The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

September 23, 2013

Charles A. Howland
President
Warwick Mills, Inc.
PO Box 409
New Ipswich, NH 03071

RE: On-Site Full Compliance Evaluation Report

Dear Mr. Howland:

The New Hampshire Department of Environmental Services, Air Resources Division ("DES") has completed a Full Compliance Evaluation of Warwick Mills, Inc. ("WMI"). The compliance evaluation included an on-site inspection completed on August 30, 2013. This is a copy of the On-Site Full Compliance Evaluation Report for your review and records.

DES identified deficiencies during this compliance evaluation, as detailed in this report.

If you have any questions, please contact Daniel Hrobak at (603) 271-1987 or email at Daniel.Hrobak@des.nh.gov.

Sincerely,

Greg Helve

Greg Helve
Compliance Assessment Section Supervisor
Air Resources Division

cc: Board of Selectmen, Town of New Ipswich, 661 Turnpike Rd, New Ipswich, NH 03071

Abbreviations and Acronyms

AAL	Ambient Air Limit
acf	Actual cubic foot
ags	Above ground surface
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAS	Chemical Abstracts Service
cfm	Cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DER	Discrete Emission Reduction
DES	New Hampshire Department of Environmental Services
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
ERC	Emission Reduction Credit
ft	Foot or feet
ft^3	Cubic feet
gal	Gallon
HAP	Hazardous Air Pollutant
hp	Horsepower
hr	Hour
kW	Kilowatt
lb	Pound
LPG	Liquefied Petroleum Gas
MM	Million
MSDS	Material Safety Data Sheet
MSW	Municipal Solid Waste
MW	Megawatt
MWC	Municipal Waste Combustor
N/A	Not applicable
NAAQS	National Ambient Air Quality Standard
NG	Natural Gas
NO_x	Oxides of Nitrogen
NPV	Notice of Past Violation
NSPS	New Source Performance Standard
PCB	Polychlorinated biphenyl
PM_{10}	Particulate Matter < 10 microns
ppm	Parts per million
psi	Pounds per square inch
RACT	Reasonably Available Control Technology
R&D	Research and Development
RSA	Revised Statues Annotated
RTAP	Regulated Toxic Air Pollutant
scf	Standard cubic foot
SEP	Supplemental Environmental Project
SO_2	Sulfur Dioxide
TSP	Total Suspended Particulate
tpy	Tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

I. Facility Description

DES conducted an On-Site Full Compliance Evaluation of WMI and the results are presented herein. The compliance evaluation covers the period of 2011 to August 30, 2013.

WMI manufactures specialty coated fabrics and fabric products, and operates two permitted boilers for building heat and process steam as well as to control VOC/HAP emissions from the fabric and metal coil coating operations. Other processes at WMI involve applying solvent-based and water-based coatings to woven fabrics, metal coil, and other substrates. WMI requires a Title V Permit as the actual emissions of the HAP toluene exceeded 10 tpy in 2007. In addition to state requirements, WMI is also subject to 40 CFR Part 63 subpart OOOO - *Metal Coil Coating* for the metal coil coating lines, 40 CFR Part 63 subpart SSSS – *Fabric Printing, Coating and Dyeing* for the fabric coating lines and the slashers, and 40 CFR 60 subpart TT *Metal Coil Surface Coating* for the metal coil coating lines.

Facility name and address	Warwick Mills, Inc. 301 Turnpike Road New Ipswich, NH 03071
County	Hillsborough
Telephone	603-878-1565
AFS#	3301100129
Source Type	Major / Title V
Inspection Date/Time	August 30, 2013 9:00 AM
Inspection Type	On-Site Full Compliance Evaluation
Inspection Period	2011 – August 30, 2013
Weather	70^{o} F., sunny, wind 5 mph
Inspected by	Daniel Hrobak, Senior Compliance Assessment Engineer
Source Contact(s)	Charles Howland, President Maureen MacAdam, Compliance Manager
Last Inspection	May 26, 2011

Last Inspection Results:

1. WMI failed to demonstrate that the capture efficiency of the PTE is 100% for EU02 after the coater was modified and relocated to an adjacent room per Table 3, Item 15. b.), 2.)ii.) of TP-0057.

2. The 2010 Semi-Annual Permit Deviation and Monitoring Report and Annual Compliance Certification had numerous omissions and erroneous entries. A list of these discrepancies was given to WMI during the inspection,

3. WMI has not included descriptions of changes to the CPMS, web coating operation or the emission capture system in the Semi-Annual reports as required by Table 6, Item 5) h.5) of TP-0057. Changes such as the additional flow measuring devices for the downdraft tables, the

changes associated with EU02 and the movement of EU02 are required to be noted in the Semi-Annual reports required by Table 6, Item 5) h.5) of TP-0057 and the federal MACT standards.

4. WMI has not updated its Env-A 1400 compliance demonstration to the February 2011 revision of Table Env-A 1450-1 within the 90 days as required by Table 3, Item 3 of the Permit. At the time of the inspection, WMI was operating the downdraft tables only and the boiler temperatures were observed to be: Boiler #1= 380 degF and Boiler #2=525 degF. WMI has not demonstrated a minimum destruction efficiency of 95% at these temperatures and therefore must perform an Env-A 1400 compliance demonstration for this and any other time the boilers were operating below the temperatures recorded during the compliance testing of June 2010 as required by Table 3, Item 1.e.) of TP-0057.

5. WMI provided DES with a CPMS Quality Control Program dated May 4, 2011. DES has determined that this plan does not meet the requirements as stated in Table 3, Item 21 of TP-0057. Specifically, this plan does not address the additional monitoring equipment for the downdraft tables, spare parts inventory, calculations, sampling, analysis methods and other data as required by Table 3, Item 21 of TP-0057 and 40 CFR 63.8(d).

