

# MIRANT COMMUNITY MONITORING GROUP (MCMG) MEETING



## DRAFT AGENDA

Wednesday, September 28, 2005  
Room: Council Work Room (2<sup>nd</sup> Floor), City Hall, 301 King Street  
8:00 P.M.

*Agenda Item 1*

**8:00 INTRODUCTION OF MCMG MEMBERS AND ATTENDEES**

*Agenda Item 2*

**8:10 REMARKS BY VICE MAYOR REDELLA PEPPER AND COUNCILMAN  
PAUL SMEDBERG**

*Agenda Item 3*

**8:20 STATUS OVERVIEW**  
Richard Baier, Director T&ES, and Ignacio Pessoa, City Attorney

*Agenda Item 4*

**8:30 MIRANT'S EMISSIONS MODELING: OVERVIEW AND RESULTS OF  
CITY'S ANALYSIS**  
By City's consultant, Maureen Barrett of AERO Engineering

*Agenda Item 5*

**9:00 STATUS UPDATE BY VIRGINIA DEPARTMENT OF ENVIRONMENTAL  
QUALITY (VADEQ)**  
Update by Mike Dowd of VADEQ

*Agenda Item 6*

**9:05 DISCUSSION: MCMG MEMBERS**

**9:25 MEETING ADJOURNED**

### Handouts:

Issues Tracking Matrix

Recent News Articles

Letters from VADEQ and Governor of Virginia to Mirant

City's letter to VADEQ and EPA re: Difference in Input Assumptions



## MIRANT ISSUES TRACKING MATRIX

Updated 09-28-2005

Area	Actions to be Undertaken	City Role and Responsibility	Status
<b>Land Use Regulations</b>	Revocation of Special Use Permit No. 2296 granted to Mirant's predecessor in 1989.	City Attorney's Office and Planning and Zoning Department to undertake necessary actions.	Revoked by City Council December 18, 2004; lawsuit filed by Mirant January 18, 2005; City response seeking dismissal based on Mirant's "unclean hands" filed March 15, 2005. <b>Court denied City's motion to dismiss but will allow City to raise the issue of Mirant's "unclean hands" in the case. Parties are engaged in discovery.</b>
	Revocation of Special Use Permit No. 2297 granted to Mirant's predecessor in 1989.	City Attorney's Office and Planning and Zoning Department to undertake necessary actions.	Revoked by City Council December 18, 2004; lawsuit filed by Mirant January 18, 2005; City response seeking dismissal based on Mirant's "unclean hands" filed March 15, 2005. <b>Court denied City's motion to dismiss but will allow City to raise the issue of Mirant's "unclean hands" in the case. Parties are engaged in discovery.</b>
	Revocation of the non-complying use status of the Potomac River plant and making it a nonconforming use.	City Attorney's Office and Planning and Zoning Department to undertake necessary actions.	Revoked by City Council December 18, 2004; lawsuit filed by Mirant January 18, 2005; City response seeking dismissal based on Mirant's "unclean hands" filed March 15, 2005. <b>Court denied City's motion to dismiss but will allow the City to raise the issue of Mirant's "unclean hands" in the case. Parties are engaged in discovery.</b>



## MIRANT ISSUES TRACKING MATRIX

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<p><b>2. NOx Reduction</b></p>	<p>Comments on the NOx Consent Decree filed in federal court on September 27, 2004, that requires Mirant to undertake several measures to address NOx and other emissions at Alexandria plant.</p>	<p>T&amp;ES and City consultants preparing comments on proposed NOx consent decree.</p>	<p>Proposed comments on NOx consent decree were considered by the City Council at the October 26, 2004 meeting. City comments were submitted to DOJ on November 8, 2004.</p> <p>Comment period was extended and is now closed.</p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>
	<p>Comments on the amendments to Virginia DEQ operating permit for Potomac River plant that have been proposed based on the NOx Consent Decree.</p>	<p>T&amp;ES and City consultants will prepare comments on proposed amendments.</p>	<p>City comments on amendments were docketed for Council consideration at the October 26, 2004 meeting and were submitted to State on October 28, 2004.</p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>



## MIRANT ISSUES TRACKING MATRIX

Area	Actions to be Undertaken	City Role and Responsibility	Status
	<p>Under the consent NOx consent decree, maximum ozone season NOX caps are imposed on the Potomac River plant and the other regional Mirant facilities.</p>	<p>T&amp;ES and City consultants will track compliance with these caps. (This will be one of the tracking items for the facility audit.)</p>	<p>Potomac Plant emissions on declining schedule to 1,475 tons by 2010.</p> <p>Mirant system-wide ozone season emissions are on a declining schedule to 5,200 tons by 2010.</p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree</p>
	<p>Under the NOx consent decree, a maximum annual NOx cap is imposed on the system (comprised of four Mirant regional facilities).</p>	<p>T&amp;ES and City consultants will track compliance with these caps. (This will be one of the tracking items for the facility audit.)</p>	<p>Mirant system-wide annual emissions are on a declining schedule to 16,000 tons by 2010.</p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>



## MIRANT ISSUES TRACKING MATRIX

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	Under the NOx consent decree, a maximum ozone season NOx cap is imposed on the system (comprising of four Mirant regional facilities).	T&ES and City consultants will track compliance with these caps. (This will also be one of the tracking items for the facility audit.)	By 2008, Mirant system-wide is to be at an ozone season emissions rate of 0.15 lb/MMBTU.  Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree
<b>3. Fine Particulates</b>  (including PM2.5 and PM10)	Under NOx consent decree, as a Supplement Environmental Project (SEP), Mirant is required to install bottom ash and fly ash silo secondary filtration system using secondary baghouses.	T&ES and City consultants will track progress on the installation of this equipment. (This will be one of the tracking items for the facility audit.)	Mirant is to submit plans for this equipment to VADEQ within 90 days after the entry of the NOx consent decree.  The NOx consent decree requires the installation of this equipment by September 2005.  Mirant is pursuing the project with an improved design. Vented air from silos will be ducted to Unit 1 precipitator. Mirant expects installation during August/September 2005. <b>All materials are on-site and Mirant's contractor plans to start installation on October 3, 2005.</b>  Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.



## MIRANT ISSUES TRACKING MATRIX

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	<p>Under NOx consent decree, as a SEP, Mirant is required to install an upgrade to the ash loading equipment (pug mill style ash loader on 3<sup>rd</sup> ash silo).</p>	<p>T&amp;ES and City consultants will track progress on the installation of this equipment. (This will be one of the tracking items for the facility audit.)</p>	<p>Mirant is to submit plans for this equipment to VADEQ within 90 days after the entry of the NOx consent decree.</p> <p>The NOx consent decree requires the installation of this equipment by June 2006.</p> <p><b>Mirant has deferred installation until Spring of 2006.</b></p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>
	<p>Under NOx consent decree, as a SEP, Mirant is required to equip ash loading system with dust suppression system.</p>	<p>T&amp;ES and City consultants will to track progress on the installation of this equipment. (This will be one of the tracking items for the facility audit.)</p>	<p>Mirant is to submit plans for this equipment to VADEQ within 90 days after the entry of the NOx consent decree.</p> <p>The NOx consent decree requires its installation no later than June 2005.</p> <p><b>Installation was completed on all three ash silos on September 9, 2005.</b></p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>



## MIRANT ISSUES TRACKING MATRIX

Area	Actions to be Undertaken	City Role and Responsibility	Status
	<p>Under the NOx consent decree, as a SEP, Mirant is required to install a truck washing facility.</p>	<p>T&amp;ES and City consultants will track progress on the installation of this facility. (This will be one of the tracking items for the facility audit.)</p>	<p>Mirant is to submit plans for this facility to VADEQ within 90 days after the entry of the NOx consent decree.</p> <p>The NOx consent decree requires its installation no later than June 2005.</p> <p>Truck wash was installed in June 2004 and is used daily except for periods of below freezing weather in winter.</p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>



## MIRANT ISSUES TRACKING MATRIX

Area	Actions to be Undertaken	City Role and Responsibility	Status
<p><b>4. Coarse Particulate</b> (including particulates &gt; PM10)</p>	<p>Under the NOx consent decree, as a SEP, Mirant is required to install coal pile wind erosion and dust suppression system.</p>	<p>T&amp;ES and City consultants will track progress on the installation of this system. (This will also be one of the tracking items for the facility audit.)</p>	<p>Mirant is to submit plans for this system to VADEQ within 30 days after the entry of the NOx consent decree.</p> <p>The NOx consent decree requires its installation by April 2005.</p> <p>The dust suppression system was installed in May 2004.</p> <p><b>Installation of fencing and screening material was completed on February 23, 2005.</b></p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>



## MIRANT ISSUES TRACKING MATRIX

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	Under the NOx consent decree, as a SEP, Mirant is required to install a coal stackout conveyor dust suppression system.	T&ES and City consultants will track progress on the installation of this system. (This will also be one of the tracking items for the facility audit.)	<p>Mirant is to submit plans for this system to VADEQ within 30 days after the entry of the NOx consent decree.</p> <p>The NOx consent decree requires this system to be installed by December 2004.</p> <p>Mirant has completed installation.</p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree</p>
	Under the NOx consent decree, as a SEP, Mirant is to install a coal railcar unloading dust suppression system.	T&ES and City consultants will track progress on the installation of this system. (This will also be one of the tracking items for the facility audit.)	<p>Mirant to submit plans for this system to VADEQ within 90 days after the entry of the NOx consent decree.</p> <p>The NOx consent decree requires this project to be completed by June 2006.</p> <p><b>Mirant expects completion during Spring of 2006.</b></p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>



