**NORTH CAROLINA DIVISION OF AIR QUALITY**

# Air Permit Review

**Permit Issue Date: MM/DD/YYYY**

**Region:** Wilmington Regional Office
**County:** Columbus
**NC Facility ID:** 2400036
**Inspector's Name:** Russell Morgan III
**Date of Last Inspection:** 09/28/2010
**Compliance Code:** 3 / Compliance - inspection

**Facility Data**

**Applicant (Facility's Name):** International Paper - Riegelwood Mill

**Facility Address:**
International Paper - Riegelwood Mill
865 John L Riegel Road
Riegelwood, NC 28456

**SIC:** 2631 / Paperboard Mills
**NAICS:** 32213 / Paperboard Mills

**Facility Classification: Before:** Title V **After:** Title V
**Fee Classification: Before:** Title V **After:** Title V

**Permit Applicability (this application only)**

**SIP:**
**NSPS:**
**NESHAP:** 112(j)
**PSD:**
**PSD Avoidance:**
**NC Toxics:** 2D.1109
**112(r):**
**Other:**

**Contact Data**

| Facility Contact | Authorized Contact | Technical Contact |
|---|---|---|
| Gary Morrow<br><br>(910) 362-3309<br>John L Riegel Rd<br>Riegelwood, NC 28456 | Floyd Whitmire<br>Mill Manager<br><br>865 John L Riegel Road<br>Riegelwood, NC 28456 | Edward Kreul<br>Manager - Environment Health and Safety<br>(910) 655-6229<br>865 John L Riegel Road<br>Riegelwood, NC 28456 |

**Application Data**

**Application Number:** 2400036.09B
**Date Received:** 09/10/2009
**Application Type:** 112(j) Part I
**Application Schedule:** State

**Existing Permit Data**
**Existing Permit Number:** 03138/R34
**Existing Permit Issue Date:** 04/30/2010
**Existing Permit Expiration Date:** 11/30/2012

**Review Engineer:** Joseph Voelker

**Review Engineer's Signature:** **Date:**

**Comments / Recommendations:**
**Issue** 03138/R35
**Permit Issue Date:**
**Permit Expiration Date:**

## I. Purpose of Application

International Paper - Riegelwood Mill (IP) is located in Riegelwood, Columbus County, North Carolina.

The NC DAQ received a Part 2 MACT "Hammer" application from this facility asking that the NC DAQ establish 112(j) emissions limitations in accordance with NC DAQ's recommendations for the following sources:

| Emission Source ID No. | Emission Source Description | Control Device ID No. | Control Device Description |
|---|---|---|---|
| PB1 | one natural gas/No. 6 fuel oil/Noble Oil Services No. 4 equivalent used oil -fired power boiler (250 million Btu per hour maximum permitted firing rate) | SCRB | equipped with a compressed air spray nozzle-type wet scrubber (129 gallons per minute minimum caustic solution injection rate, |

| Emission Source ID No. | Emission Source Description | Control Device ID No. | Control Device Description |
|---|---|---|---|
| PB2 | one bark/coal/wood fiber sludge/No. 6 fuel oil/woodwaste absorbed oil residue/natural gas /Noble Oil Services No. 4 equivalent used oil-fired power boiler with TRS gas injection (425 million Btu per hour maximum permitted heat input rate for bark/wood fiber sludge/oil/waste oil/coal/natural gas/hydrogen and combination firing) | | Over Fired Air combustion (OFA), a multicyclone (240 nine inches in diameter tubes) and a variable throat venturi-type wet scrubber/separator (1,500 gallons per minute minimum caustic solution injection rate), |
| PB5 | one bark/coal/wood fiber sludge/oil/woodwaste absorbed oil residue/No. 6 fuel oil /Noble Oil Services No. 4 equivalent used oil-fired power boiler with TRS gas injection (249 million Btu per hour maximum permitted heat input rate for oil/coal firing and 600 million Btu per hour maximum permitted heat input rate for bark/wood fiber sludge/fossil fuel combination firing, ID No. PB5) | SCRB | Over Fired Air combustion (OFA), a multicyclone (304 nine inches in diameter tubes), and a variable throat venturi-type wet scrubber (1,300 gallons per minute minimum caustic solution injection rate) |

IP proposes to comply with the HCl, TSM, and mercury limits using a health-based compliance approach (HBCA), stack testing, and fuel content monitoring. For CO, the Permittee proposes the installation and operation of continuous emission monitors (CEMs).