The facility was has addressed the above items and is in compliance, as described below.

After the inspection, on April 30, 2012 DES visited the facility to ensure that the PTE for EU02 is 100%. The ΔP was greater than 0.01" water column and the flow rate from the coater to the boilers was greater than 200 feet per minute.

On August 8, 2011, WMI emailed the 2010 Annual Compliance Certification and Semi-Annual Permit Deviation and Monitoring Repots to DES. DES reviewed this report and had several further comments. WMI resubmitted these on September 6, 2011. DES found this report to be acceptable.

The changes to the CPMS, web coating and emission capture system were resubmitted to DES on May 4, July 25 and July 28, 2011. DES reviewed these changes and had several comments, which were emailed to WMI on September 28, 2011. WMI addressed the changes, and further changes are addressed in subsequent in Semi-Annual reports.

A compliance demonstration pursuant to Env-A 1400 was completed and submitted to DES on September 6, 2011. The compliance demonstration assumed no control. From the demonstration, all RTAPs were less than the associated AALs.

The CPMS Quality Control Program was resubmitted and reviewed and sent to WMI on September 28, 2011. WMI revised the CPMS Quality Control Program and DES found it to be acceptable.

	Expires:	November 30, 2016
TP-0088	Issued:	October 14, 2011
	Reissued:	January 11, 2013
	Expires:	April 30, 2014
TP-0057	Issued:	October 1, 2010
Minor Permit Amendment:		January 14, 2011
	Expired:	April 30, 2012

On March 21, 2012, WMI sent DES a request for an exception to obtaining a Temporary Permit for a R&D project at the facility. The letter described the scope of the project, the coating usage and the emissions from the project. DES determined that the proposed project did not meet the definition of a "Research & Development operation" as specified in the New Hampshire Code of Administrative Rules Env-A 101, *Definitions*, nor did it satisfy the criteria established in Env-A 617.01, *Exception to Obtaining a Temporary Permit or State Permit to Operate*. DES determined that the Title V Permit, TV-0061, allowed for the use of these coatings in the project without any exemptions required.

The on-site inspection included an opening meeting to discuss the purpose of the inspection as well as the rules pertaining to claims of confidentiality and facility safety concerns. WMI agreed to the inspection and authorized access to the facility. Material provided and operations conducted by the facility at the time of the inspection were not claimed as confidential.

II. Emission Unit Identification and Facility Wide Emissions

Table 1 below, taken from TV-0061, lists the permitted emission units.

Table 1- Significant Activity Identification			
Emission Unit ID	**Process**	**Manufacturer**	**Installation Date**
EU01	Coater 1	Warwick Mills	March 2005
EU02	Coater 2	Warwick Mills	March 2005
EU03	Slasher 1	Charles B. Johnson	1940
EU04	Slasher 2	Charles B. Johnson	1940
EU05	Assembly Machine 1	Warwick Mills	2007
EU06	Assembly Machine 2	Warwick Mills	2007
EU07	Tape-off Machine	Warwick Mills	2006
EU08	Mixing/Compounding Room	NA	NA
EU11	Portable Downdraft Table #1	NA	NA
EU12	Portable Downdraft Table #2	NA	NA
Emission Unit ID	**Device**	**Manufacturer Model Number Serial Number**	**Installation Date**

Table 1- Significant Activity Identification			
EU09	Boiler 1	Clever Brooks CB-621-50 0-15670	1956
EU10	Boiler 2	Clever Brooks CB-621-80 0-15671	1956

In addition, the temporary permit,TP-0088, includes requirements for a new biomass boiler, designated EU13. The associated information for this device is below in Table 1a, below.

Table 1a- Additional Significant Activity Identification from TP-0088				
Emission Unit ID	**Device**	**Manufacturer Model Number Serial Number**	**Installation Date**	**Name Plate Rating**
EU13	Boiler 3	Dall Energy 2MW Biomass TBD	TBD	8.02 MMBtu/hr Biomass – equivalent to 1,667 lb/hr

The facility also operates a diesel-fuel fire pump engine with information listed below. This device is subject to 40 CFR 63 subpart ZZZZ. Any device that is subject to a federal requirement, such as 40 CFR 63, subpart ZZZZ, is to be included in Title V permits as a "significant activity." See *Section X: Other Findings* for more information.

Fire Pump Inspection Data	
	Fire Pump Engine
Manufacturer	Cummins Engine Co., Inc.
Model #	NH220IF
Serial #	1022B463
Power Rating	175 HP 1.37 MMBtu/hr
Fuel	Diesel fuel

Warwick Mills has identified the following insignificant activities:

Insignificant Activities		
Device #	**Device**	**Description**
1	Calendar Machine	Aqueous fabric coating
2	R&D Activities	R&D, coatings, adhesives chemicals used
3	5th and 6th floor activities	R&D, no hood
4	Fifth floor cement application	Application of adhesives within downdraft table enclosure
5	Sixth floor cement application	Application of adhesives within downdraft table enclosure
6	Fire pump	See above

DES observed the devices identified above at the facility. It should be noted that EU03, EU04 and EU07 no longer use products that contain VOCs, HAPs and/or RTAPs. The fire pump engine is a "significant activity," This device shall include the fire pump engine.

The table below lists the facility-wide reported annual emissions for the review period.

Facility-Wide Emissions (tons)						
	TSP	**SO_2**	**NO_x**	**CO**	**VOCs**	**HAPs/RTAPs**
Permitted Limits	—	—	—	—	50	—
2012	1.20	17.45	3.08	0.28	0.70	0.01
2011	1.49	21.57	3.80	0.35	1.28	0.01

The RTAP limits are identified in Env-A 1400.

