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August 30, 2010

Mr. Jeff Koerner, PE
Program Administrator
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

Re: North County Resource Recovery Facility Unit 1 & 2 Refurbishment Project
Letter of Intent and Waiver Request for 300 F Temperature Limit
Air Construction Permit 0990234-015AC/PSD-FL-108H

Dear Mr. Koerner:

The Solid Waste Authority of Palm Beach County (SWA) operates a Municipal Solid Waste Combustor (MWC) at the North County Resource Recovery Facility (NCRRF) in West Palm Beach. The Florida Department of Environmental Protection (FDEP) issued an Air Construction (AC) permit 0990234-015AC/PSD-FL-108H authorizing the refurbishment of the MWC Boiler Units 1 and 2 in September 2009. This letter of intent is to clarify and determine when we expect the refurbished boilers (Unit 1 & Unit 2) to be in compliance with all air permit conditions during the time that the refurbished boilers and new Air Pollution Control (APC) Systems are re-commissioned and resume to normal full time operation.

On the August 12, 2010 conference call, FDEP provided clarification on when the continuous emissions monitoring system (CEMS) relative accuracy test audit (RATA) is to be conducted, when air permit limits are to be met, and when to conduct the stack test. A preliminary project schedule (dated August 4, 2010) was provided to FDEP on August 11, 2010 to be used as discussion points for the August 12 conference call. Attached you will find the August 12, 2010 meeting notes. As discussed, FDEP will review this letter of intent and issue a letter of authorization for Units 1 & 2, which will clarify the compliance requirements.

Please find attached the August 27, 2010, version of the project schedule for the Boiler #1 Demonstration and Compliance Testing. This schedule is an update to the schedule sent on August 11, 2010. The schedule for Unit 2 is currently being developed and will be provided to the Department at a later date.

Project Milestones and Projected Date of Compliance with Permit Conditions

The August 27, 2010 project schedule provides the expected timeframes and milestones for the Boiler #1 construction, system optimization/tuning, and permit activities. The following summarizes the milestone dates for permit compliance with Boiler #1:

- September 7, 2010 - Refuse derived fuel (RDF) First Fire for Boiler #1 – The unit commences combusting RDF.
- September 13, 2010 - The CEMS RATA compliance test is scheduled shortly after RDF is first introduced to the boiler and the boiler is able to operate safely and reliably at or above 50 percent of the rated capacity for the unit, which will ensure that the preliminary tuning of the APC systems is based upon accurate data.
- September 26, 2010 - The preliminary tuning of the APC systems is scheduled to be completed and this is considered to be “construction completion” for Boiler #1. For the requirements of the AC permit Specific Condition 17, the “construction completion” will start the 60 day time period within which the compliance testing of Boiler # 1 is required.
- October 17, 2010 - Optimization is completed. This optimization is scheduled to be completed within approximately three weeks following “construction completion”. The APC systems require optimization to ensure compliance with the emission limits in the permit at all normal operating loads. This optimization period includes fine tuning the reagent injection rates and varying the temperature of the exhaust gas as it leaves the Spray Dryer Absorber (SDA) by varying the amount of water injected in preparation for the compliance testing. After optimization, the Boiler status will be normal full time operation and is expected to be in full compliance with the permit conditions. However, if there is an unforeseen delay in the schedule, this time period can be extended with FDEP approval upon notification of the circumstance.

Boiler #1 is required to begin reporting excess emissions, as defined by Title V permit (i.e. 24-hour notification, quarterly reports, etc.) once normal full time operation begins. The CEMS data collected during the period from the RATA test to normal full time operation commencement will be provided to FDEP in a summary report that accompanies the compliance test report for informational purpose only and not for permit compliance use.

- October 31, 2010 - The compliance test for Boiler #1 is scheduled to commence during this week and FDEP will be notified of the test date at least 15 days before the testing.

Please understand that the schedule provided is based upon the projection of activities to be completed at this time. If there are any changes to the schedule that affects the dates in this letter due to construction activities or unexpected circumstances or issues, we will notify the FDEP.

Temperature Waiver Request during Compliance Testing

SWA respectfully requests a waiver to conduct the compliance test at a temperature above that specified in the existing Title V permit of 300°F exiting the SDA. This waiver will allow SWA to collect performance data at a higher temperature, which will be used to support a permit amendment application to allow the use of a higher temperature as revised in the AC permit, Revised Permit Condition 19 (Specific Condition 6) and to develop a compliance plan for Unit 2 to use the new temperature limit with the baghouses.

We appreciate your review of this letter of intent and look forward to receiving the letter of authorization. If you have any questions or comments please contact Mary Beth Morrison (561) 640 4000 ext. 4613

Very truly yours,

A handwritten signature in black ink, appearing to be 'M. Hammond', with a horizontal line underneath. Below the line, the initials 'FTR' are written.