A preliminary compliance demonstration is included in this application based on site-specific fuel sampling data, engineering stack test data, and stack test data from similar sources. Being a preliminary demonstration, the Permittee will have to verify everything presented here (and is expecting to do so). The Permittee optimized its risk analysis by increasing the emission rates of all HAPs included in the analysis by a factor of 10 to 100 to minimize any permit modifications necessary upon the completion of the initial compliance requirements.

# II. Chronology

| Date | Description |
|---|---|
| September 10, 2009 | A Part 2 MACT Hammer Application was received in the RCO |
| October 10, 2010 | Application assigned to Joe Voelker |
| October 15, 2010 | Mark Yoder of the AQAB issued a memo stating: "this analysis demonstrates that the facility long term non-carcinogenic inhalation risk and the long term carcinogenic risk are both less than 1.0, indicating that the facility is considered to be "low risk" for the modeled HAPs". |
| November 4, 2010 | Amy Marshall and Joe Voelker discussed the expected testing to be conducted prior to the compliance date to verify and validate the assumptions in the permit application. Joe Voelker stated it was clear that the intent of the application was a preliminary analysis in good faith. Upon further discussion, Ms. Marshall decided to, in an attempt to minimize any possible issues regarding the applicability of the 112(j) or the 112(d) Boiler MACT (which will likely be promulgated by then), resubmit the risk analysis based on optimized emission rates. |
| November 4, 2010 | The revised analysis was submitted via email to this office. |
| November 5, 2010 | Jerry Freeman of the AQAB issued a memo stating: *"this analysis demonstrates that the facility long term non-carcinogenic inhalation risk and the long term carcinogenic risk are both less than 1.0, indicating that the facility is considered to be "low risk" for the modeled HAPs".* |
| December 16, 2010 | Draft sent to Permittee for comment |

| Date | Description |
|---|---|
| January 20, 2011 | Conversation occurred with Don van der Vaart, John Evans, Joseph Voelker and Amy Marshall. The DAQ requested that, in light of the proposed 112(d) rule, assess the ambient impacts of hydrogen fluoride (HF) and hydrogen cyanide (HCM) with respect to the NC Air Toxics Rules Acceptable Ambient levels (AALs). |
| January 24, 2011 | Dispersion modeling and ambient impacts analysis requested on January 20, 2011 was received in the RRO. |
| ~~TBD~~ | ~~Concurrent public and EPA public comment period begins. Public Notice was published in the XYZ.~~ |
| ~~TBD~~ | ~~Public Comment Period ended. No comments received.~~ |

# III. Regulatory Review

**15A NCAC 2D .1109 – CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters** – On July 20, 2007, the D.C. Circuit Court vacated the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, which had been promulgated under 40 CFR 63, Subpart DDDDD. The North Carolina Attorney General's office has determined that the NESHAP vacatur equates to the failure of the U.S. EPA to promulgate a standard as required under Section 112(d) of the Clean Air Act (CAA). As a result, the site-specific Maximum Achievable Control Technology (MACT) standards required under CAA §112(j), commonly referred to as the MACT "hammer" provisions, have been triggered. North Carolina regulations implementing the MACT hammer are found at 15A NCAC 2D .1109.

NC DAQ has developed this guidance to provide standards and compliance procedures that it has determined meet the requirements of § 112(j) (http://daq.state.nc.us/permits/112j/).

The NC DAQ received a Part 2 MACT "Hammer" application from this facility asking that the NC DAQ establish 112(j) emissions limitations in accordance with NC DAQ's recommendations. The facility proposed to comply with the total selected metals (TSM), mercury (Hg), and carbon monoxide (CO) emission limitations that are consistent with the NC DAQ application guidance. NC DAQ has developed this guidance to provide standards and compliance procedures that it has determined meet the requirements of § 112(j), known as the "model rule."

The model rule provides emission limitations by subcategories of boilers and process heaters for the following pollutants:

| Regulated Pollutant or Surrogate | Comments |
|---|---|
| Mercury (Hg) | Regulated pollutant |
| Hydrogen Chloride (HCl) | Surrogate for all acid gases (inorganic HAP) |
| Carbon Monoxide (CO) | Surrogate for all organic HAP |
| Total Selected Metals (TSM) | the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.; surrogate for non-mercury metallic HAP |
| Particulate Matter, filterable (PM) | Surrogate for TSM |

Per the model rule, the permittee can comply with the emissions limitations by various methods, including periodic source testing and fuel analysis, the establishment of operating limits and associated monitoring, recordkeeping and reporting (M/R/R). As all the boilers burn multiple fuels, the emission limitations will be proportional to the type and amount of fuel burned and the fuel specific emission limitation.