## MIRANT ISSUES TRACKING MATRIX

Area	Actions to be Undertaken	City Role and Responsibility	Status
	<p>Under the NOx consent decree, as a SEP, Mirant is required to conduct a settled dust study.</p>	<p>T&amp;ES and City consultants will track progress on this study and evaluate its findings and results. (This will be one of the tracking items for the facility audit.)</p>	<p>Mirant to submit plans for this study to VADEQ within 60 days after the entry of the NOx consent decree.</p> <p>The study is to begin no later than November 2004 and be completed within 6 months.</p> <p>Mirant conducted preliminary sampling in 2004. <b>Mirant submitted the study protocol to VADEQ in May 2005 and commenced data collection in June 2005.</b></p> <p>Parties claiming financial interests in Mirant's Morgantown and Dickerson plants in MD have sought to intervene and oppose the consent decree.</p>



## MIRANT ISSUES TRACKING MATRIX

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<p><b>5. Downwash Study Consent Order</b></p>	<p>The Downwash Study consent order between VADEQ and Mirant requires Mirant to prepare protocols that define, and to undertake, a refined modeling analysis to assess the effects of “downwash” from the Potomac River plant on ambient concentrations of SO<sub>2</sub>, NO<sub>2</sub>, CO, PM10, and Mercury in Alexandria.</p>	<p>T&amp;ES will ensure that the community is able to review the protocols that Mirant has prepared for this study.</p> <p>T&amp;ES and City consultants will review and comment on adequacy of the protocols. Based on this review, City may determine to undertake its own “downwash” modeling study.</p>	<p>Mirant submitted a modeling protocol in October 2004. The protocol was discussed with members of Mirant Community Monitoring Group on December 2, 2004. After input from community and City consultants, the final comments were forwarded to VADEQ on December 30, 2004. VADEQ provided comments on the protocol to Mirant on February 10, 2005 and asked Mirant to submit an amended protocol by March 30, 2005. On March 2, 2005, City staff submitted a letter to VADEQ clarifying City’s requests on certain items that were not clearly specified in VADEQ’s comments to Mirant. Mirant submitted revised protocols to VADEQ on March 28, 2005. City received a copy of the protocol on April 1, 2005, and submitted comments to VADEQ on April 18, 2005. <b>City submitted additional comments on the revised protocol to VADEQ on May 2, 2005. VADEQ approved the protocol (with additional comments) on June 17, 2005.</b></p> <p><b>Mirant’s modeling showed violations of NAAQS for all major criteria pollutants, i.e., NO<sub>x</sub>, SO<sub>2</sub>, CO and particulate matter (PM-10 and PM-2.5).</b></p>



## MIRANT ISSUES TRACKING MATRIX

Area	Actions to be Undertaken	City Role and Responsibility	Status
	<p>VADEQ will undertake its own modeling analysis to assess the effects of “downwash” from the plant on ambient concentrations of other toxic pollutants in Alexandria.</p>	<p>This is <u>not</u> specifically in the Downwash Study consent order, but, VADEQ staff has assured City of their plans to conduct this analysis independently.</p> <p>T&amp;ES and City consultants will work with VADEQ on this analysis. Based on review of VADEQ’s analysis, City may determine to undertake its own modeling analysis and study.</p>	<p>All analysis to be performed will be coordinated with VADEQ.</p> <p>City provided Mirant an itemized list of data needs in case the City undertakes its own modeling analysis. Mirant’s data response was received on April 1, 2005. City sent a follow-up to the original request on April 29, 2005. <b>Mirant provided additional data on June 3, 2005.</b></p> <p><b>The modeling conducted by City’s consultant showed violations of NAAQS for all major criteria pollutants including PM2.5 and ambient guidelines for some hazardous air pollutants (HF and HCl).</b></p>



## MIRANT ISSUES TRACKING MATRIX

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	<p>Under the Downwash Study consent order, Mirant is to propose and implement a corrective action plan to address any exceedances of the applicable ambient air standards.</p>	<p>Staff and City consultants will monitor, evaluate and provide comments to DEQ when the action plan is proposed.</p>	<p>The Downwash Study consent order requires Mirant to submit the corrective action plan within 90 days of submitting the results of its modeling study.</p> <p><b>Mirant's and City's modeling showed violations of NAAQS for all major criteria pollutants. On August 24, 2005, Mirant temporarily shut down all five boilers at the plant in response to VADEQ orders to reduce pollution.</b></p> <p><b>On September 21, 2005, Mirant commenced limited operation of Unit No. 1 based on a revised modeling analysis submitted to VADEQ on September 20, 2005. VADEQ expressed serious reservations about the revised modeling and underlying assumptions in a letter to Mirant dated September 20, 2005. In an internal review of the revised modeling, City has also identified serious concerns regarding the assumptions and scenarios included in the analysis.</b></p> <p><b>The D.C. Public Service Commission has requested the Federal Energy Regulatory Commission for an emergency order to restart the Mirant power plant to alleviate perceived risks of power outage in D.C. That request is currently pending at the FERC and the U.S. Department of Energy.</b></p> <p><b>The City will continue to follow developments regarding plans to restart plant operation and analyze impacts of such plans on City residents.</b></p>



## MIRANT ISSUES TRACKING MATRIX

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<p><b>6. Independent Facility Audit funded by Mirant</b></p>	<p>A memorandum of understanding between City and Mirant will be prepared regarding regular, periodic performance audits of Potomac River plant by an independent firm, to be funded by Mirant.</p>	<p>T&amp;ES will work with Mirant to finalize MOU on scope, frequency, and other issues related to the audit.</p>	<p>Mirant has agreed to the concept of a regular plant audit.</p> <p>City provided Mirant with a list of items to include in the audit. Mirant's response was received on April 1, 2005. City sent a follow-up to the original request on April 29, 2005.</p>
<p><b>7. Virginia Legislation</b></p>	<p>City will support passage of the Virginia Clean Smoke Stacks bill during 2005 session of General Assembly.</p>	<p>Bernard Caton, T&amp;ES and City Attorney's will provide input in the legislative process.</p>	<p>HB 2546 (Van Landingham) was defeated in the House Committee on Agriculture, Chesapeake and Natural Resources.</p> <p>HB 2742 (Jack Reid) was also defeated in the House Committee on Agriculture, Chesapeake and Natural Resources.</p>
<p><b>8. Potential Litigation Options</b></p>	<p>City will consider, when appropriate, pursuing litigation against the Potomac River plant under various statutory and common law theories.</p>	<p>City Attorney's Office and its consultants will evaluate the litigation options.</p>	<p>The City Attorney's Office will make a recommendation on a nuisance suit after the Downwash Study results have been reviewed by staff and the City's consultants.</p> <p><b>Also see Item # 12</b></p>



## MIRANT ISSUES TRACKING MATRIX

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<p><b>9. Representation in Bankruptcy Court</b></p>	<p>City will consider entering appearance in Mirant bankruptcy proceeding.</p>	<p>City Attorney's Office and its consultants will evaluate this issue.</p>	<p>On April 5, 2005, the City filed with the Bankruptcy Court an objection to Mirant's request that the Bankruptcy Court authorize Mirant to enter into the proposed Consent Decree, on the basis that the proposed decree is prejudicial to the City's interests by allowing increased NOx emissions in Alexandria, purportedly in exchange for reductions at other regional, Mirant-operated plants, which, as described below may well prove illusory, and prejudicial to the bankruptcy estate in that implementation of the decree it will likely lead to additional litigation.</p> <p>On April 4, 2005, the owners of two of these regional plants, the Dickerson and Morgantown plants, filed their objection, asserting that they had no knowledge of the proposed Consent Decree, and that the decree was prejudicial to their interests by requiring costly environmental remediation actions at their two plants, leased and operated by Mirant, which, unlike the Alexandria plant, had no significant violation history, and that the proposed remediation could not accomplish the claimed reduction in emissions. At the same time, the owners assert that Mirant was seeking permission from the Bankruptcy Court to terminate the leases under which Mirant operates these plants, thus freeing Mirant from any obligation to implement environmental remediation at these plants.</p> <p>The Bankruptcy Court has taken no action on Mirant's request, or the objections filed thereto.</p>



## MIRANT ISSUES TRACKING MATRIX

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<p><b>10. New Federal Air Quality Regulatory Actions</b></p>	<p>Three federal air quality actions are underway:</p> <ul style="list-style-type: none"> <li>(1) PM2.5 designations</li> <li>(2) Implementation of new 8 hour standard for ozone, and</li> <li>(3) NOx and SO<sub>2</sub> reductions from sources in eastern U.S.</li> <li>(4) New limits on mercury emissions from power plants.</li> </ul>	<p>T&amp;ES, City Attorney and City consultants will track these new federal regulations and their impacts on the City.</p>	<p>PM2.5 designations occurred in December 2004.</p> <p>EPA to propose implementation rule in February 2005 and finalize the rules in Early 2006.</p> <p>Staff continues to track Clean Power Act, Clear Skies Act, Clean Air Interstate Rule, Utility mercury reduction rule.</p> <p>The region's deadline to achieve compliance with 8-hr Ozone and the PM2.5 standard in 2010.</p> <p>EPA issued the Clean Air Interstate Rule on March 10, 2005. This is a cap-and-trade rule which EPA expects to result in NOx and SO<sub>2</sub> reductions of 61% and 73%, respectively, compared to 2003 levels.</p> <p>EPA issued the Clean Air Mercury Rule on March 15, 2005 with an effective date of July 18, 2005. This is a cap-and-trade rule which EPA expects to result in 70% reduction in mercury emissions. This is a controversial rule and is expected to be challenged in court.</p> <p>STAPPA/ALAPCO has raised serious objections to this rule.</p>