Mark Hammond
Executive Director

Attachments

Cc: L Anderson (FDEP – Southeast District)
B Forrest (FDEP-Southeast District)
Mark McLean (SWA)
MB Morrison (SWA)
R Worobel (SWA)
L Richter (Malcolm Pirnie)
J Krupa (Malcolm Pirnie)
K Liang (Malcolm Pirnie)



MEETING NOTES

**SWA/FDEP Conference Call
August 12, 2010 2:00 – 3:00 pm**

Meeting Attendees

<i>Name</i>	<i>Organization</i>	<i>Name</i>	<i>Organization</i>
Jeff Koerner	<i>FDEP (Tallahassee)</i>	Mary Beth Morrison	<i>Solid Waste Authority</i>
Bill Forrest	<i>FDEP (SED)</i>	Bob Worobel	<i>Solid Waste Authority</i>
Joe Krupa	<i>Malcolm Pirnie</i>	Dave Broten	<i>Solid Waste Authority</i>
Deborah Caston	<i>Malcolm Pirnie</i>	Mark Davis	<i>PBRRC</i>

Meeting Purpose

Review Boiler 1 Draft Start up Schedule

Clarify compliance questions with respect to the start up schedule

Meeting Notes

1. When must the boiler be in compliance with all permit conditions?

- (a) During the period from RDF first fire to compliance (stack) testing, when does the unit need to be in compliance with permit limits for CEMS pollutants (NO_x, CO, SO₂, steam flow, temp)?
- (b) When does the 3-hour window for start-up, shutdown and malfunction per occurrence become effective?
- (c) When are excess emissions required to be reported?

In the current Title V permit the boiler is required to be in compliance with all permit conditions within a 3 hour window of boiler startup, shutdown, and malfunction, per occurrence. After this 3 hour timeframe, all emissions in excess of the permit conditions require reporting and may be considered to be violations. FDEP noted that this condition is intended for a boiler currently in operation and is not applicable during the Boiler 1 “shake down” period when all the APC is being tuned.





FDEP staff were not comfortable with Boiler 1 being in full operation and Boiler 2 decommissioned for an extended period without Boiler 1 being in full compliance. The FDEP initially noted that Boiler 1 should be fully in compliance with permit limits when Boiler 2 was taken out of service. However, FDEP agreed to allow for an additional 2-3 week period after construction of Boiler 1 is complete i.e. when initial tuning of APC systems is complete) for additional fine tuning, before the permit conditions would become enforceable. Additionally, Boiler 1 emissions compliance test will be conducted within 60 days of completing construction.

The end of the 2-3 week period of APC system optimization following construction completion can be defined as the beginning of normal full time operation. However, if there is a force majeure, this time period can be extended with FDEP approval. Once in normal full time operation, Boiler 1 should be in compliance with the permit conditions, and begin reporting excess emissions.

When should CEMS be RATA tested?

FDEP encouraged SWA to schedule the RATA testing as early as possible in the start-up schedule to ensure that CEMS data was valid for APC system tuning purposes.

Are CEMS data and any emission limit excursion during the start up period required to be reported to FDEP as excess emissions?

FDEP indicated that they would like the CEMS RATA to be performed as early as possible during the start up period and that they would not use the collected data during the system optimization period for enforcement purposes. They were interested in receiving a summary copy of the collected CEMS data (between the RATA test to the end of the system optimization period) for in house use only. The summary report could be provided with the emissions compliance test report. Once normal full time operation begins, then excess emissions would be reportable, as defined by Title V permit (i.e. 24-hour notification, quarterly reports, etc.).

When is the temperature limit of 300F for the Spray Dryer Absorber in effect, and when does the temperature limit in the AC permit become effective?

FDEP noted that existing 300 F temperature limit is in effect until after a Title V permit modification application is submitted. The new temperature limit (based upon that measured during



testing) was intended for use with the baghouses that are being installed to replace the ESP's as part of the refurbishment project. A Title V permit amendment application was submitted, however, the request to remove the temperature condition was withdrawn as the FDEP asked for assurance that the emission limits would be met at the higher temperature with the ESPs.

To demonstrate compliance at a higher temperature with baghouses, the SWA can request that the 300 F temperature limit condition be waived during stack testing. The results of the stack testing will be used to support the Title V permit amendment for Unit 1 and to develop a compliance plan for Unit 2 to use the new temperature limit with the baghouses.

Next Steps

Malcolm Pirnie/SWA will draft a letter of intent to FDEP outlining the proposed milestones of when the system optimization is complete, when normal full time operation begins, and when we expect the facility to be in compliance with the permit conditions. The summary report of CEMS data collected after the RATA up until normal full time operation begins will be submitted to FDEP with the emissions compliance test report. The letter of intent will also request a waiver to the temperature limitation during compliance testing of Boiler 1 and 2.

FDEP will respond to this letter of intent with a letter of authorization which will clarify the compliance requirements for the facility during this start up period.

