allocated before we advertise for bids.

I have attached a copy of the present, approved Six Year Secondary Improvement Plan for King and Queen County for your information. A total of approximately \$580,000 is provided for King and Queen County's Secondary Improvement Program each year. As can be seen from the funding schedule for the Six Year Plan, sufficient funds are not available to finance the needed improvements on a timely schedule.

Route 614 presently carries approximately 470 vehicles per day. In our discussion with representatives of BFI, it was indicated that in the first year of operation they would expect 500-750 tons per day at the landfill. With an average load of 20 tons per truck it is estimated that we would have an increase of 50 to 80 vehicles per day in traffic on Route 614. (500-750 tons per day divided by 20 tons per load would equal 25 to 40 deliveries with

a return trip empty would equal 50 to 80 trips.) BFI indicated that they do not expect to reach full capacity of 4,000 tons per day to the landfill for several years. At such time as that total is reached we can expect a total of 200 deliveries or 400 trips per day additional on Route 614. Route 614, in its present condition, has a safe capacity of over 2,000 vehicles per day based on safe and legal operation of vehicles. With the proposed improvements the safe carrying capacity of Route 614 will exceed 3,200 vehicles per day.

The proposed improvements to Route 614 will involve reconstruction of the present 18 foot wide pavement on a 30 foot right of way to a 24 foot wide pavement to provide a 12 foot lane in each direction with six foot to eight foot shoulders on a 60 foot right of way. Curves, grades and sight distance will be improved for a 55 MPH design speed.

We discussed the use of VDOT's Revenue Sharing Program to expedite the improvements to Route 614. This program may provide up to \$500,000 per year for construction, improvement or maintenance of primary or secondary roads in addition to present allocations, if a like amount is appropriate from the County's general revenues. A copy of Section 33.1-75.2 of the Code of Virginia is attached for reference. Requests for Revenue Sharing funds must be made annually through the Resident Engineer by March in order to be considered for the next fiscal year beginning July 1.

If the full amount of the additional funds required for right of way acquisition and construction of the second project on Route 614 could be provided through the Revenue Sharing Program over the next two years, then it is likely that the full length of Route 614 from Route 14 to Route 609 could be completed by early 1996. Revenue Sharing funds could also be used to provide spot improvements along sections of Route 14.

We also discussed the relocation of the connection of Route 609 to Route 614 southwest along Route 614 approximately 0.3 miles to connect south of the Dungee property. This would provide the connection entirely on Chesapeake Corporation land and would minimize the impact on the Second Mt. Olive Baptist Church. BFI will be responsible for providing this connection.

Concern was expressed with the operation and routing of trucks hauling to the landfill. Mr. Jeff Southard stated that BFI would maintain strict controls over trucks operated by or leased by BFI to assure they were operating in a safe manner. It was also agreed that trucks would be routed along Route 33 to Route 14 and then north on Route 14 to Route 614 at Little Plymouth. This would minimize improvements to be made with limited funds available to Route 614 and 14.

I trust this will help to answer many of the concerns expressed by members of the Board of Supervisors and their constituents. I will be more than happy to meet with the Board of Supervisors or any of the citizens to discuss these issues. If I may be of further assistance please give me a call at (804) 758-2321.

Sincerely,

104

L. W. DICKERSON
FOR
D. M. Warner

An Evaluation of the Impact of a Well-Designed Landfill on Surrounding Property Values

Real estate values have always been affected by surrounding land uses. One such externality is a landfill. It has always been assumed that buyers would pay less for a house in close proximity to a landfill. In this article, a theoretical framework is presented for analyzing the effect of a landfill on surrounding property values. Whether a landfill's negative impact can be reduced or removed through the use of modern laws, restrictions, and management skills is also evaluated.

As immobile assets, real estate values have always been affected both positively and negatively by surrounding land uses. One such externality is a landfill. Public concern has been raised that close proximity to a landfill has a negative impact on property values. Modern laws, restrictions, and management techniques, however, make it possible to reduce or remove the negative impact of a landfill during its useful life.¹

In this article, the housing prices in a neighborhood adjacent to a

landfill in the Los Angeles area are compared to housing in comparable neighborhoods some distance from the landfill. The results indicate that there is no significant difference in either current prices or in appreciation rates (and thus prices over time) over a ten-year period.

This article presents a theoretical framework for analyzing the neighborhood effects of an externality such as a landfill. The data selection and statistical methodology employed are illustrated, and

1. All landfills have a finite life. Once they are no longer used for trash disposal any impact they may have would depend on the land use to which they are converted.

Donald R. Bleich, Ph.D., is associate professor of real estate at California State University at Northridge, where he specializes in the teaching of real estate valuation. Dr. Bleich is also president of Donald Bleich and Associates, a real estate appraisal and consulting firm.

M. Chapman Findlay III, Ph.D., is currently president of Fin Fin, Inc., and a senior associate with JurEcon, Inc. Dr. Findlay has published articles relating to real estate and financial valuation issues in several publications, including *The Appraisal Journal*.

G. Michael Phillips, Ph.D., is professor of finance, real estate, and insurance at California State University at Northridge, where his academic research focuses on modeling the impact of expectations on financial value. Dr. Phillips is also president of Phillips Research Applications, Inc., and is a senior associate with JurEcon, Inc.

the empirical results of this analysis are also discussed.

THEORETICAL FRAMEWORK AND HYPOTHESES

In this article, a home near the landfill will be designated as a "target home," and the term "comparable home" will be used when referring to a similar home in an otherwise similar neighborhood. If the landfill were not a factor, the target home and the comparable home would be expected to sell at similar prices. Appreciation over time for both the target and the comparable homes would depend on a variety of factors: such as inflation, interest rates, and the state of the local economy. The appreciation rates of the two should therefore be similar. These assumed equal values and appreciation rates are graphed in Figure 1.

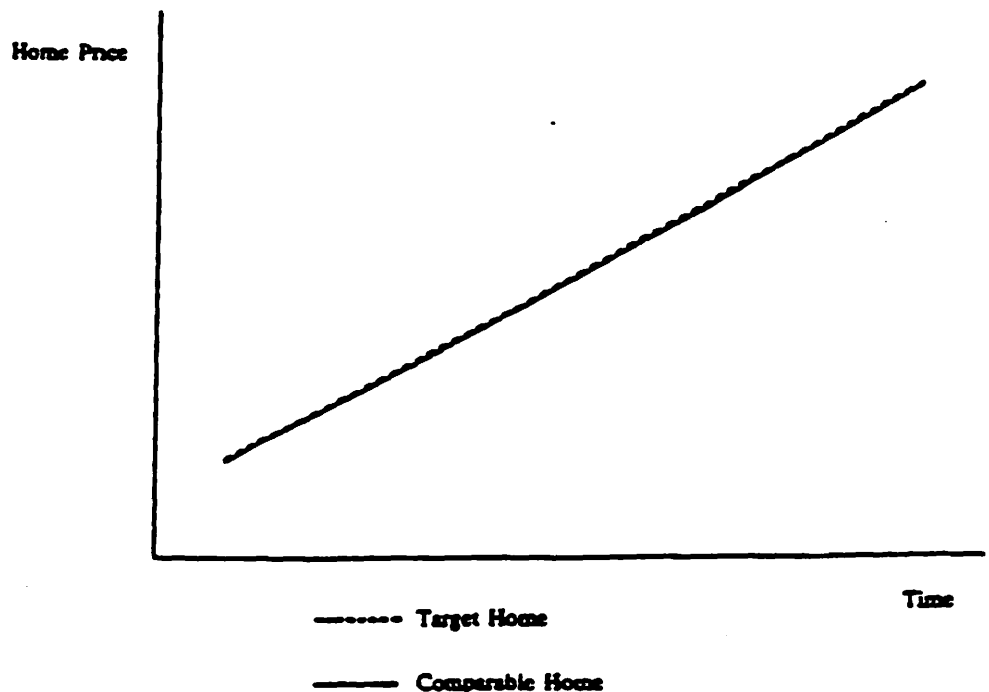
With the help of modern laws,

restrictions, and management techniques, it is certainly quite possible that a landfill would have no worse impact than that of the average neighbor. If this is the case, the introduction and operation of a landfill are "non-events," the expected price and appreciation behavior of target and comparable homes remain the same, and Figure 1 continues to apply.