III. Control Equipment

The exhaust gas from each coating process and associated curing oven (EU01 and EU02), and production processes EU05, EU06, EU11 and EU12 are directed to the boilers (EU09 and EU10) for VOC, HAP and RTAP destruction. EU09 and/or EU10 shall operate at all times the production processes EU05, EU06, EU11, and/or EU12 are operating, and in accordance with the conditions specified in Table 4 of TV-0061, and whenever EU01 and EU02 are operating and not using coatings that comply with the limitations specified in 40 CFR part 63 subparts OOOO section 63.4291(a)(1), and/or subpart SSSS section 63.5120(a)(2). EU09 and EU10 shall be maintained in accordance with the manufacturer's specifications.

Additionally, when the biomass boiler, EU13, is installed, it can be used as a control device in the same manner as EU09 or EU10.

IV. Stack Criteria

Table 2 below, taken from permit TV-0061, lists the permitted stack requirements for the facility's devices.

During the inspection, DES observed the stacks to be vertical with no modifications noted by the facility.

Table 2 – Stack Criteria			
Stack Number	**Emission Unit Number**	**Minimum Height (feet above ground surface)**	**Stack Exit Diameter (feet)**
1	EU03	20.5	1.33
2	EU04	9.5	1.33
5	EU07	5.0	0.25
6	EU08	9.5	0.83
7	EU09 & EU10	21.5	1.33

Additionally, permit TP-0088 includes stack criteria for EU13, as is listed in Table 2a, below. Because EU13 is not yet installed, DES was unable to determine compliance with stack criteria.

Table 2a– Stack Criteria from TP-0088			
Stack Number	**Emission Unit Number**	**Minimum Height (feet above ground surface)**	**Stack Exit Diameter (feet)**
8	EU13	50	1.5

V. Compliance with Operating and Emission Limitations

Table 3 below, taken from permit TV-0061, lists the relevant state-only enforceable operating and emission limitations for the facility and any deficiencies noted during the evaluation.

Table 3- State-only Enforceable Operating and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
1.	*24-hour and Annual Ambient Air Limit* The emissions of any regulated toxic air pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual ambient air limit as set forth in Env-A 1450.01, *Table Containing the List Naming Regulated Toxic Air Pollutants.*	Facility Wide	Env-A 1400	**Yes**
2.	*Revisions of the List of RTAPs* In accordance with RSA 125-I:5, IV, if DES revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the Owner or Operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the Owner or Operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such	Facility Wide	RSA 125-I:5 IV	**Yes**

Table 3- State-only Enforceable Operating and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
	permit or permit modification.			
3.	*Activities Exempt from Visible Emission Standards* a) The average opacity shall be allowed to be in excess of those standards specified in Env-A 2002.02 for one period of 6 continuous minutes in any 60 minute period during startup, shutdown, malfunction, soot blowing, grate cleaning, and cleaning of fires. b) Exceedances of the opacity standard in Env-A 2002 shall not be considered violations if the Owner or Operator demonstrates to the Division that such exceedances: 1). Were the result of the adherence to good boiler operating practices which, in the long term, result in the most efficient or safe operation of the boiler; 2). Occurred during periods of cold startup of a boiler over a continuous period of time resulting in efficient heat-up and stabilization of its operation and the expeditious achievement of normal operation of the unit; 3). Occurred during periods of continuous soot blowing of the entire boiler tube section over regular time intervals as determined by the operator and in conformance with good boiler operating practice; and 4). Were the result of the occurrence of an unplanned incident in which the opacity exceedance was beyond the control of the operator and in response to such incident, the operator took appropriate steps in conformance with good boiler operating practice to eliminate the excess opacity as quickly as possible.	EU09 & EU10	Env-A 2002.04(c) (Effective 4-23-2005) Env-A 2002.04(d), (e) & (f) (effective 4-23-2005)	**Yes**

Table 4 below, taken from permit TV-0061, lists the relevant federally enforceable operating and emission limitations for the facility and any deficiencies noted during the evaluation