## MIRANT ISSUES TRACKING MATRIX

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<b>11. Purchase of Clean Power</b>	City will consider options for purchase of clean or green power.	General Services and Purchasing will evaluate options.	General Services and Purchasing are working on this issue.
<b>12. Status of Consent Decree</b>	Monitor status, and consider intervention in EPA enforcement action.	City Attorney's Office and its consultants are monitoring and evaluating this issue.	<p>On February 7, 2005, the owners of two of the regional plants subject to the proposed Consent Decree, the Dickerson and Morgantown plants, sought to intervene in the enforcement action brought by the EPA, Maryland and Virginia against Mirant, pending in the U.S. District Court in Alexandria, and to object to the proposed Consent Decree, asserting that they had no knowledge of the proposed decree, and that the decree was prejudicial to their interests by requiring costly environmental remediation actions at their two plants, leased and operated by Mirant, which, unlike the Alexandria plant, had no significant violation history, and that the proposed remediation could not accomplish the claimed reduction in emissions. At the same time, the owners assert that Mirant was seeking permission from the Bankruptcy Court to terminate the leases under which Mirant operates these plants, thus freeing Mirant from any obligation to implement environmental remediation at these plants.</p> <p>The Court has stayed further action in the enforcement case until May 17, 2005, while the government agencies and Mirant attempt to resolve these issues, and Mirant has advised the Bankruptcy Court that there will likely be substantial revisions to proposed Consent Decree.</p>



## MIRANT ISSUES TRACKING MATRIX

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			<p>These developments call into serious question the premise -- that environmental remediation at other regional, Mirant-operated plants would off set increased NOx emissions at the Alexandria plant -- and viability of the proposed Consent Decree as drafted. In order better to protect its interests and those of its residents, the City intervened in the Consent Decree case. The City also filed a motion for leave to amend the complaint, a motion that is pending the expiration of the 60 day notice requirement under the Clean Air Act. The City's position is that the proposed Consent Decree, and any amendment thereto, is invalid without addressing the air quality standards exceedances identified in the City's and Mirant's downwash studies.</p>
<p><b>13. Stack Height Increase</b></p>	<p>Monitor status, and consider objecting to any stack height increase if it precludes emissions reductions.</p>	<p>T&amp;ES and City Attorney will track this issue and evaluate implications that the stack height increases may have on reducing ambient impacts and therefore preclude emission reductions.</p> <p>The stack height increase, if approved,</p>	<p>Mirant has applied to the Federal Aviation Administration (FAA) to receive approval for a 50-foot increase in the stack height for each of the five boilers. FAA's role will be to evaluate aviation safety given the close proximity of the plant to the Washington National airport. At the MCMG meeting on May 3, 2005, the MCMG members asked Mirant to provide copies of any communication with the FAA. <b>The FAA staff determination of Mirant's application is pending.</b></p> <p>Under environmental regulations, new plants are allowed to construct stack heights that follow Good Engineering Practice (GEP) guidelines for avoiding building</p>



## MIRANT ISSUES TRACKING MATRIX

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		will require a SUP from the City.	<p>downwash. However, stack height increases at existing plants are only approved on a case-by-case basis upon consideration of other factors beyond the need to avoid building downwash.</p> <p>The increase in stack height will require a Special Use Permit from the City Council.</p>

**Updated: 09-28-2005**

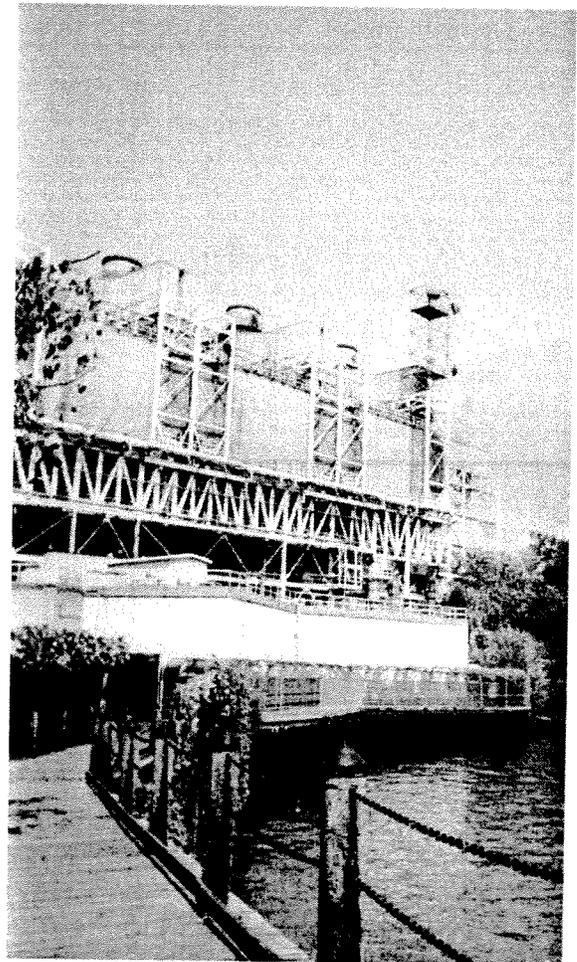
**Bold** formatting has been used in "Status" column to indicate the most recent updates.



***Mirant Community Monitoring Group –  
Sept.28, 2005***

**Results of the Ambient Air Quality  
Analyses of the Potomac River  
Generating Station**

- City's Analysis,  
Procedures and  
Results
- Outstanding  
Differences to  
Mirant's Analysis
- One-Boiler  
Scenario





# Order by Consent Timeline

- ***October, 2004***: issued for “the purpose of ensuring compliance with ambient air quality standards”
- ***April to May, 2004***: AERMOD 04300 Released
- ***June, 2005***: DEQ submits final written comments to Mirant regarding their procedures.
- ***August, 2005***: Both City’s analysis and Mirant’s are submitted as final reports.
- ***w.in 90 days***: “a plan and schedule to eliminate and prevent such exceedances on a timely basis.”



# In Many Areas Identical

- AERMOD-PRIME applied with same five-year set of meteorology from DC National/Sterling.
- Receptor heights derive from USGS dbases.
- Short-term impacts predicted using allowable, permitted emission rates.
- Both analyses show severe exceedances of the standards for SO<sub>2</sub>, NO<sub>2</sub> and PM<sub>10</sub>



# **Key Emission Assumptions of City's Analysis**

- PM10 – “Condensable” Portion Added to Annual Emissions
- PM2.5 – For combustion sources only, PM10 is all PM2.5
- Heat Input Rate – City pressed for the highest heat input rate reported.
- Coal/Ash Yard Sources – Flyash silos assumed to emit at rate equal to bottom ash silo.
- AERMOD provides great resolution capability for railcars, coal pile (6 acres in size), and roadway emissions, and City used it.



# City's Results vs. AAQS

## *NO2 Annual:*

416. Versus 100. – Northeast Fenceline

## *PM2.5 24-hour*

544 vs. 65 - Northeast Fenceline

## *PM2.5 Annual*

93 vs. 15. – *Northeast Fenceline*

## **PM10 24-hour -**

766 vs. 150. - Southwest Fenceline

## *SO2 3-hour*

10,601 vs. 1,300 – Marina Towers, 3<sup>rd</sup> Floor

## *SO2 24-hour*

6,869 vs. 365 – Northeast Fenceline

## *SO2 Annual*

1,009 vs. 80 – Northeast Fenceline

## *HCl 1-hour*

386. vs. 75 – Marina Towers – 3<sup>rd</sup> Level

## *HF 1-hour*

50 vs. 41 – Marina Towers – 3<sup>rd</sup> Level



# **Differences to Immediately Resolve with DEQ**

- Mercury Rate
- Silo Baghouse Emission Rate
- PM2.5 Analysis – Interim Guidance Recommends it be Analyzed within a PM10 Nonattainment Program.
- Coal Pile Size and Silt Loading
- Meteorological Input Data, No. of days with precip. = 43
- Downwash Dimensions
- Placement of Fenceline Receptors
- Asking for a “Prove-It” Attitude by DEQ/EPA



# Hypothetical Label is Inaccurate

- City's analysis uses actual historical emissions and mid-load conditions
- Impacts still exceed AAQS by 3 to 12 times
- Even scaling for short-term impacts for annual rates, impacts still exceed AAQS by 2 and 8 times
- Records show that short-term historical emission rates did at time equal emission limits
- **ALL AAQS analyses** must protect against a facility's **ALLOWABLE** impacts.
- If truly hypothetical, why didn't Mirant ask for a permit limit reduction?