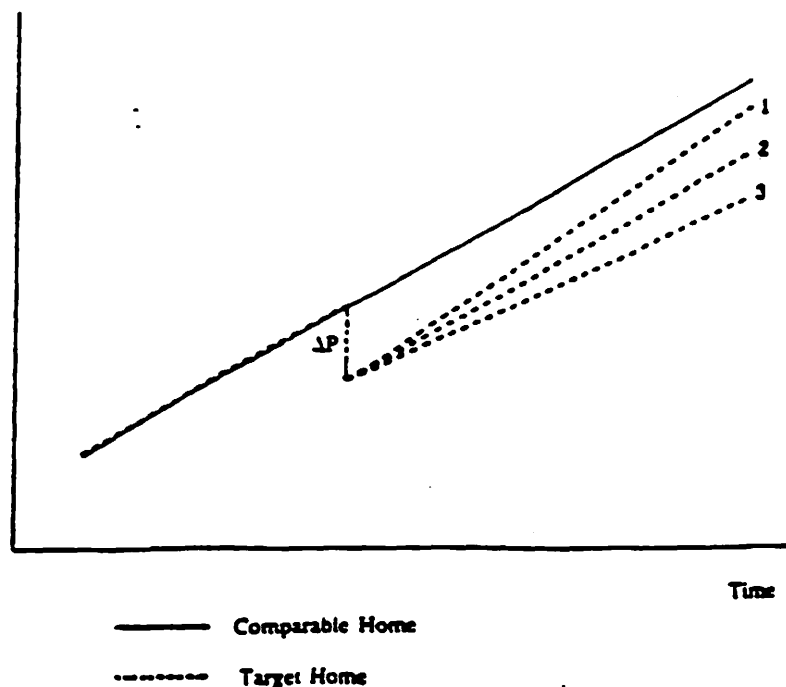
If, on the other hand, the landfill is viewed as a worse than average neighbor, a price decline in a target home relative to a comparable home would be expected (see ΔP in Figure 2). Following the decline, however, the relative rates of price appreciation could not be predicted without additional data. Three alternatives are illustrated in Figure 2.

Once the initial price decline has occurred, a greater rate of appreciation on the target home would generally be expected to allow for the convergence of the two values

FIGURE 1 Price Appreciation (No Landfill Impact)



Home Price



at the end of the (finite) life of the negative externality² (see Figure 2, line 1). In addition, if the impact were expected to be permanent and the initial decline were unbiased, there would be no reason to expect the subsequent appreciation rate to differ from that of other homes (see Figure 2, line 2). Finally, if the initial price decline were too small (either as a result of an underestimation of the impact or a future worsening of the negative externality), further declines would occur. Measured over time, these declines would take the form of a lower rate of appreciation for homes in the target area (see Figure 2, line 3).

Therefore, appreciation rates will not provide an unambiguous answer to this question. Price levels, however, will provide the answer. The hypothesis to be tested is that proximity to the landfill will have

no statistically significant impact on the expected prices of homes in the surrounding neighborhoods. In other words, the sale price predicted for a home, using housing and neighborhood characteristics but not proximity to a landfill, will be equal to the sale price predicted using the same characteristics, and including proximity to a landfill.

Mathematically this can be expressed as:

$$H_0: E(P_i | X_i) = E(P_i | X_i, L_i)$$

where

$E(P_i | \dots)$ = expected price of home i at time t conditional on . . .

X_i = vector of housing and neighborhood characteristics at time t

P_i = price of i th home at time t

L_i = proximity to landfill

2. At the end of its finite life, the landfill will cease to exist as a landfill. If the landfill has been well managed and regulated there should be no residual effect. Therefore, if it has had a negative impact this will be neutralized and the homes in the target area should sell for the same price as those in comparable areas.

This landfill was designed and is managed to minimize its effect on the surrounding neighborhoods.

In other words, whether the landfill has any statistically significant impact on the determination of market prices will be tested and, if so, whether that impact is positive or negative will be revealed. To test this hypothesis a regression-based approach will be used.

DATA SELECTION

The landfill used in this study is located in the northern central portion of the San Fernando Valley in Los Angeles. Its existence and current utilization predates the decade employed in this study. This landfill was designed and is managed to minimize its effect on the surrounding neighborhoods. The landfill is on the north slope of a hill. The south slope, which abuts the neighboring homes, is undeveloped land owned by the county. Therefore, the actual dumping area is not visible from the neighboring homes. The entrance to the landfill and all access roads are from the north of the site and also are not visible from the surrounding neighborhoods. In addition, litter is controlled by on-site personnel, large mesh fences surround actual dump sites, and frequent patrols are dispatched to gather any litter that might be carried off-site by strong winds.

The data used in this analysis consist of 1,628 sale transactions that occurred between January 1978 and early 1988 in three neighborhoods located within six miles of the landfill. The three areas consisted of the target area, located adjacent and just south and southeast of the landfill, and two comparable neighborhoods. The comparable neighborhoods were selected by carefully matching detailed ethnic, family size, and family income information from U.S. census data with that of the target area. In addition, the neighborhoods were also matched on the

basis of the age and size of the existing homes. Only those homes that were of similar size to those in the target neighborhood (between 1,700 square feet and 3,000 square feet) were used.

The first comparable neighborhood is located adjacent and just south of the target area at a distance of one to one and a half miles from the landfill. The second comparable neighborhood is located along the border of the Northridge and Chatsworth sections of the San Fernando Valley and ranges from three to six miles southwest of the landfill.

For each sale, twelve variables were used to predict sales price (see Table 1). Eight of the twelve variables refer specifically to characteristics of the house. These include the square footage of the house and the lot, the number of bedrooms and bathrooms, the ratio of the building size to the lot size, whether the house included a swimming pool, the year the house was built, and the year the observed sale transaction occurred. Usually, these variables are found to be statistically significant with the price increasing as the size variables increase. In addition, the price decreases as the ratio of building size to lot size increases (for there is relatively less yard for the house), increases if a pool is present, and decreases as the house grows older. The price also increases because more recent transactions reflect the general increase in housing prices.