Table 4- Federally Enforceable Operational and Emission Limitations

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite	Compliant
1.	The Facility shall comply with the National Ambient Air Quality Standards (NAAQS) and the applicable requirements of RSA 125-C:11 and Env-A 606.04.	Facility Wide	RSA 125C:11 & Env-A 606.04	**Yes**
2.	*Facility-Wide VOC Emission Limitation* The total VOC emissions from this Facility shall not exceed 50 tpy during any consecutive 12-month period. The Owner or Operator is limiting VOC emissions to ensure synthetic minor status for VOC emissions.	Facility Wide	Env-A 1204.48, 604.02(a)(1) & TP-0057	**Yes**
3.	*Maximum Sulfur Content Allowable in Liquid Fuels* a) The sulfur content of No. 6 fuel oil shall not exceed 2.0 percent sulfur by weight; and b) Diesel fuel oil shall not exceed 0.4 percent by weight.	EU09 & EU10	Env-A 1604.01 (effective 4-23-2005)	**Yes**
Finding: See Table 4a, Item #1, and Section IX: Permit Deviations.				
4.	*Particulate Emission Standards for Fuel Burning Devices Installed After May 13, 1970* The particulate matter emissions from fuel burning devices installed after to May 13, 1970 shall not exceed 0.60 lb/MMBtu	EU09 & EU10	Env-A 2002.06 (effective 4-23-2005; formerly Env-A 1202)	**Unknown**
Finding: Compliance with particulate matter emission standards can only be determined through stack testing for particulate matter, which has not been required for these devices, to date.				
5.	*Visible Emission Standards for Fuel Burning Devices Installed After May 13, 1970* The average opacity from fuel burning devices installed on or after to May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period.	EU09 & EU10	Env-A 2002.02 (effective 4-23-2005; formerly Env-A 1202)	**Yes**
6.	*Fuel Usage Limitations* The maximum fuel oil consumption for EU09 and EU10 combined shall be limited to: a) 144,540 gal of No. 6 fuel oil in any rolling 12-month period: and b) 610 gal of No. 6 fuel oil during any calendar 24-hr period.	EU09 & EU10	TP-0057	**Yes**
7.	*Minor Core Activities* a) In accordance with Env-A 1204.02(d), minor core activities of VOC emissions are exempt from the VOC RACT requirements of Env-A 1204. VOC emissions from all minor core activities shall be limited to less than 5 tons combined in any rolling 12-month period. Minor core activities currently include product assembly activities using solvents, coatings, and/or adhesives. If at any time, the VOC emissions from these minor core activities exceed the 5-ton limit, these process(es) become subject to the provisions of Env-A 1204.48 for unclassifiable processes. b) The exhaust from the down draft tables associated with EU05, EU06, EU11 and/or EU12 shall be vented to EU09 and/or EU10 at all times the processes are in operation; c) A static pitot tube shall be installed in the duct-work for each down draft table before the duct connects to the duct-work leading to the boilers (EU09 & EU10) for destruction; d) The static pitot tube shall be calibrated and operated in accordance with the manufacturers recommendations; e) The flow shall be maintained at or above 71 cubic feet per minute as measured as a 15 minute average when the down draft tables alone are vented to EU09 and/or EU10; f) The flow shall be maintained at or above 30 cubic feet per minute as measured as a 15 minute average when the down draft tables and EU01 and/or EU02 are also vented to EU09 and/or EU10;	EU05, EU06, EU07, EU08, EU11 & EU12 EU05, EU06, EU07, EU08, EU11, EU12, EU09 & EU10	Env-A 1204.02(d) & TP-0057 Consent Decree Docket #09-E-0336	**Yes**

Table 4- Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
	g) During coating operations, when the exhaust from only EU05, EU06, EU07, EU08, EU11 and/or EU12 are routed to either EU09 and/or EU10, the average combustion temperature in any 3-hour period for: 1). EU09 must not fall below 824°F as measured by the system thermocouple at the exit of the 2nd pass; and 2). EU10 must not fall below 705°F as measured by the system thermocouple at the exit of the 2nd pass.			
8.	*Pollution Control Equipment Operation and Maintenance* The Facility shall operate and maintain EU09 and EU10 per the manufacturers' recommendations to control the emissions from the coating operations EU01 and EU02 to minimize emissions and to meet the requirements of Table 4, Items 11.b.)2.), 12.b.) 2.), 13.a.) and 13.b.) of TV-0061. At a minimum, EU09 and EU10 shall be subject to annual inspection and biennial tune-up.	EU09 & EU10	Env-A 604.01	**Yes**
9.	*Applicability Criteria for Coating of Paper, Fabric, and Foil Substrates* For a coating source that uses add-on control equipment or a bubble to achieve compliance, the emission rate limit shall be determined on a solids basis, as specified below: $$S = \frac{E_c}{1 - \left(\frac{E_c}{d_A} \right)}$$ Where: S = the VOC emission rate limit (lb/gal of coating solids); d_A = the actual mass density of VOC in the applied surface coating formulation (lb/gal); in the case where multiple coatings are used, d_A means the weighted average actual mass density of VOC in the applied surface coatings in lb/gal; E_c = the emission rate limit of 2.9 lb VOC/gal (0.35 kg VOC/l) of coating as applied for fabric film or foil as calculated on a coating basis; and E_c = the emission rate limit of 2.6 lb VOC/gal (0.31 kg VOC/l) of coating as applied for metal coils as calculated on a coating basis.	EU01 & EU02	Env-A 1204.04(c) & 1204.04(d)	**Yes**
10.	*Polymeric Coating of Supporting Substrates* VOC usage for each coating operation and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates, must be less than 95Mg (105 tons) per consecutive 12-month period.	Facility Wide	40 CFR 60.740(b) subpart VVV	**Yes**
11.	*Metal Coil Surface Coating* The Owner or Operator shall not cause emissions into the atmosphere of more than a value of between 0.14 (or a 90% emission reduction) and 0.28 kg VOC/l of coating solids applied for each calendar month when the facility intermittently uses an emission control device operated at the most recently demonstrated overall efficiency.	EU01 & EU02	40 CFR 60.462(a)(4) subpart TT	**Yes**