Section 15 of the model rule also allows for an HBCA, which essentially is a risk analysis approach modeled on the vacated boiler MACT (MACT Subpart DDDDD, originally promulgated September 13, 2004). The model rule approach extends this approach to all HAPs with the exception of CO.

## Compliance approach

### CO

The Permittee will install CO CEMS on all three affected boilers. The CO emission limitations are as follows:

| Boiler | Fuel fired | CO Limit (30 day rolling average) |
|---|---|---|
| PB1 | Natural gas | NA – Work practices |
| | No.4 equivalent used oil/No.6 fuel oil [residual] | 28 ppmvd, 7% $O_2$ |
| PB2 | Natural gas | NA – Work practices |
| | No.4 equivalent used oil/No.6 fuel oil [residual] | 28 ppmvd, 7% $O_2$ |
| | Wood/woodwaste/bark [green wood] | 834ppmvd @7%$O_2$ |
| | Coal | 133 ppmvd, 7% $O_2$ |
| PB5 | Natural gas | NA – Work practices |
| | No.4 equivalent used oil/No.6 fuel oil [residual] | 28 ppmvd, 7% $O_2$ |
| | Wood/woodwaste/bark [green wood] | 834 ppmvd @7%$O_2$ |
| | Coal | 133 ppmvd, 7% $O_2$ |

The emission limitations in practice will be proportional to the type and amount of fuel burned and the fuel specific emission limitation. For example, when PB2 is operating at a total heat input of 100 mmBtu/hr, and 50% of the heat input is from the combustion of natural gas and No. 6 fuel oil respectively, its CO limit would be 0.5*66+0.5*28= 47 ppmvd@7%$O_2$.

The Permittee will be required to perform continuous monitoring of CO and $O_2$ via the CEMS. Section 11 of the model rule addresses the continuous monitoring requirements, including performance specifications and performance evaluation requirements. These requirements are typical of CO CEMS installed for other regulatory compliance applications.

**TSM**

TSM consists of the combination of the following eight metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

As allowed by the model rule, the Permittee has opted to comply with the HBCA for the following subset of six TSM HAPs: Beryllium, Cadmium, Lead, Manganese, Nickel and Selenium. Chromium and Arsenic were not included in the HBCA.

**Chromium and Arsenic**

The allowable TSM limits under the model rule for the boilers are as follows:

| Boiler | Fuel fired | TSM Limit (lb/mmBtu) |
|---|---|---|
| PB1 | Natural gas | NA |
| | No.4 equivalent used oil/No.6 fuel oil [residual] | 0.002 |
| PB2 | Natural gas | NA |
| | No.4 equivalent used oil/No.6 fuel oil [residual] | 0.002 |
| | Wood/woodwaste/bark [green wood] | 0.0003 |
| | Coal | 0.0004 |
| PB5 | Natural gas | NA |
| | No.4 equivalent used oil/No.6 fuel oil [residual] | 0.002 |
| | Wood/woodwaste/bark [green wood] | 0.0003 |
| | Coal | 0.0004 |

Per the model rule, the permittee is allowed to remove the contribution of each individual TSM HAP that was used in the HBCA in the determination of compliance with the allowable TSM limit. Thus, in this case, the Permittee will comply with the TSM emission limit through the contributions of only Arsenic and Chromium.

The Permittee intends on determining initial compliance with the TSM limits through stack testing (performance testing) and/or fuel analysis per the procedures in the model rule. Ongoing compliance will be a combination of periodic performance testing or fuel analysis, and operating limitations on the respective control devices (wet scrubbers of varying designs on all three boilers) established during the initial performance testing and associated M/R/R.