The remaining four variables are included to measure neighborhood effects. For each of the two comparable neighborhoods there are two variables. The first variables (*COMP1* and *COMP2*) indicate whether there is, at any given time, a different base price for each of the comparable areas relative to the target homes. These dummy variables will have a value of one if

Dependent Variable

PRICE	Sale price
House-Specific Variables	
YEARSOLD	Year of sale
YEARBLT	Year built
BLDGAREA	Building area (square feet)
LOTSIZE	Lot size (square feet)
BLDGLOT	Building to lot size ratio ($BLDGAREA/LOTSIZE$)
BDRMS	Number of bedrooms
BATHS	Number of bathrooms
POOL	Is there a pool? (1 = yes, 0 = no)
Neighborhood Variables	
COMP1	Is property located in comparable neighborhood 1? (1 = yes, 0 = no)
COMP2	Is property located in comparable neighborhood 2? (1 = yes, 0 = no)
COMPIYEAR	Interaction term for properties in comparable neighborhood 1. ($COMP1 \times YEARSOLD$)
COMP2YEAR	Interaction term for properties in comparable neighborhood 2. ($COMP2 \times YEARSOLD$)

the home is in this comparable neighborhood and a value of zero if the home is not. Homes in the target area will have a value of zero for both *COMP1* and *COMP2*. The second variables (*COMPIYEAR* and *COMP2YEAR*), called interaction variables, measure whether homes in each comparable area appreciated in price at a different rate than did the homes in the target

area.³ These variables are computed by multiplying the value of the *COMP* variables by the year of sale.

RESULTS OF THE ANALYSIS

The results of the regression analysis are presented in Table 2. The table includes five house-specific

TABLE 2 Regression Results

Dependent Variable: *PRICE*

Number of Observations: 1,628

Variable	Coefficient	Standard Error	T-statistic	Significance
CONSTANT	-1,269,364.8	52,838.000	-24.023	0.000
House-Specific Variables Selected:				
YEARSOLD	13,821.99	604.595	22.862	0.000
YEARBLT	2,012.47	134.190	14.997	0.000
BLDGAREA	67.78	2.886	23.489	0.000
BLDGLOT	-59,938.60	9,400.121	-6.376	0.000
POOL	18,690.60	1,719.882	10.867	0.000
Neighborhood:				
COMP1	59,855.03	75,611.402	0.792	0.429
COMPIYEAR	-624.92	900.481	-0.694	0.488
COMP2	45,080.77	59,932.049	0.752	0.452
COMP2YEAR	-338.14	712.745	-0.474	0.635
R-squared				0.672008
Adjusted R-squared				0.670183
Standard error of regression			33,493.30	
Mean of dependent variable			196,548.0	
Standard deviation of dependent variable			58,320.55	
F-statistic			368.338	

3. It is possible that at any given time two homes may sell for the same price even though they are appreciating at different rates.

and four neighborhood variables. The five significant house-specific variables were year of sale, year built, square footage of the house, the site-coverage ratio, and the existence of a pool. Three house-specific variables were found to be insignificant. All three (number of bedrooms, number of bathrooms, and lot size) were highly correlated with the size of the house and therefore added no new information to the equation.

The estimated equation is able to explain about two-thirds (adjusted $R^2 = .670$) of the variation in housing prices in these neighborhoods. Each of the five significant house-specific variables previously mentioned is statistically significant (less than 0.1% chance) with the coefficients having the expected signs. However, each of the neighborhood variables is statistically insignificant.⁴

The statistical analysis indicates that the null hypothesis (H_0) cannot be rejected. In other words, prices of homes adjacent to the landfill and in the two comparable neighborhoods are all predicted by the same mathematical equation,

which is the equation that does not include the landfill variable. There is no statistically measurable impact, either positive or negative, caused by the landfill.

CONCLUSION

The impact of a well-designed and -managed landfill on surrounding property values has been examined in this article. The target area, located adjacent to the landfill, was compared to two other neighborhoods that were similar with regard to demographics, socioeconomic characteristics, and housing stock, but were outside the area affected by the landfill.

Using 1,628 transactions over a ten-year period, a regression analysis was performed with both house-specific and neighborhood variables. Five of the eight house-specific variables, but none of the neighborhood variables, were significant. These results suggest that a landfill, if well-designed and -managed, can be a good neighbor and have no statistically measurable negative impact on surrounding property values.

4. All the variables have a *t*-statistic less than one. This indicates that if these variables were included in the equation, the adjusted R^2 (coefficient of multiple determination) would actually be reduced.



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

SOLID WASTE FACILITY PERMIT
PERMIT NUMBER 554

Facility Name: King and Queen Sanitary Landfill

Facility Type: Sanitary Landfill

Latitude: 37°-29'-36"

Site Location: King and Queen County

Longitude: 76°-46'-33"

Location Description: The facility is located on Route 609, approximately 400 feet east of the intersection of Routes 609 and 614 in King and Queen County, Virginia. The facility encompasses 325 acres, of which 227 acres encompass the limits of waste disposal.

Background: The facility serves as a sanitary landfill for the area defined in an August 1990 agreement between King and Queen County and Browning-Ferris Industries (BFI), and any future modifications to this agreement. Solid waste will be delivered to the site by private automobiles and trucks, packer trucks, transfer trailers, and other commercial vehicles. The waste accepted will conform to those wastes listed in Permit Attachment I-2 (Operation). The landfill capacity is estimated to be 21.6 million cubic yards over a design life of 26 years.

Permit Highlights: This permit includes two permit modules. Module I includes general permit conditions and associated attachments related to design and construction, operation, and closure and post-closure care. Module II includes conditions and an attachment related to groundwater monitoring of the facility. All permit attachments are prepared based on information submitted in the permit application.

THIS IS TO CERTIFY THAT:

Browning-Ferris Industries of South Atlantic, Inc.
2490 Charles City Road
Richmond, Virginia 23231

is hereby granted a permit to construct, operate, and maintain the facility as described in the attached Permit Modules I and II, and the Permit Attachments cited in these Modules. These Permit Modules and Permit Attachments are as referenced hereinafter and are incorporated into and become a part of this permit.

The herein described facility is to be established, modified, constructed, installed, operated, used, maintained, and closed in accordance with the terms and conditions of this permit and the plans, specifications, and reports submitted and cited in the permit. The facility shall comply with all regulations of the Virginia Waste Management Board.

Failure to comply with the terms and conditions of this permit shall constitute grounds for the revocation or suspension of this permit and for the initiation of necessary enforcement actions.

The permit is issued in accordance with the provisions of § 10.1-1408.1.A, Chapter 14, Title 10.1, Code of Virginia (1950) as amended.

APPROVED:

for 
Richard N. Burton
Director

DATE: 6-2-93

PERMIT MODULES & PERMIT ATTACHMENTS¹

REFERENCE LIST ..

PERMIT MODULE I -- GENERAL PERMIT CONDITIONS

Permit Attachment I-1², *Design and Construction.*

Permit Attachment I-2², *Operation.*

Permit Attachment I-3², *Closure and Post-Closure Care.*

PERMIT MODULE II -- PHASE I GROUNDWATER MONITORING

Permit Attachment II-1, *Groundwater Monitoring Program.*

NOTES:

1. Should information contained in any permit attachment, which are generally based on documents submitted by the permittee, conflict with any requirement or condition contained in the permit modules or the VR 672-20-10, the regulatory/permit module requirement or condition shall prevail (unless an appropriate variance has been granted). The Department is not responsible for spelling, typographical, or syntax errors in attachments based on information submitted by the permittee.
2. As permit attachments are typically extracts from submitted information, they may contain references to calculations and other supporting information which are omitted from the permit document. All information submitted in support of the application may be found in Department files.