Table 4- Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
12.	*Printing, Coating, & Dyeing of Fabrics and Other Textiles* a.) The affected source includes the following: 1.) All web coating equipment used to apply cleaning materials to a substrate on the coating line to prepare it for coating material application, to apply coating materials to a substrate and to dry or cure the coating materials, or equipment used to clean web coating operation equipment; 2.) Slashing equipment used to apply and dry size on warp yarn; 3.) All containers used for storage and vessels used for mixing coating, thinning, cleaning, and slashing materials; 4.) All equipment and containers used for conveying coating, thinning, cleaning, and slashing materials; 5.) All containers used for storage and all equipment and containers used for conveying waste materials generated by a coating and slashing operation; and 6.) All equipment, structures, and/or devices used to convey, treat, or dispose of wastewater streams or residuals generated by a coating and slashing operations; b.) The Owner or Operator shall apply one of the compliance options below to an individual web coating/printing operation or to multiple web coating/printing operations: 1.) Compliant material option; 2.) The organic HAP content, as purchased, of each coating and printing material applied in the web coating/printing operation(s) is less than or equal to 0.12 kg of organic HAP per kg of solids applied; and 3.) Each thinning and cleaning material, as purchased, contains no organic HAP; or 4.) Emission rate with add-on control or the organic HAP overall control efficiency option: 5.) Reduce emissions of HAP to the atmosphere by achieving at least a 98% organic HAP overall control efficiency, or comply with the SSM plan; and 6.) Assure that the capture efficiency of the Permanent Total Enclosure (PTE) is 100%. 7.) Each web coating operation must comply with the work practice standards specified in the Work Practice Plan pursuant to Table 4, Item 16 of TV-0061, at all times; 8.) During periods of startup, shutdown, or malfunction of the emission capture system, add-on control device, or web coating/printing operation that may affect emission capture or control device efficiency, the Owner or Operator must operate in accordance with the startup, shutdown, and malfunction plan pursuant to Table 4, Item 16 of TV-0061; and c.) For all slashing operations, the compliant material option must be used to demonstrate that that the mass fraction of organic HAP in each slashing material as purchased for the slashing operation(s) is not more than zero kg organic HAP per kg of slashing materials as determined according to Table 5, Item 6 of TV-0061.	EU01, EU02, EU03, EU04, EU08, EU09 & EU10 EU01, EU02, EU09 & EU10 EU01 & EU02 EU01, EU02, EU09 & EU10 EU03 & EU04	40 CFR 63.4282(b) & 63.4282(c) subpart OOOO 40 CFR 63.4291(a) subpart OOOO 40 CFR 63.4293(b) subpart OOOO 40 CFR 63.4352(g) subpart OOOO 40 CFR 63.4290 subpart OOOO	**Yes**

Table 4- Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
13.	*Surface Coating of Metal Coil* The affected source subject to these specific emission and operational limitations are all metal coil-coating lines. The Owner or Operator shall apply one of the compliance options below to an individual metal coil coating operation or to multiple metal coil coating operations: a) Compliant material options: 1). As purchased compliant coatings – each coating material used during the 12-month compliance period may not exceed 0.046 kg of organic HAP per liter of solids; 2). As applied compliant coatings – Each coating material used may not exceed 0.046 kg of organic HAP per liter of solids on a rolling 12-month average as applied basis, determined monthly; or 3). The average of all coating material used does not exceed 0.046 kg of organic HAP per liter of solids on a rolling 12-month average as applied basis, determined monthly; and 4). Maintain compliance with the emission limitations at all times including during periods of start-up, shut down, and malfunction. b) Emission rate with add-on capture and control – organic HAP overall control efficiency option: 1). Overall organic HAP control efficiency must be at least 98 percent on a monthly basis for individual or groups of coil coating lines; or 2). Overall organic HAP control efficiency is at least 98 percent during initial performance testing and operating limits are achieved continuously for individual coil coating lines; 3). Assure that the capture efficiency of the Permanent Total Enclosure (PTE) is 100%; 4). All coating materials and thinners used in the coil coating line must be included when determining compliance with the 98% reduction limit; and 5). Must maintain compliance with the emission limitations at all times except during periods of start-up, shut down, and malfunction of any capture system and control device used to comply with these limits.	EU02, EU09 & EU10	40 CFR 63.5120(a), 63.5140, & 63.5170 subpart SSSS	**Yes**
14.	*Add-on Control Device Operation* The Owner or Operator shall assure that: a) During coating operations, the exhaust from EU01 or EU02 routed to either EU09 and/or EU10, the average combustion temperature in any 3-hour period for: 1). EU09 must not fall below 921°F as measured by the system thermocouple at the exit of the 2nd pass; 2). EU10 must not fall below 830°F as measured by the system thermocouple at the exit of the 2nd pass; b) The flow rate at the coating oven exhaust leading to EU09 and/or EU10 shall be maintained at or above 200 feet per minute, to assure 100% capture of VOC/HAP from the coating enclosure and oven.	EU01, EU02, EU09 & EU10	40 CFR 63.5121(a) subpart SSSS	**Yes**

Table 4- Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
15.	*Operation and Maintenance - General Duty* a) At all times, including periods of startup, shutdown, and malfunction, the Owner or Operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions; b) During a period of startup, shutdown or malfunction, the Owner or Operator has a general duty to minimize emissions from the affected source to the greatest extent, which is consistent with safety and good air pollution control practices; c) Is not required to achieve the emission levels in Table 4, Items 12 and 13 of TV-0061 at other times if this is not consistent with safety and good air pollution control practices; d) The general duty to minimize emissions during a period of startup, shutdown or malfunction does not require the Owner or Operator to achieve the emission levels in Table 4, Items 12 and 13 above at other times if this is not consistent with safety and good air pollution control practices, nor does it require the Owner or Operator to further reduce emissions if levels required in Table 4, Items 12 and 13 of TV-0061 above have been achieved; e) Malfunctions must be corrected as soon as practicable after their occurrence; and f) To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the Owner or Operator must comply by minimizing emissions during an unexpected event, which arises during a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.	EU01, EU02, EU03, EU04, EU09 & EU10	40 CFR 63.6(e)(1) subpart A	**Yes**
16.	*Startup, Shutdown and Malfunction Plan (SSMP)* a) The Owner or Operator shall develop and implement a written SSMP that describes in detail the following: 1). Procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; 2). A program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the emission limitations specified in Table 4, Items 12 and 13 of TV-0061; 3). Web coating operation equipment such as conveyors that move the substrate among enclosures that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions; b) Periodic revisions to the SSMP may be made as necessary to reflect changes in equipment or procedures without prior approval of the Division; and c) The Owner or Operator must revise the SSMP within 45 days after an event if the event meets the characteristics of a malfunction, and the plan fails to address, or inadequately addresses the malfunction, and was not included in the SSMP at the time the plan was developed. The revision must include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment.	EU01, EU02, EU09 & EU10	40 CFR 63.6(e)(3) subpart A	**Yes**