**Remaining TSM HAPS**

The Permittee is choosing to utilize the HBCA, specifically the site specific compliance demonstration [Section 15 (c) of the model rule] such that, not only are none of the Hazard Quotient (HQ) values for each TSM HAP greater than 1.0 at

locations where people live or congregate (e.g., schools, daycare centers, etc.), but the summation of the HQ for all TSM HAPs, defined as the Hazard Index (HI), is less than 1.0 at locations where people live or congregate. Note the HI calculated also includes the HQ for mercury and HCL as well. Thus the HBCA site specific compliance demonstration encompasses Beryllium, Cadmium, Lead, Manganese, Nickel and Selenium, HCL and Mercury. The HBCA site specific demonstration will be discussed separately elsewhere.

**Mercury**

The Permittee is choosing to utilize the HBCA site specific compliance demonstration as allowed in Section 15 (c) of the model rule as an alternative to the required mercury emission limitations in Section 2 of the model rule. The HQ calculated was included in the HI calculated for the HBCA. The HBCA will be discussed separately elsewhere.

**HCL**

The Permittee is choosing to utilize the HBCA site specific compliance demonstration as allowed in Section 15 (c) of the model rule as an alternative to the required HCL emission limitations in Section 2 of the model rule. The HQ calculated was included in the HI calculated for the HBCA. The HBCA will be discussed separately elsewhere.

**HBCA site specific demonstration**

The intent of the HBCA analysis to show that the long term inhalation risks (non carcinogenic and carcinogenic) associated with the inhalation of the HAPs at the modeled emission rates is considered low. This is shown by the calculation of the hazard index (HI) and hazard quotients (HQ). The calculated HI or HQ must be less than or equal to 1.0 at a location where people live in order for a facility to utilize the HBCA. The hazard quotient is compound-specific and is the result of the modeled concentration divided by the reference concentration (RfC). The RfC is defined as an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. Therefore, the HQ is simply a ratio of the installation's predicted concentration to the RfC.

The hazard index is simply the sum of HQ values when multiple compounds must be evaluated concurrently. Therefore, the HI will be determined as the sum of the HQ for each HAP. The resulting ratio must be less than 1.0 to utilize the HBCA.

The analysis presented in the application is preliminary. In short, the determination of the emission rates used in the analysis are not in compliance with the methodologies specified in Section 15 of the model rule. However, the Permittee is confident that the analysis supports the expectation that the facility will be able to demonstrate compliance with the HBCA for HAPs as allowed per the model rule.

Upon review of the analysis presented in the application, the preliminary analysis appears to be substantially conducted according to model rule guidance (Section 15) which is essentially the HBCA methodology that was included in the now vacated Boiler MACT.

Reasonable worst case emission rates were determined per pollutant based on source tests and fuel analysis and adjusting them accordingly per the model rule. Section 4 of the application describes the current available fuel analysis and source test data that was used in Section 5 to calculated worst case emission rates. Section 6 describes the dispersion modeling analysis, which ultimately determines the locations and magnitudes of the maximum impacts associated with the emissions of the HAPs considered. Section 7 describes the risk analysis procedure itself.

The dispersion and risk analysis are reviewed separately by the air quality and analysis branch (AQAB). On October 15, 2010, Mark Yoder of the AQAB issued a memo stating:

> "this analysis demonstrates that the facility long term non-carcinogenic inhalation risk and the long term carcinogenic risk are both less than 1.0, indicating that the facility is considered to be "low risk" for the modeled HAPs".

The impacts from this analysis were as follows:

| Hazardous Air Pollutant | CAS No. | Modeled Maximum 1-Year Concentration ($ug/m^3$) | Dose Response Value for Carcinogenic Chronic Inhalation ($1/(ug/m^3)$) | Maximum Off-Site Individual Lifetime Cancer Risk (cancer/million people) |
|---|---|---|---|---|
| Beryllium Compounds | 7440-41-7 | 2.21E-06 | 2.40E-03 | 5.30E-03 |
| Cadmium Compounds | 7440-43-9 | 3.00E-05 | 1.80E-03 | 5.40E-02 |
| Hydrogen Chloride | 7647-01-0 | 4.32E-01 | --- | --- |
| Lead Compounds | 7439-92-1 | 1.52E-03 | --- | --- |
| Manganese Compounds | 7439-96-5 | 3.60E-04 | --- | --- |
| Mercury Compounds | HG_CMPDS | 8.00E-05 | --- | --- |
| Nickel Compounds | 7440-02-0 | 1.51E-03 | --- | --- |
| Selenium Compounds | 7782-49-2 | 2.00E-05 | --- | --- |
| | | **Cumulative Cancer Risk** | | 0.059 |