PERMIT MODULE I

GENERAL PERMIT CONDITIONS

I.A. EFFECT OF PERMIT

The permittee is allowed to dispose solid waste on-site in accordance with the conditions of this permit. Any disposal of solid waste not authorized by this permit is prohibited. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Sections 10.1-1402(18), 10.1-1402(19), or 10.1-1402(21) of the Virginia Waste Management Act (Chapter 14, Title 10.1, Code of Virginia (1950), as amended); or any other law or regulation for protection of public health or the environment. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. For purposes of this permit, terms used herein shall have the same meaning as those in the Virginia Waste Management Act, and Part I and other pertinent parts of the Virginia Solid Waste Management Regulations (VR 672-20-10), unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by the generally accepted scientific or industrial meaning of the term or a standard dictionary reference. "Director" means the Director of the Department of Environmental Quality, or his designated or authorized representative.

I.B. DUTIES AND REQUIREMENTS

The permittee shall comply with all conditions of this permit and VR 672-20-10. The effect of this permit is detailed in §7.7, VR 672-20-10, and it shall be the duty of the permittee to insure the applicable requirements are met. Additionally, the permittee is subject to the recording and reporting requirements detailed in §7.9, VR 672-20-10. The facility will be designed and constructed per the requirements of Permit Attachment I-1, operated and maintained per Permit Attachment I-2, closed and maintained in post-closure per Permit Attachment I-3, and subject to a groundwater monitoring program per Permit Module II and Permit Attachment II-1. In addition to these requirements, the following additional conditions are invoked per §7.1, VR 672-20-10, and shall be complied with:

- I.B.1. Noncompliance may be authorized by a schedule of compliance [§§ 7.7.C and 7.7.G, VR 672-20-10]. Any other permit noncompliance constitutes a violation of Virginia Waste Management Act and is grounds for enforcement action, or for permit revocation, revocation and reissuance, or modification [§§ 7.12 and 7.14, VR 672-20-10].
- I.B.2. The permittee shall comply with the provisions of § 5.4, VR 672-20-10. When the results of gas monitoring indicate concentrations of methane in excess of the compliance levels required by § 5.4.A.1, VR 672-20-10, the permittee shall:

- I.B.2.a. Notify the Department in writing within five working days of learning that compliance levels have been exceeded, and indicate what has been done or is planned to be done to resolve the problem.
- I.B.2.b. Within 60 days of detection, develop a remediation plan for the methane gas releases and submit it to the Director for approval. The plan shall describe the nature and extent of the problem and the proposed remedy.
- I.B.3. The permittee shall comply, at a minimum, with the closure and post-closure care requirements of § 5.1.E and § 5.1.F, VR 672-20-10, respectively.
- I.B.4. In an enforcement action, it shall not be a defense for the permittee that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- I.B.5. In the event of noncompliance with this permit, the permittee shall take all reasonable steps to minimize releases of solid wastes or waste constituents to the environment and shall carry out measures to prevent significant adverse impacts on human health or the environment.
- I.B.6. The permittee shall at all times properly operate and maintain all units (and related appurtenances) which are installed or used by the permittee to achieve compliance with the operations manual and the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing, and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary equipment only when necessary to achieve compliance with the conditions of this permit.
- I.B.7. The permittee shall furnish to the Director, within a reasonable time, any relevant information which the Director may request to determine compliance with this permit, regulations or the Act. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit by the date specified in the request.
- I.B.8. The permittee shall allow the Director, or an authorized representative, upon the presentation of appropriate credentials, to:
 - I.B.8.a. Enter at reasonable times upon the permitted facility where a regulated unit or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - I.B.8.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - I.B.8.c. Inspect at reasonable times any unit, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.B.8.d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by Virginia Waste Management Act, any substances or parameters at any location within his control.

I.B.9. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample to be analyzed must be the appropriate method from the latest edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846.

I.B.10. This permit is not transferable to any person, unless approved by the Director. The Director may require modification or revocation and reissuance of the permit pursuant to § 7.7.F, VR 672-20-10. Before transferring ownership or operation of the facility during its operational life, the permittee shall notify the new owner or operator in writing of the requirements of Parts V and VII, of the Virginia Solid Waste Management Regulations, the Financial Assurance Regulations (VR 672-20-1) and this permit.

I.B.11. The permittee shall comply with the requirements of this permit and all applicable federal, state and local regulations.

I.C. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The permittee shall maintain the following documents at the facility, or readily accessible to Department representatives, until post-closure is complete and certified by a professional engineer, and shall maintain amendments, revisions, and modification to these documents:

I.C.1. Design Plans.

I.C.2. Operations Manual.

I.C.3. Closure and Post-Closure Plan.

I.C.4. Groundwater Monitoring Plan.

I.C.5. All other documents/records required:

I.C.5.a. Monitoring records from leachate, gas, and groundwater monitoring.

I.C.5.b. Inspection records as required from construction/installation, operational, closure, post-closure inspection requirements.

I.C.5.c. Personnel training records.

- I.C.5.d. Daily operational records (i.e., solid waste received and processed, fill area records, records of special wastes accepted, a logbook which is a daily narrative account of the activities at the landfill).

I.D. DOCUMENTS TO BE SUBMITTED

In addition to the documents/records/reports to be submitted per the requirements of this permit or VR 672-20-10, the permittee shall also submit the following documents to the Director according to indicated schedules:

- I.D.1. Upon permit issuance and before any site development work begins, the permittee shall submit:
- I.D.1.a. A copy of the fully executed deed of lease which demonstrates that the permittee has legal control over the site for the period of the permit life, in accordance with § 7.3.D, VR 672-20-10.
 - I.D.1.b. Documentation of having secured liability coverage for sudden and accidental occurrences in the amount of at least \$100,000.
 - I.D.1.c. Documentation of having secured liability coverage for non-sudden accidental occurrences for an annual aggregate sum of at least \$250,000 exclusive of legal defence costs.
- I.D.2. At least 60 days prior to receiving waste, the permittee shall submit financial assurance documentation to provide financial responsibility for closure and post closure care to cover at least the amounts specified in Permit Attachment I-3 (Closure/Post Closure Care) per § 7.2.D, VR 672-20-10 and Part III, VR 672-20-1.
- I.D.3. Prior to receiving waste, and prior to expansion into each new phase, the permittee shall notify the department, in writing, that construction has been completed; and submit to the department a letter from a professional engineer licensed to practice in the Commonwealth certifying that the facilities have been completed in accordance with the approved plans and specifications and is ready to begin operation and submit all required certification documents per § 7.7.A, VR 672-20-10, and:
- I.D.3.a. Report and supporting documents resulting from quality control/quality assurance activities performed during construction and installation of the liner/drainage systems, including the installation contractor's written acceptance of the surfaces to be lined, synthetic liner manufacturer and installer warranties, laboratory test results of the permeability of the drainage media overlying the liner, and representative copies (sufficient to demonstrate responsible control) of the accumulated inspection schedules resulting from the professional engineer's oversight of the construction.

I.D.3.b. Authorizations from the State Water Control Board or the permitted facility to discharge leachate and waste-water to an approved sewerage system and treatment works.