NCRRF 2010 Facility Refurbishment Boiler #1 Demonstration and Compliance Testing

Permit Number 0990234-015-AC/PSD-FL-108H

As of 08/27/2010

Activity ID	Activity Name	Duration (Days)	Start	Finish	Predecessors	August 2010		September 2010					October 2010					November 2010				December 2010				January 2011				February 2011				March 2011				April 2011			
						6	02	09	16	23	30	06	13	20	27	04	11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24	31	07	14	21	28	07	14	21	28
Construction/Commissioning Activities						30	09-Aug-10 A	07-Sep-10																																	
EE11490	Burner Management System Check-Out	3	09-Aug-10 A	11-Aug-10 A	EE11040		■																																		
EE11040	Gas Path Check Out (No Fire)	3	09-Aug-10 A	11-Aug-10 A			■																																		
EE11080	First Fire Boiler #1 (Natural Gas)	1	12-Aug-10 A	12-Aug-10 A	EE11490		I																																		
EE11470	KBR First Fill PAC Silo	1	16-Aug-10 A	17-Aug-10 A	EE11460		■																																		
EE11085	Refractory Cure	6	19-Aug-10 A	23-Aug-10 A	EE11080		■																																		
EE11440	Alkaline Boil Out Boiler #1	4	24-Aug-10 A	27-Aug-10	EE11085		■																																		
EE11450	Chemical Clean Boiler #1	3	28-Aug-10	30-Aug-10	EE11440		□																																		
EE11125	Steam Blows Boiler #1	5	31-Aug-10	04-Sep-10	EE11450		□																																		
EE11070	Install Remaining FFH Bags and Precoat	2	05-Sep-10	06-Sep-10	EE11125		□																																		
EE11500	Restore Boiler #1	2	05-Sep-10	06-Sep-10	EE11125		□																																		
EE11220	RDF First Fire Boiler #1	1	07-Sep-10	07-Sep-10	EE11500, EE11070		I																																		
System Tuning Activities						19	08-Sep-10	26-Sep-10																																	
EE11330	Boiler Tuning	9	08-Sep-10	16-Sep-10	EE11220		▬																																		
EE11530	Baghouse (FFH) Tuning	5	10-Sep-10	14-Sep-10	EE11330		▬																																		
EE11355	Spray Dryer Absorber Tuning	9	10-Sep-10	18-Sep-10	EE11330		▬																																		
EE11350	Overfire Air Tuning	5	17-Sep-10	21-Sep-10	EE11330		▬																																		
EE11360	SNCR Tuning	5	22-Sep-10	26-Sep-10	EE11350		▬																																		
EE11365	All Tuning Complete	0		26-Sep-10	EE11530, EE11360, EE11355, EE11350, EE11330		◆	All Tuning Complete																																	
EE11540	Construction Complete	0		26-Sep-10	EE11365		◆	Construction Complete																																	
Permit/Regulatory Activities						142	30-Jul-10 A	19-Dec-10																																	
EE11460	Notification to State -- PAC Silo Opacity Testing	0	30-Jul-10 A				◆	Notification to State -- PAC Silo Opacity Testing																																	
EE11590	PAC Silo Opacity Testing	1	16-Aug-10 A	17-Aug-10 A	EE11460, EE11470		I																																		
EE11550	Notification to State -- CEMS RATA Testing / COMS Audit (15 D Prior)	0	24-Aug-10 A		EE11122		◆	Notification to State -- CEMS RATA Testing / COMS Audit (15 D Prior)																																	
EE11122	CEMS RATA Testing / COMS Audit	2	13-Sep-10	14-Sep-10	EE11220		□																																		
EE11510	Notification to State -- RDF First Fire (15 D After)	0	22-Sep-10		EE11220		◆	Notification to State -- RDF First Fire (15 D After)																																	
EE11480	Submit PAC Opacity Test Report To State (45 D After Test)	0		01-Oct-10	EE11470		◆	Submit PAC Opacity Test Report To State (45 D After Test)																																	
EE11520	Notification to State for Permit Compliance Test (15 D Prior)	0	16-Oct-10		EE11430		◆	Notification to State for Permit Compliance Test (15 D Prior)																																	
EE11570	Submit RATA Test Report to State (45 D After Test)	0	30-Oct-10		EE11122		◆	Submit RATA Test Report to State (45 D After Test)																																	
EE11430	Permit Compliance Test (34 D After Construction Complete)	5	31-Oct-10	04-Nov-10	EE11540		□																																		
EE11610	PERMIT COMPLIANCE TEST DEADLINE (60 D After Construction Complete)	0		25-Nov-10	EE11540		◆	PERMIT COMPLIANCE TEST DEADLINE (60 D After Construction Complete)																																	
EE11600	Submit Permit Compliance Test Report to State (45 D After Test)	0		19-Dec-10	EE11430		◆	Submit Permit Compliance Test Report to State (45 D After Test)																																	

Data Date: 27-Aug-10

Run Date: 27-Aug-10

Remaining Level of Effort
 Remaining Work
 ◆ Milestone
 Actual Work
 Critical Remaining Work



Can you make a copy from your hard copy for me? Thanks, Jeff

August 30, 2010

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Florida Department of Environmental Protection
Division of Air Resource Management
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Tallahassee, Florida 32399-2400

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