# **SO<sub>2</sub> Threshold Files**

- Prints out every short-term at receptors with impact  $>$  AAQS

## **Average Over the Entire Inner Grid**

- Impacts exceeds AAQS one of every five days
- Value of impact to AAQS: 3 to 1



# One Boiler Scenario

## *City's modeling with Boiler no. 3*

- SO<sub>2</sub> 3-hour: 2,750 vs. 1,300
- SO<sub>2</sub> 24-hour: 1,670 vs. 365
- PM<sub>10</sub> 24-hour: 153 vs. 150
- No cycling assumed.

## *City's Concerns*

- Ramp-up/down emissions
- Relies on unproven emission rates for SO<sub>2</sub> and PM<sub>10</sub>
- Relies on unresolved differences in modeling inputs as discussed earlier
- No Analysis of PM<sub>2.5</sub>





DEPARTMENT OF TRANSPORTATION  
AND ENVIRONMENTAL SERVICES

P. O. Box 178 – City Hall  
Alexandria, Virginia 22313

alexandriava.gov

September 28, 2005

Mr. Richard Killian  
US EPA Region III  
Mail Code 3AP12  
1650, Arch Street  
Philadelphia PA 19103

**Re: Ambient Air Quality Analysis of Potomac River Generation – Request for Resolution of Differences in Input Assumptions**

Dear Mr. Killian:

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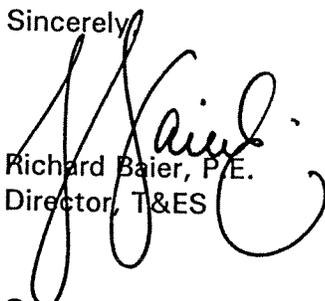
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Mirant must remedy this lack of analysis by demonstrating how its impacts of PM<sub>2.5</sub> compare against the insignificance levels for PM<sub>10</sub>. There is nothing about the interim US EPA guidance, the proposed US EPA PM<sub>2.5</sub> implementation rule,<sup>17</sup> or the VADEQ standards for criteria pollutants<sup>18</sup> that supports ignoring this pollutant's impacts or treating it in the context of an attainment pollutant.

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DEPARTMENT OF TRANSPORTATION  
AND ENVIRONMENTAL SERVICES

P. O. Box 178 – City Hall  
Alexandria, Virginia 22313

alexandriava.gov

September 28, 2005

Michael Dowd  
Air Enforcement Manager  
Virginia Dept. of Environmental Quality  
629 East Main Street  
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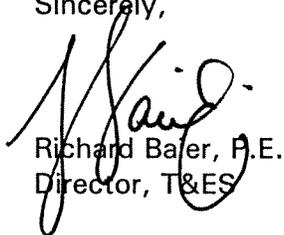
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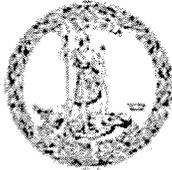
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# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

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Robert G. Burnley  
Director

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W. Tayloe Murphy, Jr.  
Secretary of Natural Resources

September 20, 2005

Ms. Lisa Johnson, President  
Mirant Potomac River, LLC  
8711 Westphalia Road  
Upper Marlboro, Maryland 20774

Dear Ms. Johnson:

At 12:49 p.m. this afternoon the Department of Environmental Quality (DEQ) received your letter informing DEQ of Mirant's intention to restart Unit 1 of the Potomac River Generating Station tomorrow, September 21, 2005. Your letter stated that it was Mirant's intention to commence operation of Unit 1 in accordance with certain restrictions designed to ostensibly ensure that emissions from Unit 1 do not result in exceedances of the National Ambient Air Quality Standards (NAAQS) promulgated by EPA under the Clean Air Act.

DEQ has not had the opportunity to fully review Mirant's plan due to the complexity of the plan's underlying modeling. DEQ, however, has serious reservations about several of the assumptions used in Mirant's modeling, including, but not limited to the use of revised SO<sub>2</sub> background monitoring data and assumptions made with respect to stack velocity and temperatures used in the model.

DEQ, therefore, is unable at this time to conclude that restart of Unit 1 under the conditions set forth in the plan will ensure the protection of human health and the environment.

DEQ is in active consultation with EPA Region III and Headquarters officials on this matter.

DEQ is disappointed that Mirant chose to issue a press release announcing its decision to restart Unit 1 prior to affording DEQ the opportunity to undertake any meaningful review of the sufficiency of the plan. If DEQ determines that the environment and human health are not protected we will use all of the tools available to us to protect the health of the citizens of Alexandria.

Very truly yours,

A handwritten signature in black ink that reads "Robert G. Burnley".

Robert G. Burnley



BY TELECOPY

Robert G. Burnley, Director  
Commonwealth of Virginia Department of Environmental Quality  
629 East Main Street  
Richmond, Virginia 22319



September 20, 2005

Mirant Potomac River: Plan to Operate Unit 1

Dear Mr. Burnley:

As you are aware, Mirant advised the Virginia Department of Environmental Quality, by letter dated August 24, 2005, of the temporary shutdown of all five units of the Potomac River power plant. Mirant Potomac River now plans to resume generating electricity on Unit 1 of the plant on September 21, 2005. We would expect the typical operating profile to be:

- ▶ Up to 16 hours of generation per calendar day, with:
  - Up to 8 hours at full capacity (88 MW);
  - 8 or more hours at minimum capacity (35 MW); and
- ▶ At least 8 hours per day with no generation.

Attached is Update #1 to "A Dispersion Modeling Analysis of Downwash from Mirant's Potomac River Power Plant," which demonstrates that Unit 1 operating in the mode described above results in ambient air concentrations that are better than the National Ambient Air Quality Standards for SO<sub>2</sub>, PM<sub>10</sub>, and NO<sub>2</sub>, and more than ensures protection of human health and the environment surrounding the Power Plant, as required by your letter of August 19, 2005.

Mirant has determined that during the temporary period that it operates in the above mode, it will not exceed the predicted ambient impacts. In order to maintain the necessary flexibility to operate Unit 1 consistent with normal operating practices, Mirant will operate under a 24-hour SO<sub>2</sub> tons-per-day emissions cap of 7.4 tons per calendar day with the proviso of no generation between the hours of 10:00 pm and 5:00 am. The cap was calculated by adding eight hours of SO<sub>2</sub> emissions at 35MW, plus eight hours of SO<sub>2</sub> emissions at 88MW, as described in the report. The cap amount is equal to the quantity of SO<sub>2</sub> emissions modeled under Scenarios 1 & 2 in Update #1. Modeling



indicates that weather conditions favorable to stack downwash typically occur during the overnight period; therefore Mirant will implement the additional operating restriction requiring no generation from Unit 1 during the hours of 10:00 pm to 5:00 am daily. The SO2 cap will constrain actual plant emissions to a level that meets the SO2, PM10, and NO2 ambient air quality standards in the downwash model. The instrumentation used to measure stack emissions will be the existing certified Continuous Emissions Monitors (CEMs) equipment on Unit 1.

Mirant plans to continue operating Unit 1 in this mode until additional solutions to address ambient air quality standards in the vicinity of the power plant are ready to be implemented.

Please call me with any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lisa D. Johnson', with a long horizontal flourish extending to the right.

Lisa D. Johnson  
President, Mirant Potomac River, LLC

cc: Deborah Jennings, Esq



**Mirant Potomac River, LLC  
Alexandria, VA**

**Update 1 to:**

**A Dispersion Modeling Analysis  
of Downwash from Mirant's  
Potomac River Power Plant**

**Modeling Unit 1 Emissions in a  
Cycling Mode**

**ENSR Corporation  
September 20, 2005  
Document Number 10350-002-410 (Update 1)**



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## 1.0 INTRODUCTION

This report describes dispersion modeling performed for Unit 1 at Mirant's Potomac River Generating Station. The modeling was performed according to the Protocol approved by the Virginia Department of Environmental Quality. The purpose of the modeling was to demonstrate that Unit 1 operating alone under specified loads and during certain periods in a calendar day will not cause or contribute to exceedances of the National Ambient Air Quality Standards (NAAQS).

Section 2 of this report presents the stack and emission parameters included in the modeling. Section 3 presents modeling results and conclusions.



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## 2.0 MODEL INPUTS

Modeling was performed using the same version of AERMOD/AERMET and the same meteorological data and receptor grid used in the August, 2005 report prepared by ENSR.

Mirant is proposing to operate Unit 1 in cycling mode in which the unit would operate up to 16 hours in a day. The unit would be shut down for the remaining 8 hours. The unit would typically operate at maximum load (88MW) for up to 8 hours in a day and minimum load (35 MW) for up to 8 hours in a day.

We have conducted dispersion modeling for two specific scenarios within this cycling frame work in order to demonstrate that NAAQS are met for all possible combinations of cycling operation. The two scenarios modeled are:

### Scenario 1

- Midnight - 2:00am Not Operating
- 2:00am - 5:00am 35 MW
- 5:00am – 1:00 pm 88 MW
- 1:00pm - 6:00pm 35 MW
- 6:00 pm – Midnight Not Operating

### Scenario 2

- Midnight - 5:00am Not Operating
- 5:00am - 6:00am 35 MW
- 6:00am - 10:00am 88 MW
- 10:00am - 4:00pm 35 MW
- 4:00pm - 8:00pm 88 MW
- 8:00pm - 9:00pm 35 MW
- 9:00 pm – Midnight Not Operating



Modeling assumed that only one unit operated during a calendar day.