I.D.4. The as-built plans and geologic boring logs of all new groundwater monitoring wells shall be submitted as these wells are installed. Information to be included on the as-built plans shall include, but is not limited to, the total depth of the well, the surveyed elevations of the top of casing and ground surface (or apron), and the length and location of the screened interval and annular space seal. All dimensions are to be shown on well construction schematics.

I.E. COMPLIANCE SCHEDULE

The permittee shall report to the Director in writing compliance or non-compliance with, or any progress reports on, interim and final requirements contained in the following compliance schedule no later than 14 days following the schedule date:

I.E.1. Within 60 days of permit issuance, the permittee shall submit to the Director for review and approval the necessary documentation and demonstrations required by § 5.1.A, VR 672-20-10 which demonstrate compliance with those siting requirements.

I.E.2. If the facility is placed in operation (i.e., receives waste) prior to October 9, 1993, the permittee shall conduct groundwater monitoring at the facility in accordance with the interim (Phase I) monitoring program described in § 5.1.D.5.b, VR 672-20-10, the compliance schedule outlined in § 5.1.D.5.a, VR 672-20-10, and Permit Module II.

If the facility is to be placed in operation after October 9, 1993 (or if the permittee desires to comply with the final detection monitoring program in advance of the compliance schedule deadlines of § 5.1.D.5.a, VR 672-20-10) the permittee shall submit to the Director, no later than August 9, 1993, a revised groundwater monitoring plan which complies with the sampling and analysis requirements of § 5.1.D.4, VR 672-20-10, and the final detection monitoring requirements of § 5.1.D.5.c, VR 672-20-10, for review and approval. The permittee must receive an approval of the revised groundwater monitoring plan, if required, prior to placing the facility in operation.

I.E.3. Prior to construction, the permittee shall submit to the Department of Environmental Quality, Waste Division, documentation which demonstrates compliance with applicable stormwater regulations concerning construction activities.

I.E.4. At least 60 days prior to receiving waste, the permittee shall submit to the Department of Environmental Quality, Water Division, a surface water VPDES permit application. The permittee shall also submit to the Waste Division, for review and approval, a surface water monitoring sampling and analysis plan which

specifies monitoring locations, parameters, and frequencies. The plan shall be implemented upon approval.

- I.E.5. Prior to receiving waste, the permittee shall upgrade that section of Route 609 that leads to the entrance of the landfill (or re-locate and upgrade Route 609) as necessary to comply with § 5.1.B.2 of VR 672-20-10. The upgrade project may involve staged construction or a measure with a short term design life until the more permanent upgrade measures are completed, provided the short-term measure complies with § 5.1.B.2 of VR 672-20-10 for the duration of its design life.

I.F. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DIRECTOR

All reports, notifications, or other submissions which are required by this permit to be sent or given to the Director should be sent to:

Director
Virginia Department of Environmental Quality
101 N. 14th Street, 11th Floor Monroe Building
Richmond, VA 23219

We're looking at the northeast boundary of the site. [inaudible] behind standing water is the site itself.

We're still standing on the northeast boundary, facing north as we speak. Now a very steep incline to the water. There's a person right there ready to turn on a picture now, looking out over the water. To her right is Beaverdam, and as I stated before, this is your proposal landfill site directly behind us.

This is one of the existing sand pits on proposed site filled with rain water. Depth is probably 2 1/2' to 3' water.

This is a [inaudible] existing sand pit on the property.

This water is probably better than 3' deep.

This is another area of standing water that should be considered wetlands for the site. Water stands just about year-round.

This site is directly on . . . on a dump site itself. This pool of water also supports small fish. I've actually seen several minnows swimming in it.

This is another shot of the north boundary; we're facing west with reference to the land incline. This is the dump site itself.

We're standing on the north boundary, western end of the property. We're looking at the wetland area. This section of the wetlands that we're looking at now extends several thousand feet up into the dump site, feeding this . . . this swamp that runs directly to the drag.





Box 23A
Little Plymouth, Virginia 23091

February 9, 1991

2-15-91
RT.

Department of Waste Management
James Monroe Building
101 North 14th Street
Richmond, Virginia 23219

Browning-Ferris Industries of South Atlantic, Inc. is preparing to submit an application to your department for a permit to operate a sanitary landfill on property that is approximately 1/4 mile from my home.

Our source of drinking water is from a shallow well. We are extremely concerned about the continued purity of our water supply. We are also concerned about the overall effect that this landfill might bring to the health and safety of those of us who live in the immediate area of this site.

We have a son who is quadriplegic and enjoys being placed outdoors for sun and fresh air. If this landfill is placed near our home, we are sure that it will bring odor, rodents, trash, and other animals that will use the refuse for food. This scourge will change an environmentally pure community into one that is infested. This will also cause an infestation in our homes which will prevent a continued safe and pleasurable environment for our grandchildren who come to visit us.

Please deny Browning-Ferris Industries this permit to operate a landfill in our community. We are not rich and powerful but we have a right to a safe, healthy and peaceful place to live.

Sincerely
Dale Jordan
Morvitz Jordan

Mr. & Mrs. Morvitz S. Jordan

COURT OF APPEALS OF VIRGINIA

Present: Judges Elder, Bray and Fitzpatrick
Argued at Richmond, Virginia

RESIDENTS INVOLVED IN SAVING THE
ENVIRONMENT, INC., ET AL.

v. Record No. 1407-95-2

OPINION BY
JUDGE JOHANNA L. FITZPATRICK
JUNE 18, 1996

COMMONWEALTH OF VIRGINIA/
DEPARTMENT OF ENVIRONMENTAL
QUALITY AND PETER W. SCHMIDT,
DIRECTOR

FROM THE CIRCUIT COURT OF THE CITY OF RICHMOND
Melvin R. Hughes, Jr., Judge

Clarence M. Dunnaville, Jr. (Henry L. Marsh,
III; Harold M. Marsh; David S. Bailey; Hill,
Tucker & Marsh, on briefs), for appellants.

Deborah Love Feild, Assistant Attorney
General (James S. Gilmore, III, Attorney
General, on brief), for appellees.

Timothy G. Hayes (Clayton L. Walton;
Williams, Mullins, Christian & Dobbins, on
brief), for intervener Browning-Ferris
Industries of South Atlantic, Inc.

Residents Involved in Saving the Environment, Inc.

(Residents)¹ appeal the circuit court's decision affirming the
Department of Environmental Quality's (the Department) issuance
of a sanitary landfill permit to Browning-Ferris Industries of
South Atlantic, Inc. (BFI). Residents argue that the Director of
the Department (Director) violated Code § 10.1-1408.1(D) by

¹Residents Involved in Saving the Environment, Inc. is an
organization of persons residing and/or owning property near the
proposed landfill site in King and Queen County, Virginia. Other
appellants include several named individuals, a church, and a
farming corporation.

issuing the permit without making the required, specific determination that the proposed facility posed "no substantial present or potential danger to human health or the environment." The Department asserts that: (1) by issuing the permit, the Director implicitly made the required determination under Code § 10.1-1408.1(D), and (2) because Residents failed to name BFI as a party in the notice of appeal or to serve it with the petition for appeal, the appeal should have been dismissed. BFI, as an intervener, argues that the court erred in denying its motion to change venue. We affirm the circuit court's decision as to the Department's motion to dismiss and BFI's motion to change venue. However, we reverse the circuit court's decision to affirm the permit's issuance because the record fails to show that the Director made the required determination under Code § 10.1-1408.1(D).

