

## DeVore, Christy

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**From:** Koerner, Jeff  
**Sent:** Thursday, March 04, 2010 5:26 PM  
**To:** 'KWHITE@southernco.com'  
**Cc:** DeVore, Christy  
**Subject:** FW: Boiler Additive

Kevin,

Based on the excellent Fuel Tech report, we have a good idea of what TIFI MG (magnesium hydroxide) is intended to do.

We have NO information on what TIFI XP (aluminum hydroxide) will do or its purpose.

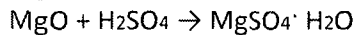
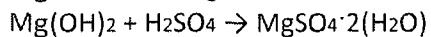
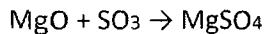
Please contact Fuel Tech and get us some information on: Why TIFI XP is needed for your plant? What will it do differently than TIFI MG? What is the driving chemical mechanism? What are the benefits from using this product? What are the expected emissions increases/reductions?

For example, for TIFI MF, the report indicates:

- Why TIFI MG is needed?

Control opacity by reducing SAM; reducing SAM reduces slag and fouling; reducing slag and fouling results in better combustion efficiency, which also reduced SAM.

- What is the driving chemical mechanism?



- What are the benefits from using this product?

Reduced SAM; reduced opacity; improved air heat efficiency; improved boiler efficiency; improved generation rate; improved heat rate; allowed for fuel flexibility; reduced slagging; and reduced outage time for cleaning.

- What are the expected emissions increases/reductions?

35% reduction in SAM; eliminated visible plume.

We prefer something like this from Fuel Tech for TIFI XP.

Thanks!

Jeff Koerner, New Source Review Section  
850/921-9536

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**From:** White, Kevin [mailto:KWHITE@southernco.com]  
**Sent:** Thursday, March 04, 2010 11:47 AM  
**To:** DeVore, Christy  
**Cc:** Waters, G. Dwain  
**Subject:** RE: Boiler Additive

Christy,

The only information I have is that available on the Fuel Tech website, address provided in the application's project description. With respect to test data, we have been unable to obtain test data from Fuel Tech or other Southern Company generation sites. As with previously permitted boiler additive request, we plan to conduct PM testing to verify compliance.

Kevin M. White, P.E.  
Gulf Power Company  
Environmental Affairs  
850-444-6537 (office)  
850-336-6222 (cell)

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**From:** DeVore, Christy [mailto:Christy.DeVore@dep.state.fl.us]  
**Sent:** Thursday, March 04, 2010 9:39 AM  
**To:** White, Kevin  
**Subject:** RE: Boiler Additive

Kevin,

Thank you. We found information on TIFI Mg as you can see in the attachment, but not on TIFI XP. Do you have any information on TIFI XP as we found for TIFI Mg or any other information that would help us in our review? Has Southern Company used this technology in any of their plants and if so, please send me test results.

*Christy DeVore, P.E.  
Bureau of Air Regulation  
New Source Review  
Telephone (850) 921-8968*

*The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.*

**From:** White, Kevin [mailto:KWHITE@southernco.com]  
**Sent:** Thursday, March 04, 2010 8:44 AM  
**To:** DeVore, Christy  
**Cc:** Waters, G. Dwain  
**Subject:** RE: Boiler Additive

Christy,

The boiler additives will be injected into the boiler at computer modeled locations. Therefore, steady-state and soot blowing operational emissions will exit the boiler and go through each unit's NOx control device (Unit 7-SCR, Units 4-6-SNCR), each unit's electro-static precipitator (ESP), and finally the scrubber.

If you have any additional questions concerning this air construction permit application, please let me know.

Kevin M. White, P.E.

Gulf Power Company  
Environmental Affairs  
850-444-6537 (office)  
850-336-6222 (cell)

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**From:** Waters, G. Dwain  
**Sent:** Wednesday, March 03, 2010 6:12 PM  
**To:** White, Kevin  
**Subject:** Fw: Boiler Additive

Let me know if you wish me to respond? Dwain

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Dwain Waters, QEP

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**From:** DeVore, Christy <Christy.DeVore@dep.state.fl.us>  
**To:** Waters, G. Dwain  
**Sent:** Wed Mar 03 14:37:47 2010  
**Subject:** Boiler Additive

For the TIFI boiler additive. During soot blowing, does that go through any control devices? Thanks.

*Christy DeVore, P.E.*  
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Bureau of Air Regulation  
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