Stack gas flow rate and exit temperature for Unit 1 at 35 MW were derived from continuous emission monitoring data for 2004. Hourly flow rates were plotted versus load and a best fit curve was derived. Similarly, hourly temperature measured at the stack breeching was plotted versus load and a best fit curve derived. The values of ACFM and temperature on the best fit curves corresponding to 35 MW were selected and used in the modeling. Exit velocity was calculated from ACFM using the stack diameter.

Power plant personnel provided the historical heat rate versus load for Unit 1. The heat rate at 35 MW for Unit 1 is 14 MMBtu/MW-hr. The heat rate was used to calculate SO<sub>2</sub> and PM<sub>10</sub> emissions at 35 MW using the following equations:

- SO<sub>2</sub> (lb/hr) = Unit 1 heat rate x 35 MW x 1.2 lb SO<sub>2</sub>/MMBtu
- PM<sub>10</sub> (lb/hr) = Unit 1 heat rate x 35 MW x 0.06 lb PM<sub>10</sub>/MMBtu
- NO<sub>x</sub> (lb/hr) = Unit 1 heat rate x 35 MW x 0.45 lb NO<sub>x</sub>/MMBtu

SO<sub>2</sub> emissions at 88 MW (maximum load) were calculated in exactly the same manner as the August 2005 modeling report except that an emission factor of 1.2 lb SO<sub>2</sub>/MMBtu was used instead of the permit limit of 1.52 lb SO<sub>2</sub>/MMBtu. Historical data indicate that the power plant emits less than 1.2 lb SO<sub>2</sub>/MMBtu. PM<sub>10</sub> emissions at 88 MW were calculated in the same manner as the August 2005 report except that an emission factor of 0.06 lb/MMBtu was used instead of the permit limit of 0.12 lb/MMBtu. Stack testing indicates that maximum PM/PM<sub>10</sub> emissions are 0.06 lb/MMBtu. The NO<sub>x</sub> emission rate at 88 MW is the same value used in the August 2005 modeling report, 473.9 lb/hr.

Table 2-1 shows the stack and flue gas exit parameters used in modeling Unit 1 stack emissions.

Sources of PM<sub>10</sub> emissions include the Unit 1 combustion stack, two fly ash silos and one bottom ash silo, plus material handling sources. Table 2-1 shows the Unit 1 stack emissions plus the silos. In modeling PM<sub>10</sub> emissions from PRGS when only Unit 1 is operating, Mirant assumed that emissions from all the silos and from the material handling sources are 20% of what they are when all units are operating at maximum load. This is because Unit 1 produces approximately 20% of the entire station's power output. The one exception to this is the coal pile wind erosion. We assumed that these emissions remain the same as they were in the August 2005 modeling.

The emissions shown in Tables 2-1 and 2-2 below for the non combustion sources represent 20% of the values listed in Tables 2-1 and 2-2 in the August 2005 modeling report, with the exception of the coal pile wind erosion.



Table 2-1

Stack and Emission Parameters Used in the Modeling

Point Source	Height m	Diameter m	Temp (K)		Exit Velocity (m/s)		SO <sub>2</sub> Emissions (g/s)		PM <sub>10</sub> Emissions (g/s)		NO <sub>x</sub> Emissions (g/s)	
			35 MW	88 MW	35 MW	88 MW	35 MW	88MW	35 MW	88MW	35 MW	88MW
Boiler 1/Stack 1	48.2	2.6	442.6	444.3	19.0	35.7	74.1	159.2	3.7	8.0	27.8	59.7
Fly Ash Silo	33.6	1.0	293.0		0.1		0.0		0.017		0.0	
Fly Ash Silo	33.6	1.0	293.0		0.1		0.0		0.017		0.0	
Bottom Ash Silo	31.0	1.0	293.0		0.1		0.0		0.023		0.0	

Notes:

1. Heat Rate (MMBtu/MW hr) @ 35 MW = 14 for Unit 1
2. SO<sub>2</sub> emissions @ 35 MW = Heat Rate (MMBtu/MW hr) x 1.2 lb SO<sub>2</sub>/MMBtu x MW
3. SO<sub>2</sub> emissions at 88 MW = 1053 MMBtu/hr x 1.2 lb SO<sub>2</sub>/MMBtu for Unit 1
4. PM<sub>10</sub> emissions @ 35 MW = Heat rate (MMBtu/MW hr) x 0.06 lb PM<sub>10</sub> / MMBtu x MW
5. PM<sub>10</sub> emissions @ 88MW = 1053MMBtu/hr x 0.06 lb/MMBtu for Unit 1

Table 2-2 - Mirant Potomac: Fugitive Sources

Area Sources	Size m <sup>2</sup>	Height m	PM <sub>10</sub> Existing Emissions			
			lb/hr	tpy	g/sec	g/sec-m <sup>2</sup>
Ash Loader Upgrade	546	2.0	0.01	0.01	0.001	2.36E-06
Coal Pile Wind Erosion and Dust Suppression	17,679	4.6	0.93	1.12	0.118	6.66E-06
Coal Stackout Conveyor Dust Suppression	263	9.1	0.01	0.04	0.001	4.38E-06
Coal Railcar Unloading Dust Suppression	288	1.0	0.02	0.01	0.003	1.08E-05
Ash trucks on Paved Roads	5,886	1.0	0.12	0.24	0.015	2.57E-06

Notes:

Coal Pile = 4 acres = 17,679 m<sup>2</sup>

Modeled height of coal pile = one half of average pile height = 30 feet x 0.5 = 15 feet (4.6 meters)

Modeled height stackout conveyor dust suppression = average height of coal pile (9.1 meters)

Resuspended roadway dust from paved roads: area = 2 x 0.3 miles x 20 feet wide = 5,886 square meters



## 3.0 MODELING RESULTS

### 3.1 Sulfur Dioxide (SO<sub>2</sub>) Modeling Results

Tables 3-1 and 3-2 present results of modeling SO<sub>2</sub> emissions from Unit 1 at PRGS for Scenarios 1 and 2, respectively. Highest second highest 3-hour and 24-hour impacts and highest annual average impacts for each year are presented in the tables. Modeled impacts are added to the highest monitored background concentrations for comparison with the NAAQS. The monitored background for the 24-hour average was 60.3ug/m<sup>3</sup>. This represented the highest, second highest concentration over the three year (2002-2004) period used in the August 2005 report. Mirant reviewed daily monitored concentrations for this 3-year period and determined that the highest monitored background concentrations do not occur on the days when highest 24-hour SO<sub>2</sub> impacts are predicted from Unit 1. Therefore, Mirant is substituting a slightly lower background concentration of 51 ug/m<sup>3</sup> for purposes of demonstrating that the described operating scenario assures the NAAQS are met.

#### Scenario 1

As shown in Table 3-1, the highest second highest 3-hour average SO<sub>2</sub> concentration is 1,165 ug/m<sup>3</sup>. This concentration is below the 1,300 ug/m<sup>3</sup> 3-hour NAAQS. The highest, second highest 24-hour average concentration is 356 ug/m<sup>3</sup>. This concentration is also below the 365 ug/m<sup>3</sup> 24-hour NAAQS. Finally, the highest annual average concentration of 55 ug/m<sup>3</sup> is below the 80 ug/m<sup>3</sup> annual NAAQS.

#### Scenario 2

As shown in Table 3-2, the highest second highest 3-hour average SO<sub>2</sub> concentration is 1,238 ug/m<sup>3</sup>. This concentration is below the 1,300 ug/m<sup>3</sup> 3-hour NAAQS. The highest, second highest 24-hour average concentration is 364 ug/m<sup>3</sup>. This concentration is below the 365 ug/m<sup>3</sup> 24-hour NAAQS. Finally, the highest annual average concentration of 57 ug/m<sup>3</sup> is below the 80 ug/m<sup>3</sup> annual NAAQS.

### 3.2 PM<sub>10</sub> Results

Table 3-3 presents results of modeling PM<sub>10</sub> emissions from Unit 1 plus all other non-combustion sources at PRGS. Modeling was performed for Scenario 2 only because modeled impacts are significantly below the NAAQS and would also be significantly below the NAAQS for Scenario 1. The highest, second highest 24-hour average concentration is 100 ug/m<sup>3</sup>. This concentration is below the 150 ug/m<sup>3</sup> 24-hour NAAQS. The highest annual average concentration of 32.6 ug/m<sup>3</sup> is below the 50 ug/m<sup>3</sup> annual NAAQS.



### 3.3 Nitrogen Oxides (as NO<sub>2</sub>) Results

Table 3-4 presents results of modeling Unit 1 NO<sub>x</sub> emissions for Scenario 2. Modeling was performed for Scenario 2 only because modeled impacts are significantly below the NAAQS and would also be significantly below the NAAQS for Scenario 1. Maximum total NO<sub>2</sub> concentrations are predicted to be 60 ug/m<sup>3</sup>. This concentration is below 100 ug/m<sup>3</sup> annual NAAQS.

### 3.4 Conclusions

Modeling results indicate that Unit 1 in the mode described above results in ambient air concentrations that are better than the NAAQS for SO<sub>2</sub>, PM<sub>10</sub> and NO<sub>2</sub>.