BACKGROUND

On September 18, 1990, BFI filed a notice of intent with the Department to initiate the application process for a permit to build a landfill in King and Queen County.² BFI also filed a local certification that the proposed location and operation of the landfill complied with local ordinances, as required by Code § 10.1-1408.1(B)(1).³ On February 4, 1991, BFI submitted Part A

²The record in this case consists of a written statement of facts pursuant to Rule 5A:8(c).

³Code § 10.1-1408.1(B)(1) requires that a permit application contain "[c]ertification from the governing body of the county, city or town in which the facility is to be located that the

of its permit application, which contained information concerning whether the proposed site was suitable for the proposed use and addressing the siting criteria required by the Virginia Solid Waste Management Regulations (SWMR). The Department's staff reviewed Part A and approved it on July 29, 1991. On March 20, 1992, BFI submitted Part B of its application, addressing facility design, construction, and operation. The Department's technical staff reviewed Part B, made numerous revisions to the original proposal, and determined that the application complied with the SWMR.

The Department subsequently prepared a draft permit and held a public hearing on March 24, 1993, with the public comment period extended to April 5, 1993. The Department's staff received comments on the draft permit, made changes based on these comments before recommending that the Director approve the permit, and responded in writing to many of the issues raised during the public comment period. On June 2, 1993, the Director issued the permit to BFI. Prior to issuing the permit, the Director made no explicit finding or determination that the proposed facility posed "no substantial present or potential danger to human health or the environment," as required by Code § 10.1-1408.1(D).

On July 30, 1993, Residents appealed the permit's issuance to the Circuit Court for the City of Richmond, arguing that the

location and operation of the facility are consistent with all applicable ordinances."

Director "failed to investigate whether the construction and/or operation of the landfill will create an adverse impact or a present or potential hazard to human health." Residents also argued that the Director was required to make the specific determination that the landfill posed no "substantial present or potential danger to human health or the environment." In their appeal, Residents named only the Department and the Director as parties. BFI later intervened in the appeal and moved to transfer the case to King and Queen County, the preferred venue under Code § 8.01-261(1). The circuit court denied the motion. After hearing oral argument on October 20, 1994, the circuit court issued a letter opinion on May 4, 1995, finding that: (1) Code § 10.1-1408.1(D) did not impose an independent duty of investigation on the Director, and (2) the Director's action in issuing the permit complied "with the applicable regulations or law governing the concerns the appellant[s] raise[.]"

NECESSARY PARTIES IN ADMINISTRATIVE APPEALS

The Department argues that the circuit court should have dismissed Residents' appeal because they failed to name BFI as a party in the notice of appeal and failed to serve BFI with the petition for appeal.

In its letter opinion of November 5, 1993, the circuit court refused to dismiss Residents' appeal and determined that "BFI [did] not fit the definition of 'party' as used in Rules 2A:2 and 2A:4."

Appeals pursuant to the Virginia Administrative Process Act (VAPA), Code §§ 9-6.14:1 to 9-6.14:25, are governed by Part 2A of the Rules of the Supreme Court of Virginia. Rule 2A:1(c). Rule 2A:1(b) provides, in pertinent part, as follows:

The term "party" means any person affected by and claiming the unlawfulness of a regulation or a party aggrieved who asserts a case decision is unlawful and any other affected person or aggrieved person who appeared in person or by counsel at a hearing, as defined in § 9-6.14:4 E, with respect to the regulation or case decision as well as the agency itself.

(Emphasis added). A "rule" or "regulation" under the VAPA is "any statement of general application, having the force of law, affecting the rights or conduct of any person, promulgated by an agency in accordance with the authority conferred on it by applicable basic laws." Code § 9-6.14:4(F). In contrast, the VAPA defines the term "case" or "case decision" as follows:

any agency proceeding or determination that, under the laws or regulations at the time, a named party as a matter of past or present fact, or of threatened or contemplated private action, either is, is not, or may or may not be (i) in violation of such law or regulation or (ii) in compliance with any existing requirement for obtaining or retaining a license or other right or benefit.

Code § 9-6.14:4(D). The Reviser's Notes to Code § 9-6.14:4 indicate that the primary distinction between regulations and case decisions is that regulations are "legislative" or "quasi-legislative" in nature and that case decisions serve a "judicial" or "quasi-judicial" function. Code § 9-6.14:4, Reviser's Notes D. See also Kenley v. Newport News General & Non-Sectarian Hosp.

Ass'n. Inc., 227 Va. 39, 44, 314 S.E.2d 52, 55 (1984) ("[T]he 'heart' of a case decision 'is a fact determination respecting compliance with law.'" (quoting Code § 9-6.14:4, Reviser's Notes D)). Under the VAPA, the term "hearing" refers to the following:

agency processes other than those informational or factual inquiries of an informal nature provided in 9-6.14:7.1 and 9-6.14:11 of this chapter and includes only (i) opportunity for private parties to submit factual proofs in formal proceedings as provided in 9-6.14:8 of this chapter in connection with the making of regulations or (ii) a similar right of private parties or requirement of public agencies as provided in 9-6.14:12 hereof in connection with case decisions.

Code § 9-6.14:4(E).

Any party appealing an agency case decision must file its notice for appeal within thirty days of the final order in the case decision. Rule 2A:2 provides, in pertinent part, as follows:

The notice of appeal shall identify the . . . case decision appealed from, shall state the names and addresses of the appellant and of all other parties and their counsel, if any, shall specify the circuit court to which the appeal is taken, and shall conclude with a certificate that a copy of the notice of appeal has been mailed to each of the parties. . . . The omission of a party whose name and address cannot, after due diligence, be ascertained shall not be cause for dismissal of the appeal.

Within thirty days after filing the notice of appeal, the appellant must file his petition for appeal with the clerk of the circuit court. Rule 2A:4(a). "Such filing shall include all steps provided in Rules 2:2 and 2:3 to cause a copy of the

petition to be served (as in the case of a bill of complaint in equity) on the agency secretary and on every other party." Id.

We agree with the circuit court and hold that BFI is not a "party" as defined in Rule 2A:1(b) and as used in Part 2A of the Rules of the Supreme Court of Virginia. BFI is not "a person affected by and claiming the unlawfulness of a regulation" because: (1) an agency case decision, not an agency regulation, is at issue in this case; and (2) BFI does not assert that the Director's issuance of the permit was unlawful. As the company that benefitted from the agency's granting of the landfill permit, BFI is also not "a party aggrieved who asserts a case decision is unlawful." Additionally, BFI is not "any other affected person or aggrieved person who appeared in person or by counsel at a hearing" because it is undisputed that no "hearing" as defined in Code § 9-6.14:4(E) was held concerning BFI's permit request.

Additionally, the Department argues that BFI was a "necessary party," relying on Asch v. Friends of the Community of the Mt. Vernon Yacht Club, 251 Va. 89, 465 S.E.2d 817 (1996). In Asch, the Supreme Court of Virginia defined "necessary party":

"Where an individual is in the actual enjoyment of the subject matter, or has an interest in it, either in possession or expectancy, which is likely either to be defeated or diminished by the plaintiff's claim, in such case he has an immediate interest in resisting the demand, and all persons who have such immediate interests are necessary parties to the suit."