| Hazardous Air Pollutant | CAS No. | Modeled Maximum 1-Year Concentration ($ug/m^3$) | Dose Response Value for Non-carcinogenic Chronic Inhalation ($mg/m^3$) | Hazard Quotient |
|---|---|---|---|---|
| Beryllium Compounds | 7440-41-7 | 2.21E-06 | 2.00E-05 | 1.11E-04 |
| Cadmium Compounds | 7440-43-9 | 3.00E-05 | 1.00E-05 | 3.00E-03 |
| Hydrogen Chloride | 7647-01-0 | 4.32E-01 | 2.00E-02 | 2.16E-02 |
| Lead Compounds | 7439-92-1 | 1.52E-03 | 1.50E-04 | 1.01E-02 |
| Manganese Compounds | 7439-96-5 | 3.60E-04 | 5.00E-05 | 7.20E-03 |
| Mercury Compounds | HG_CMPDS | 8.00E-05 | 3.00E-04 | 2.67E-04 |
| Nickel Compounds | 7440-02-0 | 1.51E-03 | 9.00E-05 | 1.68E-02 |
| Selenium Compounds | 7782-49-2 | 2.00E-05 | 2.00E-02 | 1.00E-06 |
| | | **Cumulative Non-cancer Risk** | | 0.06 |

Note the very low risk (low HI and total HQ) associated with this analysis.

On November 4, 2010, the Permittee revised the risk analysis by "optimizing" or increasing the emission rates of each applicable HAP. See the following table:

| Original Submittal | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Description | Mercury (lb/hr) | HCl (lb/hr) | Beryllium Compounds (lb/hr) | Cadmium Compounds (lb/hr) | Lead (lb/hr) | Manganese (lb/hr) | Nickel Compounds (lb/hr) | Selenium (lb/hr) |
| No. 2 Power Boiler - bark | 0.00E+00 | 0.00E+00 | | | | | | |
| No. 2 Power Boiler - sludge | 1.24E-03 | 2.71E+00 | | | | | | |
| No. 2 Power Boiler - coal | 4.50E-03 | 2.91E+01 | | | | | | |
| **No. 2 Power Boiler - total** | **5.74E-03** | **3.18E+01** | **1.43E-04** | **1.21E-03** | **4.55E-02** | **2.84E-02** | **1.30E-01** | **1.39E-03** |
| No. 5 Power Boiler - bark | 9.50E-04 | 6.38E+00 | | | | | | |
| No. 5 Power Boiler - sludge | 1.24E-03 | 2.71E+00 | | | | | | |
| No. 5 Power Boiler - coal | 3.19E-03 | 2.06E+01 | | | | | | |
| **No. 5 Power Boiler - total** | **5.38E-03** | **2.97E+01** | **1.72E-04** | **3.10E-03** | **1.70E-01** | **2.34E-02** | **7.50E-02** | **1.69E-03** |
| **No. 1 Power Boiler - No. 6 fuel oil** | **0.00E+00** | **0.00E+00** | **0.00E+00** | **0.00E+00** | **0.00E+00** | **0.00E+00** | **1.04E-02** | **0.00E+00** |

| Optimized Rates | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Optimization Factor** | **100** | **15** | **79** | **10** | **15** | **15** | **15** | **100** |
| | **Mercury (lb/hr)** | **HCl (lb/hr)** | **Beryllium Compounds (lb/hr)** | **Cadmium Compounds (lb/hr)** | **Lead (lb/hr)** | **Manganese (lb/hr)** | **Nickel Compounds (lb/hr)** | **Selenium (lb/hr)** |
| **No. 2 Power Boiler - total** | 5.74E-01 | 4.77E+02 | 1.13E-02 | 1.21E-02 | 6.82E-01 | 4.26E-01 | 1.96E+00 | 1.39E-01 |
| **No. 5 Power Boiler - total** | 5.38E-01 | 4.46E+02 | 1.36E-02 | 3.10E-02 | 2.56E+00 | 3.51E-01 | 1.13E+00 | 1.69E-01 |
| **No. 1 Power Boiler - No. 6 fuel oil*** | 1.11E-04 | 5.95E-01 | 4.63E-05 | 7.58E-04 | 2.71E-03 | 5.00E-06 | 1.55E-01 | 1.14E-03 |