Table 3-1 AERMOD Modeling Results for SO<sub>2</sub> - Scenario 1

Year	Pollutant	Averaging Period	AERMOD-PRIME	Predicted Concentrations (µg/m <sup>3</sup> )		NAAQS	Impact Location		Distance	Direction	Ground Elevation	Flagpole Elevation
				Monitored Background	AERMOD-PRIME + Background*		X (m)	Y (m)				
2000	SO <sub>2</sub>	3-hour	763.5	238.4	1,001.9	1300	322770.8	4298791.5	182.7	349	6.1	39.6
		24-hour	266.5	51.0	317.5	365	322880.8	4298542.5	102.7	133	6.7	0.0
		Annual	39.6	15.7	55.3	80	322880.8	4298542.5	102.7	133	6.7	0.0
2001	SO <sub>2</sub>	3-hour	926.3	238.4	1,164.7	1300	322729.9	4298820.0	221.1	340	7.7	39.6
		24-hour	305.4	51.0	356.4	365	322787.7	4298786.0	174.8	354	4.6	39.6
		Annual	37.4	15.7	53.1	80	322880.8	4298542.5	102.7	133	6.7	0.0
2002	SO <sub>2</sub>	3-hour	842.2	238.4	1,080.6	1300	322770.8	4298791.5	182.7	349	6.1	39.6
		24-hour	277.0	51.0	328.0	365	322770.8	4298791.5	182.7	349	6.1	39.6
		Annual	29.9	15.7	45.6	80	322787.7	4298786.0	174.8	354	4.6	39.6
2003	SO <sub>2</sub>	3-hour	701.7	238.4	940.1	1300	322858.6	4298648.5	64.6	56	4.1	0.0
		24-hour	220.7	51.0	271.7	365	322880.8	4298542.5	102.7	133	6.7	39.6
		Annual	24.5	15.7	40.2	80	322871.6	4298555.0	81.4	125	5.6	0.0
2004	SO <sub>2</sub>	3-hour	726.6	238.4	965.0	1300	322770.8	4298791.5	182.7	349	6.1	39.6
		24-hour	285.7	51.0	336.7	365	322880.8	4298542.5	102.7	133	6.7	39.6
		Annual	28.7	15.7	44.4	80	322880.8	4298542.5	102.7	133	6.7	0.0

\* SO<sub>2</sub> background concentrations for 24-hour averaging period are less than 51 µg/m<sup>3</sup> during periods when highest impacts from Unit 1 are predicted.



Table 3-2 AERMOD Modeling Results for SO<sub>2</sub> - Scenario 2

Year	Pollutant	Averaging Period	AERMOD-PRIME	Monitored Background	AERMOD-PRIME + Background *		NAAQS	Impact Location		Distance	Direction	Ground Elevation		Flagpole Elevation
					Predicted Concentrations ((g/m <sup>3</sup> ))			X (m)	Y (m)			m	m	
2000	SO <sub>2</sub>	3-hour	750.5	238.4	988.9	1300	322700.9	4298819.5	232.2	333	10.3	39.6		
		24-hour	295.7	51.0	346.7	365	322747.6	4298814.0	210.0	344	6.6	39.6		
		Annual	40.9	15.7	56.6	80	322871.6	4298565.0	81.4	125	5.6	39.6		
2001	SO <sub>2</sub>	3-hour	893.9	238.4	1,132.3	1300	322717.6	4298816.5	222.4	337	8.8	39.6		
		24-hour	280.6	51.0	331.6	365	322787.7	4298786.0	174.8	354	4.6	39.6		
		Annual	40.9	15.7	56.6	80	322770.8	4298791.5	182.7	349	6.1	39.6		
2002	SO <sub>2</sub>	3-hour	1,000.0	238.4	1,238.4	1300	322717.6	4298816.5	222.4	337	8.8	39.6		
		24-hour	313.3	51.0	364.3	365	322770.8	4298791.5	182.7	349	6.1	39.6		
		Annual	33.3	15.7	49.0	80	322787.7	4298786.0	174.8	354	4.6	39.6		
2003	SO <sub>2</sub>	3-hour	765.3	238.4	1,003.7	1300	322858.6	4298648.5	64.6	56	4.1	0.0		
		24-hour	231.7	51.0	282.7	365	322880.8	4298542.5	102.7	133	6.7	0.0		
		Annual	24.5	15.7	40.2	80	322871.6	4298565.0	81.4	125	5.6	39.6		
2004	SO <sub>2</sub>	3-hour	750.2	238.4	988.6	1300	322858.6	4298648.5	64.6	56	4.1	0.0		
		24-hour	266.7	51.0	317.7	365	322880.8	4298542.5	102.7	133	6.7	0.0		
		Annual	28.6	15.7	44.3	80	322880.8	4298542.5	102.7	133	6.7	0.0		

\* SO<sub>2</sub> background concentrations for 24-hour averaging period are less than 51 ug/m<sup>3</sup> during periods when highest impacts from Unit 1 are predicted.



[washingtonpost.com](http://www.washingtonpost.com)

## Mirant Wants to Reopen Power Plant in Alexandria

In the Meantime, Pepco Looks to Fill Void

By Jerry Markon  
Washington Post Staff Writer  
Thursday, September 15, 2005; GZ08

Mirant Corp. plans to propose that its Alexandria power plant be allowed to reopen on a limited basis while the company seeks solutions to the environmental problems that resulted in the plant's shutdown last month, documents filed with federal regulators show.

Under a tentative plan Mirant outlined last week, the Potomac River plant would operate at a level "significantly reduced from full capacity," one that does not violate national air quality standards. At the same time, Mirant would continue studying long-term remedies such as burning cleaner coal or increasing the height of the plant's smokestacks so that pollutants disperse better.

The plan must pass muster with the Virginia Department of Environmental Quality (DEQ), which has ordered Mirant to take immediate steps to reduce pollution. DEQ spokesman Bill Hayden said the department has not yet seen a proposal from Mirant but "will take a look at what they do propose. The main thing we're looking for is, if they are continuing to operate, it must be in a way that does not violate air-quality standards."

Federal regulators, meanwhile, also are evaluating a petition, filed by the D.C. Public Service Commission, that asks them to order the plant's reopening. In documents that Mirant filed last week with the Federal Energy Regulatory Commission, the company revealed that it is likely to propose the partial reopening.

Amid the blitz of regulatory activity, it remains unclear when the plant, which was providing electricity to homes in the District and Maryland but not Virginia, might reopen even temporarily. And Mirant acknowledges that a full-scale resumption of operations could be more than a year away.

Mirant decided on Aug. 24 to shut down the plant in response to the order from Virginia officials to cut potentially harmful pollution from the coal-fired facility. The directive by the Department of Environmental Quality came after it reviewed the results of an analysis that showed that some pollutants found in the plant's vicinity are sometimes considerably higher than national standards allow.

Neighbors of Mirant have complained for years about what they believe to be high levels of contaminants emanating from the plant. But the 56-year-old plant was supplying enough electricity to serve about 400,000 homes in the District and Maryland, and officials with Pepco and the D.C. Public Service Commission have described it as a vital link in the Washington power grid. Without the plant's generating capacity, there could be a blackout "in much of the District of Columbia" affecting all electricity customers in Georgetown, Foggy Bottom and major portions of downtown Washington if other transmission circuits failed, Pepco wrote in a filing last week with the Federal Energy Regulatory Commission.

"Numerous federal facilities will lose power, including those crucial to the security, safety and welfare of the whole country, such as the FBI, the Justice Department, the State Department," wrote Pepco, which distributes electricity in the region.

Officials at Pepco and the D.C. Public Service Commission acknowledged last week that the plant's shutdown has not

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yet affected the power supplied to residents. "So far, we've gotten by because we haven't had the kind of conditions that could lead to sudden blackouts, like equipment failures, and we've had relatively mild weather," said Richard E. Morgan, D.C. public service commissioner.

"But it still could happen," he added.

Pepco said it doesn't plan to let things get to that point. The company announced that it plans to work with the D.C. commission to accelerate construction of new transmission facilities that would ensure reliable electrical power even without the Mirant plant.

"Given Mirant's recent decisions, we believe action is necessary to satisfy Pepco's obligation to provide reliable service to our customers," said Dennis Wraase, president and chief executive officer of Pepco Holdings Inc. Construction of the transmission facilities is expected to take about 18 months.

Pepco said that for now it supports the D.C. Public Service Commission petition asking federal regulators to order the plant's reopening. Bryan Lee, a spokesman for the Federal Energy Regulatory Commission, would not say when the commission will make a decision.

Mirant remains determined to reopen the plant. "We're confident that we're going to find a solution that will allow us to get our plant back into service and restore the level of electric reliability that we've come to expect," Mirant spokesman Steve Arabia said.

The report that precipitated the shutdown looked at worst-case scenarios involving pollution, weather and operational capacity. Researchers found that under certain conditions, the levels of sulfur dioxide, nitrogen dioxide and particles in the vicinity of the Mirant plant are higher than national ambient air-quality standards allow.

As a result, state officials directed Mirant to take immediate steps to reduce pollution from the plant. Mirant decided to shut the plant down until it could find a way to meet air quality standards.

Atlanta-based Mirant, which filed for bankruptcy in 2003, operates four plants in the Washington area, including three in Maryland: in Montgomery, Prince George's and Charles counties.