Table 4- Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
17.	*Work Practice Plan (WPP)* The Owner or Operator shall develop and implement a written WPP to minimize organic HAP emissions from storage, mixing, and conveying of regulated materials used in and waste materials generated by the coating operations. a) The WPP shall specify practices and procedures to ensure that at a minimum the elements specified below are implemented: b) All organic HAP containing regulated material and waste materials must be stored in closed containers; c) Spills of organic HAP containing regulated materials and waste materials must be minimized; d) Organic HAP containing regulated materials and waste materials must be conveyed from one location to another in closed containers or pipes; e) Mixing vessels which contain organic HAP containing regulated materials must be closed except when adding to, removing, or mixing the contents; and f) Emissions of organic HAP must be minimized during cleaning of web coating storage, mixing, and conveying equipment.	EU01, EU02, EU05, EU06 & EU08	40 CFR 63.4293(b) subpart OOOO	**Yes**
18.	*Quality Control Program for Continuous Parameter Monitoring Systems (CPMS)* The Owner or Operator shall develop and implement a CPMS quality control program. At a minimum the written protocol shall include the following operations: a) Initial and any subsequent calibration of the CPMS; b) Preventive maintenance of the CPMS including spare parts inventory; c) Data recording, calculations and reporting; d) Accuracy audit procedures; and e) Program of corrective action for a malfunction of the CPMS.	EU09 & EU10	40 CFR 63.8(d) subpart A	**Yes**
19.	*Work Practice Standards for Industrial/Commercial Boilers* No later than March 21, 2012, the Owner or Operator shall conduct a tune-up of each boiler as specified in Table 5, Item 16 of TV-0061.	EU09 & EU10	40 CFR 63.11196 & 63.11201 subpart JJJJJ	**Unknown**
Finding: On December 20, 2012, EPA revised 40 CFR 63 subpart JJJJJJ. In this revision, the compliance date for the initial tune-up was delayed to March 21, 2014. At the time of the inspection, WMI had not yet conducted the initial tune-up on EU09 or EU10.				
20.	*General Compliance Requirements Only When No VOC Laden Fume are Routed Through the Boilers* At all times, the Owner or Operator must operate and maintain the boilers in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emission if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	EU09 & EU10	40 CFR 63.11205 subpart JJJJJ	**Yes**

Table 4- Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
21.	*Accidental Release Program Requirements* The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities: a) Identify potential hazards which result from such releases using appropriate hazard assessment techniques; b) Design and maintain a safe facility; c) Take steps necessary to prevent releases; and d) Minimize the consequences of accidental releases that do occur	Facility-Wide	CAAA 112(r)(1)	**Yes**

Table 4a below lists additional relevant operating and emission limitations,, as identified in permit TP-0088 for the facility and any deficiencies noted during the evaluation.

Table 4a Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
1.	*Maximum Sulfur Content Allowable in Liquid Fuels* The sulfur content of No. 6 and No. 4 fuel oil shall not exceed 1.0 percent sulfur by weight.	EU09 & EU10	Env-A 1604.01 & RSA 125-C:11	**No**
Finding: See Section IX: Permit Deviations.				
2.	*Fuel Usage Limitations* The maximum fuel oil consumption for EU09 and EU10 combined shall be limited to: a) 141,500 gal of No. 6 and/or No. 4 fuel oil in any rolling 12-month period: and b) 610 gal of No. 6 and/or No. 4 fuel oil during any calendar 24-hr period.	EU09 & EU10	RSA 125-C:11	**Yes**
3.	*Visible Emission Standards for Fuel Burning Devices Installed After May 13, 1970* The average opacity from fuel burning devices installed on or after to May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period.	EU13	Env-A 2002.02	**Unknown**[1]
4.	*Particulate Emission Standards for Fuel Burning Devices Installed On and After January 1, 1985* The particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.	EU13	Env-A 2002.08	**Unknown**[1]
5.	*Particulate Emission Standards for Fuel Burning Devices* The PM_{10} emissions from the device shall not exceed 0.23 lb/MMBtu.	EU13	Env-A 607.01(y)	**Unknown**[1]
6.	*Activities Exempt from Visible Emission Standards* The average opacity shall be allowed to be in excess of those standards specified in Table 3, Item 3 of TP-0088 for one period of 6 continuous minutes in any 60 minute period during startup, shutdown, malfunction, soot blowing, grate cleaning, and cleaning of fires.	EU13	Env-A 2002.04(c)	**Unknown**[1]

Table 4a Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
7.	*Activities Exempt from Visible Emission Standards* Exceedances of the opacity standard in Env-A 2002 shall not be considered violations if the Owner or Operator demonstrates to DES that such exceedances: a) Were the result of the adherence to good boiler operating practices which, in the long term, result in the most efficient or safe operation of the boiler; b) Occurred during periods of cold startup of a boiler over a continuous period of time resulting in efficient heat-up and stabilization of its operation and the expeditious achievement of normal operation of the unit; c) Occurred during periods of continuous soot blowing of the entire boiler tube section over regular time intervals as determined by the operator and in conformance with good boiler operating practice; and d) Were the result of the occurrence of an unplanned incident in which the opacity exceedance was beyond the control of the operator and in response to such incident, the operator took appropriate steps in conformance with good boiler operating practice to eliminate the excess opacity as quickly as possible	EU13	Env-A 2002.04(d), (e) & (f)	**Unknown[1]**
8.	*Pollution Control Equipment Operation and Maintenance* The Facility shall operate and maintain EU13 per the manufacturers' recommendations to control the emissions from the coating and process operations listed in Section III of Temporary Permit TP-0057 to minimize emissions and to meet the requirements of Table 3, Items 11. a.), 12. a.) and 13 of TP-0088. At a minimum, EU13 shall be subject to annual inspection and biennial tune-up.	EU13	Env-A 604.01	**Unknown[1]**
9.	*Work Practice Standards for Industrial/Commercial Boilers* The Owner or Operator shall conduct a tune-up of each boiler as specified in Table 4, Item 8 of TP-0088 within 180 days of startup of the new biomass boiler.	EU13	40 CFR 63.11196(c) & 63.11201(d) subpart JJJJJ	**Unknown[1]**
10.	*General Compliance Requirements Only When No VOC Laden Fume are Routed Through the Boiler* At all times, the Owner or Operator must operate and maintain the boiler in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emission if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	EU13	40 CFR 63.11205 subpart JJJJJ	**Unknown[1]**