Id. at 90-91, 465 S.E.2d at 818 (quoting Raney v. Four Thirty Seven Land Co., 233 Va. 513, 519-20, 357 S.E.2d 733, 736 (1987)). However, the instant case is distinguishable from Asch and other cases applying the "necessary party" analysis because the Rules governing an administrative appeal under the VAPA are specific to the nature of the Act. In appeals under the VAPA, the only parties required to be a part of the case are those listed in Rule 2A:1(b). Thus, because BFI was not a "party" as defined in Rule 2A:1(b) and BFI was allowed to intervene in the case to protect its interests, the circuit court did not err in refusing to dismiss the appeal.

TIMELY OBJECTION TO VENUE

Additionally, BFI asserts that the circuit court erred in finding that an intervenor has no right to object to venue.

In a letter opinion dated January 31, 1994, the trial court denied BFI's motion to change venue and stated as follows:

There has been a question in the Court's mind whether an intervenor can object to venue. The Court decides that in this case the intervenor cannot. . . . Rule 2:15 . . . state[s] that as to the petitioner the rules applicable to bills and subpoenas apply and as to the parties the rules applicable to defendants apply. This puts BFI in the position of plaintiff and the parties as defendants who would file responsive pleadings.

Since the original defendant, DEQ, failed to object to venue that motion is lost to the case because there is no other party defendant, including BFI as intervenor, present in the case to object to venue under the terms of [Code] § 8.01-264.

Code § 8.01-264(A) provides, in pertinent part, as follows:

Venue laid in forums other than those designated by this chapter shall be subject to objection, but no action shall be dismissed solely on the basis of venue if there be a forum in the Commonwealth where venue is proper. In actions where venue is subject to objection, the action may nevertheless be tried where it is commenced, and the venue irregularity shall be deemed to have been waived unless the defendant objects to venue by motion filed, as to actions in circuit courts, within twenty-one days after service of process commencing the action, or within the period of any extension of time for filing responsive pleadings fixed by order of the court.

(Emphasis added). In appeals under the VAPA, "[u]nless the parties otherwise agree, . . . the venue for agency or court proceedings shall be as specified in subdivision 1 of § 8.01-261."⁴ Code § 9-6.14:5.

Rule 2:15 governs intervention of new parties and provides as follows:

⁴Code § 8.01-261(1) designates the preferred venue for appeals of state administrative decisions:

1. In actions for review of, appeal from, or enforcement of state administrative regulations, decisions, or other orders:
 - a. If the moving or aggrieved party is other than the Commonwealth or an agency thereof, then [venue lies in] the county or city wherein such party:
 - (1) Resides;
 - (2) Regularly or systematically conducts affairs or business activity; or
 - (3) Wherein such party's property affected by the administrative action is located.

Residents concede that the preferred venue for the appeal was in the Circuit Court of King and Queen County.

A new party may by petition filed by leave of court assert any claim or defense germane to the subject matter of the suit.

All provisions of these Rules applicable to bills and subpoenas, except those provisions requiring payment of writ tax and clerk's fees, shall apply to such petitions; and all provisions of these Rules applicable to defendants shall apply to the parties on whom such petitions are served.

"Generally speaking, an intervenor is held to take the case as he finds it" Newport News Shipbuilding & Dry Dock Co. v. Peninsula Shipbuilders' Ass'n, 646 F.2d 117, 122 (4th Cir. 1981).

We hold that the circuit court did not err in denying BFI's motion to change venue because no defendant filed a timely objection to venue. The original defendant, the Department, failed to object to venue within twenty-one days of Residents commencing the appeal as required by Code § 8.01-264 and thus waived any venue objection. BFI intervened in the case after the twenty-one-day period for objecting to venue had passed. Thus, no timely objection to venue was filed. To hold otherwise would allow an intervenor to object to venue at a late stage of the proceedings, thus interrupting the flow of the trial.⁵ Because no timely objection to venue was filed, the circuit court properly denied BFI's motion to change venue.

DETERMINATION REQUIREMENT UNDER CODE § 10.1-1408.1(D)

Residents argue that the Director violated Code

⁵We do not reach the question of whether an intervenor would be allowed to object to venue within the twenty-one-day period. Resolution of that issue is unnecessary to this appeal because no timely objection was made.

§ 10.1-1408.1(D) when he issued the landfill permit to BFI without determining that the facility posed "no substantial present or potential danger to human health or the environment."⁶ The Director and the Department assert that the issuance of the permit represented the Director's implicit determination that the landfill posed "no substantial . . . danger to human health or the environment."

In 1992, the General Assembly consolidated several state agencies, including the Department of Waste Management, and created the Department of Environmental Quality. Code

⁶Residents' additional argument that the Director was required to consider the character of the land affected is without merit. Code § 10.1-1408.1(I) provides as follows:

No person shall allow waste to be disposed of on his property without a permit. Any person who removes trees, brush, or other vegetation from land used for agricultural or forestal purposes shall not be required to obtain a permit if such material is deposited or placed on the same or other property of the same landowner from which such materials were cleared. The Board shall by regulation provide for other reasonable exemptions from permitting requirements for the disposal of trees, brush and other vegetation when such materials are removed for agricultural or forestal purposes.

When promulgating any regulation pursuant to this section, the Board shall consider the character of the land affected, the density of population, the volume of waste to be disposed, as well as other relevant factors.

(Emphasis added). Thus, the statute plainly states that the Director is required to consider the character of the land only when promulgating regulations providing for other exemptions concerning the disposal of vegetation.

§ 10.1-1183. The statutorily mandated policy of the Department is "to protect the environment of Virginia in order to promote the health and well-being of the Commonwealth's citizens." Id. The purposes of the Department include "coordinat[ing] permit review and issuance procedures to protect all aspects of Virginia's environment," Code § 10.1-1183(2), and "promot[ing] environmental quality through public hearings and expeditious and comprehensive permitting, inspection, monitoring, and enforcement programs." Code § 10.1-1183(10).

Under the Virginia Waste Management Act (the Act), the Department is responsible for insuring that "[n]o person . . . operate[s] any sanitary landfill or other facility for the disposal, treatment or storage of nonhazardous solid waste without a permit from the Director." Code § 10.1-1408.1(A).

No permit for a new solid waste management facility shall be issued until the Director [of the Department] has determined, after investigation and evaluation of comments by the local government, that the proposed facility poses no substantial present or potential danger to human health or the environment. The Department shall hold a public hearing within the said county, city or town prior to the issuance of any such permit for the management of nonhazardous solid waste.

Code § 10.1-1408.1(D) (emphasis added). See also Concerned Taxpayers of Brunswick County v. County of Brunswick, 249 Va. 320, 328, 455 S.E.2d 712, 716 (1995) (holding that determining compliance with the Act's provisions is the function of the Director, "who issues the permit required for the operation of a sanitary landfill or other like facility, after determining that

the proposed facility poses no substantial danger to human health or the environment"). Any permit issued by the Director "shall contain such conditions or requirements as are necessary to comply with the requirements of this Code and the regulations of the [Virginia Waste Management] Board and to prevent a substantial present or potential hazard to human health and the environment." Code § 10.1-1408.1(E).