Poul Hertel, a neighbor who has helped to lead the fight against the plant, said he is skeptical about Mirant's plan to reopen on a limited basis. He said the problem of polluted downwash from the plant's smokestacks could worsen.

"Downwash is not proportional to how much they are producing, it's more proportional to the speed and velocity of the emissions," Hertel said. "Just because they are operating at lowered capacity doesn't mean the issue is by any way, shape or form resolved."

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## Hair Samples Tell the Tale

By Chuck Hagee

September 8, 2005

What is the level of potentially toxic mercury in the bodies of Alexandrians? That was the question 30 residents hoped to have answered Aug. 24 when they donated samples of their hair to mercury exposure tests being conducted under the aegis of the Sierra Club and Greenpeace.

Joining the 30 volunteers at Lords & Ladies Hair Salon, 605 Franklin St., were Vice Mayor Redella "Del" Pepper and City Councilman Ludwig P. Gaines. Each volunteer submitted to having a lock of their hair cut to be tested for mercury content in their body.

Sharon Frances, owner of the Alexandria salon as well as another in Del Ray, decided to perform the service at the request of one of her regular clients, Lillian White, a Sierra Club member. "Lillian is a good client of ours in Del Ray and we are more than happy to provide this service. It's for a very good cause," Frances said.

"The reason I wanted this done was out of concern over the pollutants being put out by the Mirant plant. This is only one concern over that situation," White said as she assisted the beauticians in gathering the necessary personal profiles from the volunteers.

"This is something that should concern everyone. I'll be interested to hear how these tests turn out," said Gaines.

"I think this is very important. It is something people should be aware of. I really wanted to know what my level of mercury is since I eat a lot of fish," Pepper said.

Coal-burning power plants are the single largest source of mercury pollution in the United States and responsible for 33 percent of the total mercury emissions from all manmade sources nationwide, according to Sierra Club statistics.

"One in six women of childbearing age already has enough mercury in her body to put a fetus at risk of developmental disorders and learning disabilities," said Chris Carney, Mount Vernon Group, Sierra Club.

"Coal-fired power plants emit mercury into our air, where it rains down into our rivers and streams and finds its way to our bodies through contaminated fish. The good news is that there is something we can do about mercury pollution," he said.

"States like New Jersey have already made a commitment to reduce mercury pollution by 90 percent. The technology is out there. We just need to move in that direction," Carney said. Samples gathered at the end of last month were sent to the Environmental Quality Institute at the University of North Carolina-Asheville, which will process the results. Each participant's data will be added anonymously to a UNC research study involving the largest sample size of any study to date on the effects of mercury in the U.S. population.



**Sharon Frances, owner, Lords & Ladies Hair Salon, takes a sample of hair from Councilman Ludwig Gaines during a Sierra Club test for potential toxic levels of mercury in the systems of Alexandria residents.**

[Printable Version](#)





## Hair Samples Tell the Tale

By Chuck Hagee

September 8, 2005

What is the level of potentially toxic mercury in the bodies of Alexandrians? That was the question 30 residents hoped to have answered Aug. 24 when they donated samples of their hair to mercury exposure tests being conducted under the aegis of the Sierra Club and Greenpeace.

Joining the 30 volunteers at Lords & Ladies Hair Salon, 605 Franklin St., were Vice Mayor Redella "Del" Pepper and City Councilman Ludwig P. Gaines. Each volunteer submitted to having a lock of their hair cut to be tested for mercury content in their body.

Sharon Frances, owner of the Alexandria salon as well as another in Del Ray, decided to perform the service at the request of one of her regular clients, Lillian White, a Sierra Club member. "Lillian is a good client of ours in Del Ray and we are more than happy to provide this service. It's for a very good cause," Frances said.

"The reason I wanted this done was out of concern over the pollutants being put out by the Mirant plant. This is only one concern over that situation," White said as she assisted the beauticians in gathering the necessary personal profiles from the volunteers.

"This is something that should concern everyone. I'll be interested to hear how these tests turn out," said Gaines.

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... because she re-

Judith M. ... because she re- fuses to reveal a source while Karl Rowe, President Bush's advisor, remains free despite admitting he helped confirm the identity of a CIA agent."

Miller was sentenced to four months in the Alexandria Detention Center after she refused to testify before a grand jury about her source in the story now embroiling White House Assistant Chief of Staff Karl Rowe. Miller did not write about the

**Alexandria Councilman Andrew H. Macdonald**

ministration for support of "repressive tactics and weakening of constitutional freedoms." "Truth, trust and accountability should be the defining hallmark of American government. When elected officials don't speak the truth and don't uphold the public trust they should be held accountable," Moran said. "Judith Miller is sitting in the Alexandria jail because she was seeking the truth as to who revealed a

SEE RALLY FOR JOURNALIST. PAGE 48

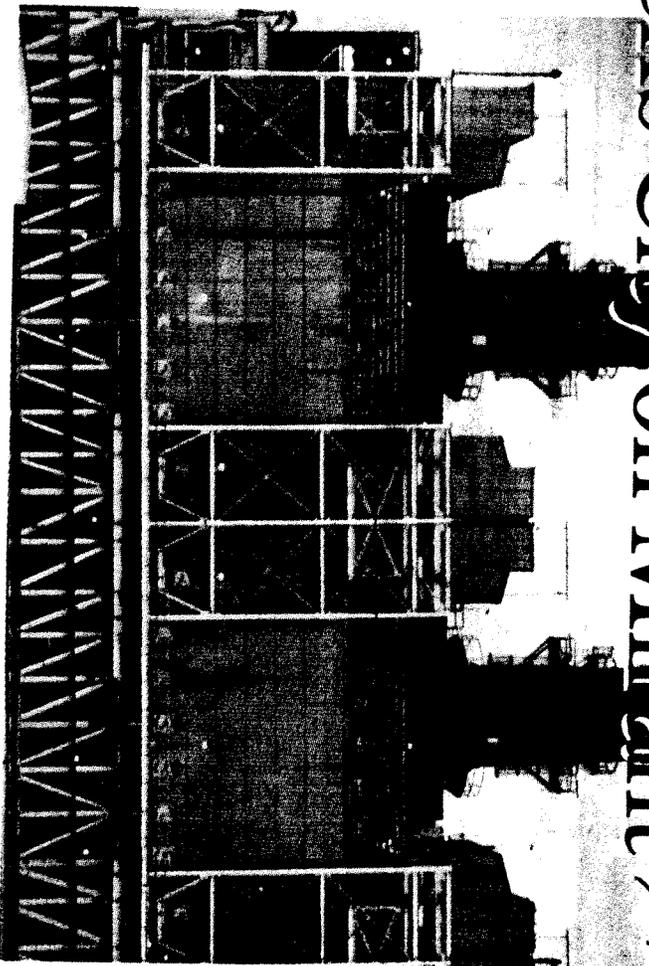
# Court Backs City on Mirant

## Nothing will pass to public view before Alexandria sees it.

By CHUCK HAGEE  
GAZETTE

Alexandria officially became a part of the Mirant Consent Decree process last Friday as a result of a judgement handed down in the U.S. District Court for the Eastern District of Virginia. But, the City will not have a seat at the negotiating table. That was the decision reached by U.S. District Judge Leonie M. Brinkema on Alexandria's petition to intervene in the amended consent decree negotiations pertaining to Mirant's operation of the Potomac

Mirant's Potomac River Generating Station at the north end of Old Town.



Alice Myers and Lisa Krupicka, join protesters at Market Square on Monday afternoon.



River Generating Station at the north end of Old Town. In her decision Brinkema stated the following:

"The City of Alexandria is granted leave to intervene in this civil action on a limited basis according to the following terms: (1) the parties must provide the City with individual notice of all court filings and hearings; (2) the City may file pleadings and participate in any hearings that might be held regarding the entry of a proposed amended consent decree; and (3) the City will have the opportunity to review any proposed amended consent decree before it is lodged with the court."

However, she also said, "The City will not be a party to the ongoing negotiation of the proposed amended consent decree and must sign a confidentiality agreement re

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# Court Backs City on Mirant Decision

FROM PAGE 3

garding its review on any non-public version of such a decree."

At the very outset of the proceedings, Brinkema told the attorneys, "I've resolved this motion pretty much in my own mind. The City clearly has an interest in these matters. But, that doesn't mean they have a seat at the table. It does give them the right to be heard."

Attorney Arnold Rosenthal, U.S. Department of Justice, in an attempt to dissuade Brinkema from granting Alexandria participation argued that her decision would, in effect, "allow Alexandria to have a seat at the table at the last moment and could disrupt the negotiations. The parties are very close to an agreement. It is our intent to expedite this matter as quickly as possible."

Her response to that argument was, "I'm not going to cut Alexandria out of this case. I tend to think their presence will enhance this matter."

**ROSENTHAL REQUESTED** that the Court permit the parties to "finish the decree" at which time they "would share the decree with the City" before it was published in the Federal Register commencing the public comment period. "The City's right to review was solidified by Brinkema's third proviso.

Arguing for the City, Attorney John Britton of Schnader Harrison Segal and Lewis, noted, "Alexandria takes the position that they are not adequately protected by either the Commonwealth or the EPA (U.S. Environmental Protection Agency)." He also pointed out that the consent decree was

submitted in 2004.