Table 4a Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
11.	*Surface Coating of Metal Coil* Whenever the emission rate with add-on capture and control of organic HAP overall control efficiency option is chosen for an individual metal coil coating operation or to multiple metal coil coating operations [EU02], the Owner or Operator shall comply with the following: a) Overall organic HAP control efficiency must be at least 98 percent on a monthly basis for individual or groups of coil coating lines; or b) Overall organic HAP control efficiency is at least 98 percent during initial performance testing and operating limits are achieved continuously for individual coil coating lines; c) Assure that the capture efficiency of the Permanent Total Enclosure (PTE) is 100%; d) All coating materials and thinners used in the coil coating line must be included when determining compliance with the 98% reduction limit; and e) Must maintain compliance with the emission limitations at all times except during periods of start-up, shut down, and malfunction of any capture system and control device used to comply with these limits.	EU02 & EU13	40 CFR 63.5120(a), 63.5140 & 63.5170 subpart SSSS	**Unknown[1]**
Finding: Because EU13 is not yet installed, HAP emissions from EU02 are currently directed to EU09 and EU10.				
12.	*Printing, Coating, & Dyeing of Fabrics and Other Textiles* Whenever the emission rate with add-on capture and control of organic HAP overall control efficiency option is chosen for an individual web coating/printing operation or to multiple web coating/printing operations [EU01, EU02, EU03, EU04, EU08], the Owner or Operator shall comply with the following: a) Reduce emissions of HAP to the atmosphere by achieving at least a 98% organic HAP overall control efficiency, or comply with the startup, shutdown, and malfunction plan; b) Assure that the capture efficiency of the Permanent Total Enclosure (PTE) is 100%; and c) During periods of startup, shutdown, or malfunction of the emission capture system, add-on control device, or web coating/printing operation that may affect emission capture or control device efficiency, the Owner or Operator must operate in accordance with the startup, shutdown, and malfunction plan pursuant to Table 3, Item 17 of TP-0088.	EU01, EU02, EU03, EU04, EU08 & EU13 EU01, EU02 & EU13	40 CFR 63.4291(a) subpart OOOO 40 CFR 63.4352(g) subpart OOOO	**Unknown[1]**
Finding: Because EU13 is not yet installed, HAP emissions from the coating and printing operations are currently directed to EU09 and EU10.				

Table 4a Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
13.	*Add-on Control Device Operation* The Owner or Operator shall assure that: a) During coating operations, when the exhaust from Coater 1 [EU01] or Coater 2 [EU02] are routed to EU13, the average combustion temperature in any 3-hour period must not fall below the minimum temperature required to comply with the requirements listed in Table 3, Items 11, and 12 of TP-0088, and will be established during the stack testing required in Table 4, Item 7 of TP-0088; and b) The ΔP at the coating oven exhaust leading to EU13 shall be maintained at or above 0.01 inches of water column, which is equivalent to 200 feet per minute, to assure 100% capture of VOC/HAP from the coating enclosures and ovens.	EU01, EU02 & EU13	40 CFR 63.5121(a) subpart SSSS	**Unknown[1]**
14.	*Quality Control Program for Continuous Parameter Monitoring Systems (CPMS)* The Owner or Operator shall develop and implement a CPMS quality control program. At a minimum the written protocol shall include the following operations: a) Initial and any subsequent calibration of the CPMS; b) Preventive maintenance of the CPMS including spare parts inventory; c) Data recording, calculations and reporting; d) Accuracy audit procedures; and e) Program of corrective action for a malfunction of the CPMS.	EU13	40 CFR 63.8(d) subpart A	**Unknown[1]**
15.	*Minor Core Activities* a) The exhausts from the down draft tables associated with EU05, EU06, EU11 and EU12 shall be vented to EU13, EU09 and/or EU10 at all times the processes are in operation; b) During coating operations, when the exhaust from only EU05, EU06, EU07, EU08, EU11 and/or EU12 are routed to EU13, EU09 and/or EU10, the average combustion temperature in any 3-hour period must not fall below the minimum temperature required to comply with the requirements listed in Table 3, Items 11, and 12 of TP-0088 above, which will be established during the stack testing required in Table 4, Item 7 of TP-0088; and c) The flows from EU05, EU06, EU07, EU11 and EU12 leading to EU13 shall be maintained at or above those flows established during the stack testing required in Table 4, Item 7 of TP-0088, to assure capture of VOCs/HAPs from the down draft tables.	EU05, EU06, EU07, EU08, EU11 & EU12	Consent Decree Docket #09-E-0336	**Unknown[1]**
Finding: Because EU13 is not yet installed, HAP emissions from the coating and printing operations and down draft tables are currently directed to EU09 and EU10.				
16.	*Operation and Maintenance - General Duty* a) At all times, including periods of startup, shutdown, and malfunction, the Owner or Operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions;	EU01, EU02, EU03, EU04 & EU13	40 CFR 63.6(e)(1) subpart A	**Unknown[1]**

