

CITY OF ALEXANDRIA

Mirant Potomac River Generating Station

**PROPOSED PROJECT SCHEDULE
AND
PROPOSED AGREEMENT**

**Presentation To
Mirant Community Monitoring Group
June 30, 2008**

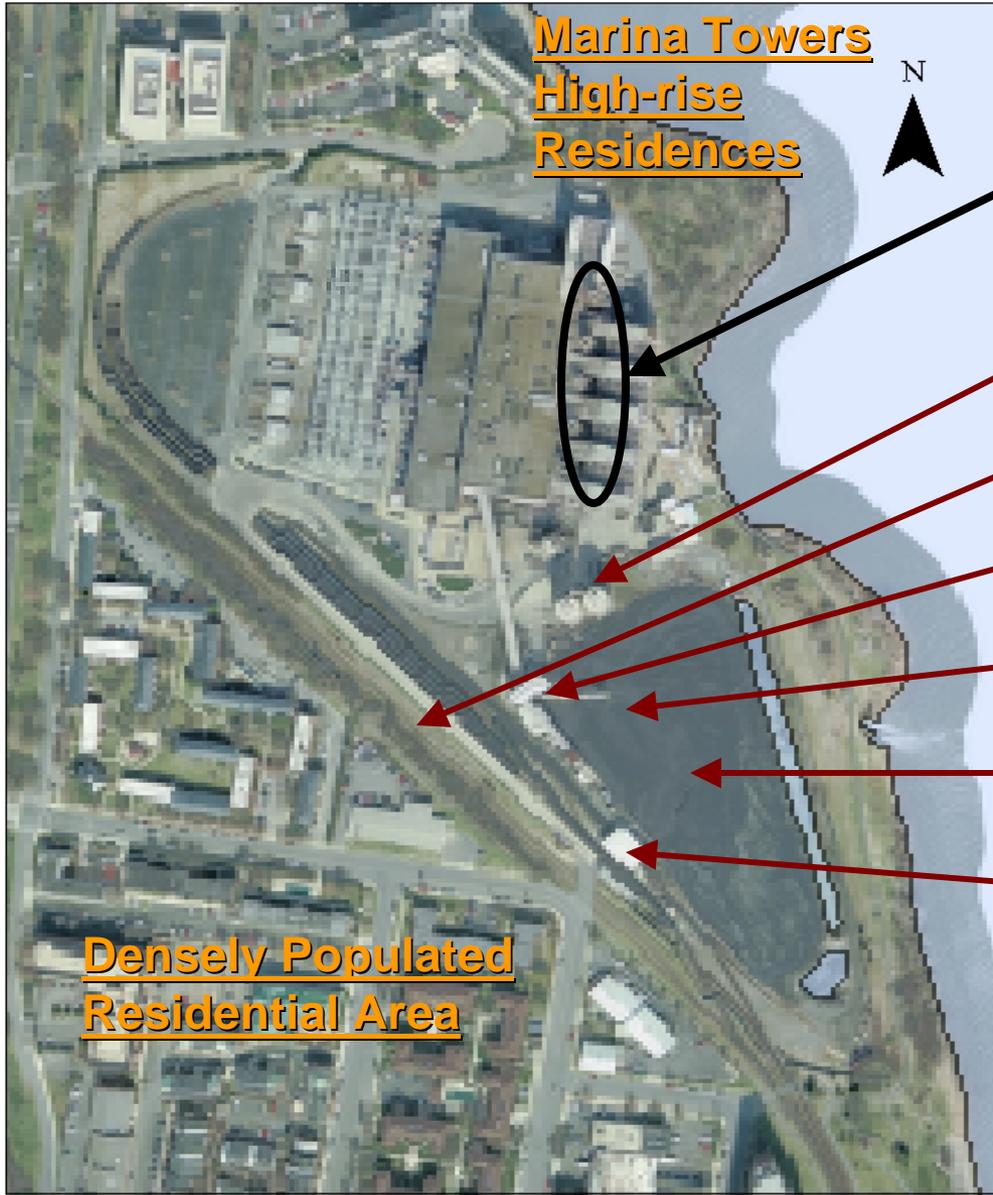


Stacks - tons (2003) :

<u>SO2</u> = 15,139	<u>HCl</u> = 609
<u>PM10</u> = 606	<u>HF</u> = 76
<u>PM2.5</u> = app. 400	<u>NO2</u> = 5,750

- **Ash silos**
- **Ash hauling**
- **Coal breaker**
- **Coal dump**
- **Coal pile**
- **Railcar dump**

Stack heights slightly exceed Marina Towers height.