* Emissions of Mercury, HCl, Beryllium, Cadmium, Lead, Manganese, and Selenium from the No. 1 Power Boiler No. 6 Oil have not been optimized. There are currently no emissions from these compounds, but have modeled a lb/hr based upon CEMR emission factors and maximum rating of 250 MMBtu/hr

The impacts from this analysis were as follows:

| Hazardous Air Pollutant | CAS No. | Modeled Maximum 1-Year Concentration ($ug/m^3$) | Dose Response Value for Carcinogenic Chronic Inhalation ($1/(ug/m^3)$) | Maximum Off-Site Individual Lifetime Cancer Risk (cancer/million people) |
|---|---|---|---|---|
| Beryllium Compounds | 7440-41-7 | 1.75E-04 | 2.40E-03 | 4.20E-01 |
| Cadmium Compounds | 7440-43-9 | 3.10E-04 | 1.80E-03 | 5.58E-01 |
| Hydrogen Chloride | 7647-01-0 | 6.48E+00 | --- | --- |
| Lead Compounds | 7439-92-1 | 2.29E-02 | --- | --- |
| Manganese Compounds | 7439-96-5 | 5.46E-03 | --- | --- |
| Mercury Compounds | HG_CMPDS | 7.81E-03 | --- | --- |
| Nickel Compounds | 7440-02-0 | 2.27E-02 | --- | --- |
| Selenium Compounds | 7782-49-2 | 2.16E-03 | --- | --- |
| | | **Cumulative Cancer Risk** | | 0.98 |

| Hazardous Air Pollutant | CAS No. | Modeled Maximum 1-Year Concentration ($ug/m^3$) | Dose Response Value for Noncarcinogenic Chronic Inhalation ($mg/m^3$) | Hazard Quotient |
|---|---|---|---|---|
| Beryllium Compounds | 7440-41-7 | 1.75E-04 | 2.00E-05 | 8.74E-03 |
| Cadmium Compounds | 7440-43-9 | 3.10E-04 | 1.00E-05 | 3.10E-02 |
| Hydrogen Chloride | 7647-01-0 | 6.48E+00 | 2.00E-02 | 3.24E-01 |
| Lead Compounds | 7439-92-1 | 2.29E-02 | 1.50E-04 | 1.52E-01 |
| Manganese Compounds | 7439-96-5 | 5.46E-03 | 5.00E-05 | 1.09E-01 |
| Mercury Compounds | HG_CMPDS | 7.81E-03 | 3.00E-04 | 2.60E-02 |
| Nickel Compounds | 7440-02-0 | 2.27E-02 | 9.00E-05 | 2.52E-01 |
| Selenium Compounds | 7782-49-2 | 2.16E-03 | 2.00E-02 | 1.08E-04 |
| | | **Cumulative Noncancer Risk** | | 0.90 |

Note that, with the exception of the No.1 Boiler (PB1) all the expected emission rates were increased by a factor ranging from 10 to 100. For the No.1 boiler, the permittee does not expect fuel analysis to yield any metals with the (exception of nickel).

**Initial and ongoing compliance requirements for the HAPs used in the HBCA**

Section 15(d) of the model rule specifies how to determine the HAP emissions to be used in the HBCA, as well as what must be submitted for approval of the HBCA. This includes the identification of process factors that will become enforceable permit conditions.

The Permittee has chosen to effectively comply with the emission limits established in the HBCA as they would to the required emission limits in Section 2 of the model rule with the associated a combination of periodic performance testing and or fuel analysis operating limitations on the respective control devices (wet scrubbers of varying designs on all three boilers) as well as maximum fuel pollutant input levels established during the initial performance testing and associated M/R/R.

# IV. Table of Changes to existing Air Permit

| Existing Condition No. | New Condition No. | Changes |
|---|---|---|
| Cover Letter | Same | • Revised dates, revision number, etc. |
| Permit cover | Same | • Revised dates, revision number, etc. |
| Equipment list | | • For boilers No. PB1, PB2 and PB5 indicated “Case-by-Case MACT” |
| A.1. | Same | • Added reference to 2D .1109 |
| NA | A.1(k) | • Added 2D .1109 condition (112(j) |

# V. Public Notice

See chronology in Section II.

# VI. Recommendations

This permit modification application for the subject facility has been reviewed by NC DAQ to determine compliance with all procedures and requirements with respect to 2D. 1109. NC DAQ has determined that this facility appears to be complying with all applicable requirements with respect to 2D 1109.

The issuance of Permit No. **03138/R35** is recommended.