"We are very satisfied with the Judge's order. It is very favorable to the City," Britton said after Brinkema entered her decision. "The key result for the City is that it is now a party to the law suit. We can bring directly to the Court's attention any items involving environmental and health issues of concern to the City."

Britton explained, "What's important is that the Judge ordered that Alexandria gets to review and comment on any modified consent decree before it is docketed. We can go before the Court to say we don't agree with the agreement for whatever reason."

Once the decree is published "what took place last September as far as comments are concerned will happen all over again,"

## "The City clearly has an interest in these matters."

**Leonie M. Brinkema,  
U.S. District Judge**

Air Act case pending against Mirant in May in order to protect interests impacting the City and its residents. "Intervention will allow the City the opportunity to advocate on behalf of City residents as proceedings in this case unfold," Alexandria Mayor William D. Euille said at that time.

Council's action was triggered by the disclosure that Mirant had not revealed it did not own two of the plants covered in the consent decree action. They only leased them from a group known as MirMa. After the proposed decree was made public MirMa objected to the terms and sought to intervene in the case.

MirMa Landlords opposed approval of the

decree on the grounds that Mirant was seeking to gain the advantage of relaxed emission standards at the Alexandria plant, which Mirant does own, by requiring new regulations at the leased plants which are presently environmentally compliant. While negotiating the proposed decree, Mirant was also seeking the authority to terminate the leases for the two compliant plants, in a Texas Bankruptcy Court, according to the City.

**MIRMA LANDLORDS** maintain that they were not aware of the consent decree provisions until it was made public and that if the emission provisions were enacted it would "potentially diminish the plants' operational capacity during peak generating times." This brought about the renegotiation of the decree provisions and Council's action to seek City intervention.

Immediately prior to Friday's court hearing, Elizabeth Chimento and Poul Hertel, leaders in the fight to either force the closure of the Alexandria plant or to have it upgraded to comply with environmental emission standards, circulated a flyer summarizing the issues and various law suits. They identified the two main issues as 1. Primary particulate matter emissions; and 2. Downwash.

As to the latter, they noted, "The state-mandated Comprehensive Downwash Study has been held up by delays in protocol establishment." They also presented a brief synopsis of the three law suits underway: Mirant vs. Alexandria; MirMa Landlords' suit to gain intervention; and Alexandria's intervention action.

Mirant sued the City after Council upheld Alexandria Planning Commission's recommendation to revoke Mirant's Special Use Permits and rezone the plant property. "Last

week [July 10] the court stated in a procedural issue, that Mirant has the right to sue the City," the flyer stated.

On June 22, Steven Arabia, director, External Affairs, Mirant Mid-Atlantic, stated in correspondence, "The environmental performance of our Potomac River plant ... is stronger now than it's ever been." He then listed the following improvements to buttress that statement.

❖ New Nitrogen Oxide controls to reduce emissions

❖ A \$10 million project to install new emission controls

❖ Installation of new equipment and procedures to further prevent dust and ash from leaving the plant grounds

❖ Use of a new environmentally safe organic suppressant to reduce potential dust from coal

❖ Installation of automatic door closers at the coal car dumping station

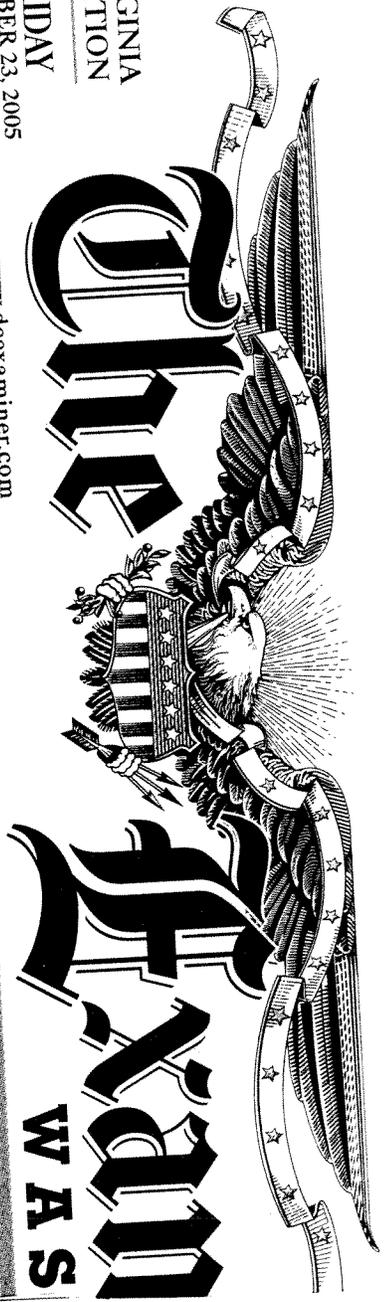
❖ Installation of nearly 1,000 feet of 12-foot high windscreen to prevent windblown coal dust from leaving the coal pile. Installation of a wash station to clean ash-hauling trucks

❖ Washing plant roads and ash-loading area to contain ash in the plant

He also claimed the company's emission control actions are expected "to reduce NOx emissions from the plant by 25 percent from the 2004 levels." And, that other emission control actions have added an additional 10 percent reduction in NOx emission levels from 2003 rates bringing about a total reduction of 35 percent since 2002, according to Arabia.

Rosenthal told the Court the parties hope to have a renegotiated agreement by the end of August. Alexandria will then have an opportunity to review it before it is placed on the public record.





VIRGINIA  
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FRIDAY

SEPTEMBER 23, 2005

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# Mirant sued over pollution

Alexandria slaps power company with lawsuit  
after troubled plant resumes partial operations

City alleges 56-year-old facility not  
complying with emissions standards  
» SEE STORY BY SARAH LESHER, Page 5

City working  
to shut down  
plant again

BY CHRISTY GOODMAN  
Examiner Staff Writer

ard Baier, director of Alexandria and Department of Transportation and Environmental Services.  
After a study showed the plant could not meet national air quality standards, the plant voluntarily shut down in late August rather than be shut down by the Virginia Department of Environmental Quality.  
Baier said the city of Alexandria is exploring an injunction, a lawsuit and a technical review, and it has inspectors at the site.  
The District, too, is studying the situation.  
"Generally, the [D.C.] mayor is all for closing any power plant that is old and polluting. However, we are studying the Mirant situation very carefully because of the need to protect the power grid in the District and ensure that hospitals, who are in this air shed," said Rich-

**MIRANT TIMELINE:**  
■ September 2004: Mirant agrees to a study.  
■ Aug. 19: Results say Potomac River plant exceeds air quality standards.  
■ Aug. 21: DEQ gives the plant a warning.  
■ Aug. 24: Mirant plant shuts down.  
■ Sept. 21: Mirant restarts one of five generators

that DEQ was given less than 24 hours' notice to review Mirant's new numbers before the plant opened. Dave Thompson, a Mirant spokesman, said the plant is operating at 8.5 percent of its total capacity. "We are very comfortable with our science and our decision," Thompson said.  
Diana Artemis of Sierra Club's Mount Vernon chapter said in a statement that Mirant must show conclusive evidence that the restart will not pose a health risk to area residents and that the local power grid should be upgraded as soon as possible.  
"Sadly, Mirant appears to be more interested in their own bottom line than about the health of our children in the metro D.C. area," she said. [goodman@dcxaminer.com](mailto:goodman@dcxaminer.com)



Friday, September 23, 2005

Local News

# Alexandria sues Mirant

## City: Plant not complying with permits

BY SARAH LESHER  
*Special to The Examiner*

The city of Alexandria is seeking a court order to stop Mirant Corp. from operating a single generator part time at its Alexandria power plant. The city alleges that Mirant has no evidence that it can achieve a safe level of toxic emissions even with limited operation.

A spokesman for Mirant said he could not comment on the lawsuit

without further review.

Mirant voluntarily shut down the plant Aug. 24 after an emissions study mandated by the Virginia Department of Environmental Quality showed the plant violated the National Ambient Air Quality Standards.

But Mirant announced Tuesday that it would partially restart the plant Wednesday, saying it was critical for reliable power in the D.C. area, and that a major fix for the whole plant would take three to 18 months. The plant supplies electricity to thousands of homes in the District and parts of Maryland.

Pollution from Mirant was investigated after a preliminary study funded by private citizens in Alexandria showed the plant

expressing dismay and anger at Mirant's decision to start up before Virginia's DEQ could evaluate health dangers. Some are planning to file their own lawsuits.

"We are suing Mirant over their failure to comply with limits set forth in its permits here in Maryland," said Chris Fick, policy advocate for MaryPIRG, a public advocacy group.

"While Mirant stands to make a large profit at today's prices, they should not be allowed to operate if they do not meet" air quality standards, said Julie Crenshaw, chairwoman of the Air Quality Public Advisory Committee to the regional Council of Governments.

[slesher@dcexaminer.com](mailto:slesher@dcexaminer.com)

### MIRANT POWER PLANT

- Built in 1949
- Acquired by Mirant 2000
- Powers 482,000 homes
- Employs 120 people

was depositing toxic emissions. The pollution spreads throughout the region, with the majority crossing the Potomac River into D.C. and Maryland, according to a 2004 analysis by Dr. Jonathan Levy of the Harvard School of Public Health.

### Citizen involvement

Several citizens groups in Maryland and D.C. joined Alexandria in