TERMS

- **June 2007 SO2 Permit:** Issued by the Board, regulates SO2 emissions primarily
- **March 2008 VDEQ 2-Stack Draft Permit:** Held in abeyance by the Board
- **Agreement based proposed 2-Stack Permit:** Will become effective upon completion of Stack Merge
- **Final Permit limits for PM2.5:** After installation of the Project (Fugitive and Stack controls)



SUMMARY OF PROPOSED AGREEMENT

- Mirant will invest **\$34 MILLION** on Pollution Controls
 - Capital improvements only (incl. Engineering Study)
 - Includes controls for stack and fugitive emissions
 - Of the \$34 million, \$ 2 million is allocated towards fugitive emissions controls
- Mirant will receive an agreement based **2-stack permit** from Board
 - Operate up to 5 boilers
 - Receive dispersion credit
 - Will contain limits that are more stringent than VDEQ Draft 2-Stack Permit
 - Requires installation of PM and CO CEMS in 12 months
 - Requires installation of one additional ambient PM2.5 monitor



Agreement Based 2-Stack Permit

- Interim PM2.5 Limits
 - 0.016 lb/MMBtu, 207 tons/yr
 - NAAQS compliance based on:
 - Allowing dispersion credit
 - Expected reduction in background concentrations
 - EPA's AERMOD model with EBD
- Final PM2.5 Limits
 - Upon “Project” completion
 - PM2.5 stack tests
 - Technology based
 - NAAQS compliance via EPA and Board/DEQ approval



Agreement Based 2-Stack Permit Comparison (cont'd)

	Agreement Based 2-Stack Permit	VDEQ Draft 2-Stack Permit
PM2.5	0.016 lb/MMBtu	None
PM2.5	207 tons/yr	None
PM10	0.03 lb/MMBtu	0.03 lb/MMBtu
PM10	325 tons/yr	377 tons/yr
SO2 (3hr)	0.36 lb/MMBtu	0.39 lb/MMBtu
SO2 (24 hr)	0.3 lb/MMBtu	0.3 lb/MMBtu
S Content	0.9 % by wt. Quarterly Average	1.0 % by wt. Annual Average



Agreement Based 2-Stack Permit (cont'd)

- Alternate sorbent requires permit modification
- Mirant to share data with City
 - PM & CO CEMS (at least one year)
 - 5-minute ambient SO₂ data



“Project” Process

- Mirant’s stack merge schedule
 - Upon 2-stack permit issuance
 - Boilers 3, 4, 5 in Fall/Winter 2008
 - Boiler 1,2 in Winter/Spring 2009
- Escrow Account for \$34 Million
 - Upon start of stack merge, if no permit challenge
 - Interest to accrue in the account
- Mirant to drop its challenges
 - Jun 2007 SOP, Permit requirement for stack merge



“Project” Process (cont’d)

- City decides how to spend \$34 MM
- City’s Involvement in “Project” with Mirant
 - Select Engineer
 - Evaluate engineering study
 - Select pollution controls
 - Recommend stack controls to Board for approval
 - Monitor “Project” implementation and testing
 - Mirant to allow access to City



“Project” Process (cont’d)

- Engineering study to be conducted first
- “Project” schedule
 - Fugitive dust controls
 - Study by Nov 30, 2008
 - Controls expected by Nov 30, 2009
 - Up to \$2 MM on fugitive controls
 - Stack Controls
 - Draft study by Apr 15, 2009
 - Final study by July 31, 2009
 - Schedule for controls decided by Engineer
 - Penalty for delays cause by Mirant or City



“Project” Process (cont’d)

- Possible Fugitive Dust Controls
 - Coal dust controls
 - Ash dust controls
 - Roadway dust controls
- Possible Stack Controls
 - Baghouses
 - ESP upgrades
 - Hybrid controls



“Project” Process (cont’d)

- Upon “Project” completion
 - Stack test using EPA methods
 - Include filterable and condensible PM_{2.5}
 - PM_{2.5} NAAQS compliance via EPA/DEQ approval
 - Final limits technology based and smaller of stack test or NAAQS compliance
 - Final PM_{2.5} limits in a revised permit
 - Mirant required to maintain and operate controls continuously



Emissions Comparison (tons/yr)

Pollutant	2003 Actual	Jun 2007 SO2 SOP	Interim 2-Stack	Final 2-Stack
PM2.5	~ 400	None	207	≤207
PM10	~ 600	None	325	325
SO2	~ 15,000	3,813	3,813	3,813
NOx	~ 5,750	3,700 (NOx CD)	3,700*	3,700*

* NOx CAIR limits come into effect in 2009, Approx. 1734 tons/yr for PRGS and approx 700 tons for Ozone Season



Discussion and Questions

Thank you very much.