The Act provides that "[a]ny person aggrieved by a final decision of the Board or Director under this chapter shall be entitled to judicial review thereof in accordance with the Administrative Procedure Act." Code § 10.1-1457. In an appeal under the VAPA, "[t]he burden is upon the party complaining of the agency action to demonstrate an error of law subject to review." Johnston-Willis, Ltd. v. Kenley, 6 Va. App. 231, 241, 369 S.E.2d 1, 6 (1988) (citing Code § 9-6.14:17). Code § 9-6.14:17 lists the issues of law subject to review:

- (i) accordance with constitutional right, power, privilege, or immunity, (ii) compliance with statutory authority, jurisdiction limitations, or right as provided in the basic laws as to subject matter, the stated objectives for which regulations may be made, and the factual showing respecting violations or entitlement in connection with case decisions, (iii) observance of required procedure where any failure therein is not mere harmless error, and (iv) the substantiality of the evidential support for findings of fact.

"[W]here the legal issues require a determination by the reviewing court whether an agency has, for example, accorded constitutional rights, failed to comply with statutory authority,

or failed to observe required procedures, less deference is required and the reviewing courts should not abdicate their judicial function and merely rubber-stamp an agency determination." Johnston-Willis, 6 Va. App. at 243, 369 S.E.2d at 7-8 (emphasis added). "Agency action, even when 'supported by substantial evidence,' must be set aside if judicial review reveals a failure '. . . to comply with statutory authority.'" Environmental Defense Fund, Inc. v. Virginia State Water Control Bd., 15 Va. App. 271, 278, 422 S.E.2d 608, 612 (1992).

"[A] legal issue involving statutory interpretation . . . is within the specialized competence of the courts rather than the administrative agency." Johnston-Willis, 6 Va. App. at 247, 369 S.E.2d at 10. "A primary rule of statutory construction is that courts must look first to the language of the statute. If a statute is clear and unambiguous, a court will give the statute its plain meaning." Loudoun County Dep't of Social Servs. v. Etzold, 245 Va. 80, 85, 425 S.E.2d 800, 802 (1993).

We hold that the Director failed to comply with Code § 10.1-1408.1(D) in issuing the permit to BFI. Code § 10.1-1408.1(D) clearly specifies that no permit for solid waste management shall be issued until the Director has made a determination or finding⁷ that the proposed facility poses "no substantial present or potential danger to human health or the environment." The record shows that the Director and the

⁷"Determination" is defined as "[t]he decision of a court or administrative agency" and is synonymous with "finding." Black's Law Dictionary 450 (6th ed. 1990).

Department's staff reviewed the permit application, drafted a permit, held a public hearing concerning the draft permit, received public comments on the draft permit, made changes to the draft permit, and responded in writing to the public's concerns. However, before issuing the permit neither the Director nor the Department's staff made the finding that the facility posed "no substantial . . . danger to human health or the environment," not even in the permit itself. The Director and the Department concede that no such determination in writing appears in the record, but assert that the Director implicitly made that determination by issuing the permit.

Because the Department's main policy is "to protect the environment of Virginia in order to promote the health and well-being of the Commonwealth's citizens," Code § 10.1-1183, we hold that the issuance of the permit alone was insufficient to satisfy the statutory mandate of Code § 10.1-1408.1(D), and that an explicit determination of "no substantial present or potential danger to human health or the environment" was required. Thus, the case is remanded to the trial court with instructions to remand the matter to the Director to consider the record already presented and make the required determination.

Accordingly, the circuit court's rulings on the Department's dismissal motion and BFI's change of venue motion are affirmed. We reverse the court's affirmance of the permit issuance, and

remand to the trial court for remand to the Director to make the required determination concerning BFI's permit application.

Affirmed in part,
reversed in part,
and remanded.

Environment, Inc. et al. v. Commonwealth of Virginia, et. al., (Court of Appeals Record No. 1407-95-2)(decided June 18, 1996). The decision of the Court of Appeals reversed the decision of the Circuit Court of the City of Richmond, which had affirmed the decision of the Director of the Department of Environmental Quality to issue a solid waste management facility permit to Browning-Ferris Industries of South Atlantic, Inc. ("BFI").

I. ASSIGNMENTS OF ERROR

A. First Assignment of Error

The Court of Appeals erred in deciding an issue that was not decided by the circuit court and was not before the circuit court, and in not dismissing the appeal before it on the ground the issue was not raised or decided by the circuit court.

B. Second Assignment of Error

The Court of Appeals erred in reading into § 10.1-1408.1.D of the Code of Virginia (1950), as amended ("Code"), a requirement that the Director of the Department of Environmental Quality make an explicit, written finding that a proposed solid waste management facility does not pose a substantial present or potential danger to human health or the environment.

C. Third Assignment of Error

The Court of Appeals erred in refusing to require that a third party challenging a permit make the permit holder a party to the appeal of the permit decision.

II. QUESTIONS PRESENTED

A. First Question Presented

Where an issue was not presented to the circuit court in the petition for appeal filed there, and was not decided by the circuit court, did not the Court of Appeals err in refusing to dismiss the issue presented for the first time on appeal and in deciding the case on the newly-raised issue?

B. Second Question Presented

Where § 10.1-1408.1.D of the Code of Virginia states: "No permit for a new solid waste management facility permit shall be issued until the Director has determined, after investigation and evaluation of comments by the local government, that the proposed facility poses no substantial present or potential danger to human health or the environment", does the statute require an explicit written finding, or may a reviewing court rely upon the agency file and the permit itself to determine whether the Director has complied with the statute?

Appeals reversed the Trial Court on the ground that § 10.1-1408.1.D.¹ of the Code of Virginia required the Agency Director to make a written finding prior to issuance of the permit.

I. ASSIGNMENTS OF ERROR

- A. THE COURT OF APPEALS ERRED IN HOLDING THAT § 10.1-1408.1.D. OF THE CODE OF VIRGINIA REQUIRES THE DIRECTOR OF THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY TO MAKE A WRITTEN FINDING PRIOR TO ISSUANCE OF A PERMIT FOR A SOLID WASTE MANAGEMENT FACILITY.

II. QUESTION PRESENTED

- A. DOES § 10.1-1408.1.D. OF THE CODE OF VIRGINIA REQUIRE THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY TO MAKE A SPECIFIC WRITTEN FINDING, PRIOR TO ISSUANCE OF A PERMIT FOR A SOLID WASTE MANAGEMENT FACILITY, THAT THE FACILITY WILL POSE NO SUBSTANTIAL PRESENT OR POTENTIAL THREAT TO HUMAN HEALTH OR THE ENVIRONMENT, OR MAY A REVIEWING COURT CONCLUDE, ON THE BASIS OF THE AGENCY RECORD, THAT THE DECISION TO ISSUE THE PERMIT WAS SUPPORTED BY SUBSTANTIAL EVIDENCE AND MADE IN ACCORDANCE WITH THE AGENCY'S STATUTORY AUTHORITY?

III. STATEMENT REQUIRED BY RULE 5:17(c)

Because this case originated before the Virginia Department of Environmental Quality ("DEQ"), an administrative agency of the Commonwealth, § 117-116.07 of the Code of Virginia provides that the decision of the Court of Appeals is final unless this Court determines that the case involves matters of significant

¹ § 10.1-1408.1.D. No permit for a new solid waste management facility shall be issued until the Director has determined, after investigation and evaluation of comments by the local government, that the proposed facility poses no substantial present or potential danger to human health or the environment. The Department shall hold a public hearing within the said county, city or town prior to the issuance of any such permit for the management of nonhazardous solid wastes. (1996 Cum. Supp.).