Table 4a Federally Enforceable Operational and Emission Limitations				
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**	**Compliant**
	b) During a period of startup, shutdown or malfunction, the Owner or Operator has a general duty to minimize emissions from the affected source to the greatest extent, which is consistent with safety and good air pollution control practices; c) Is not required to achieve the emission levels in Table 3, Items 11 and 12 of TP-0088 at other times if this is not consistent with safety and good pollution control practices; d) The general duty to minimize emissions during a period of startup, shutdown or malfunction does not require the Owner or Operator to achieve the emission levels in Table 3, Items 11 and 12 of TP-0088 at other times if this is not consistent with safety and good air pollution control practices, nor does it require the Owner or Operator to further reduce emissions if levels required in Table 3, Items 11 and 12 of TP-0088 have been achieved; e) Malfunctions must be corrected as soon as practicable after their occurrence; and f) To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the Owner or Operator must comply by minimizing emissions during an unexpected event, which arises during a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.			
17.	*Startup, Shutdown and Malfunction Plan (SSMP)* a) The Owner or Operator shall develop and implement a written SSMP that describes in detail the following: 1). Procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; 2). A program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the emission limitations specified in Table 3, Items 11 and 12 of TP-0088; 3). Web coating operation equipment such as conveyors that move the substrate among enclosures that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions; b) Periodic revisions to the SSMP may be made as necessary to reflect changes in equipment or procedures without prior approval of the Division; and c) The Owner or Operator must revise the SSMP within 45 days after an event if the event meets the characteristics of a malfunction, and the plan fails to address, or inadequately addresses the malfunction, and was not included in the SSMP at the time the plan was developed. The revision must include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment.	EU13	40 CFR 63.6(e)(3) subpart A	**Unknown[1]**

[1] EU13 is not yet operational, therefore, compliance with this permit condition can not be determined at this time.

VI. Compliance with Monitoring and Testing Requirements

Table 5 below, taken from TV-0061, lists the monitoring and testing requirements for the facility and any deficiencies noted during the inspection.

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
1.	To be determined	When conditions warrant, the Division may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Division approved methods.	Upon request by the Division	Facility Wide	RSA 125-C:6, XI	**Not Applicable**
Finding: During the inspection period, DES has not requested that WMI conduct stack testing.						
2.	Sulfur Content of Liquid Fuels	Conduct testing in accordance with appropriate ASTM test methods or retain delivery tickets in accordance with Table 6, Item 5 of TV-0061 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.	For each delivery of fuel oil to the facility	Facility Wide	Env-A 806.02 & Env-A 806.05 (effective 4-27-2007)	**Yes**
3.	Fuel Consumption	The Owner or Operator shall install, calibrate and maintain non-resettable fuel flow meters, and meet the following requirements: a) Will be operated and maintained to monitor fuel oil usage; b) Monitor fuel oil usage on a calendar day basis; and c) Shall be calibrated in accordance with the manufacturer's specifications at least annually or in a manner and/or frequency approved by the Division.	Continuous Daily Annually	EU09 & EU10	40 CFR 70.6 (a)(3)(i)(B) & TP-0057	**No**
Finding: WMI did not comply with Table 5, Item #3a and b, in that the fuel flow meters intermittently failed and therefore, were unable to collect daily from the meters. Although WMI was unable to monitor the fuel flow every day during the inspection period using the fuel flow meters, WMI did measure the fuel consumption per day by measuring the volume of fuel consumed in the fuel tanks. WMI was in compliance with Table 5, Item #3c during the inspection period. See Section IX: Permit Deviations for more information.						
4.	VOC Usage	The Owner or Operator shall make semiannual estimates of the projected annual amount of VOC to be used for the coating of polymeric substrate in that year.	Semiannual	EU01 & EU02	40 CFR 60.744(b) subpart VVV	**Yes**

Table 5 – Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
5.	VOC Emissions	The Owner or Operator shall use the following procedures for determining monthly volume-weighted average emissions of VOCs in kg/l of coating solids applied whenever the emissions from EU01 and EU02 are uncontrolled: a) Determine the composition of coatings by formulation data either: 1). Supplied by the manufacturer of the coating; or 2). An analysis of the coating as received using Method 24. b) Determine the volume of coating and the mass of VOC-solvent added to the coatings; c) Calculate the volume-weighted average of the total mass of VOCs consumed per unit volume of coating solids applied during each calendar month whenever the capture system and control device is used on an intermittent basis as follows: 1). Calculate the total volume of coating solids applied without the control device in operation (L_{sn}): $L_{sn} = \sum_{i=1}^{n} V_{si} L_{ci}$ [Eq. 1] Where: V_{si} = proportion of solids in each coating, i, as received (fraction by volume); L_{ci} = volume of each coating, i, consumed, as received (l); and n = number of coatings used without the control device in operation; 2). Calculate the total volume of coating solids applied with the control device in operation (L_{sc}): $L_{sc} = \sum_{i=1}^{n} V_{si} L_{ci}$ [Eq. 2]	Monthly	EU01 & EU02	40 CFR 60.463(c)(1) subpart TT	**Yes**

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
5. cont	VOC Emissions	Where: V_{si} = proportion of solids in each coating, i, as received (fraction by volume); L_{ci} = volume of each coating, i, consumed, as received (l); and n = number of coatings used with the control device in operation; 3). Calculate the mass of VOCs used without the control device in operation ($M_{on} + M_{dn}$): $M_{On} + M_{dn} = \sum_{i=1}^{n} L_{ci} D_{ci} W_{oi} + \sum_{j=1}^{m} L_{dj} D_{dj}$ [Eq. 3] Where: L_{ci} = the volume of coating, i, consumed, as received (l); D_{ci} = density of each coating, i, as received (kg/l); W_{oi} = proportion of VOCs in each coating, i, as received (fraction by weight); L_{dj} = volume of each VOC-solvent added to coating, i, (l); D_{dj} = density of each VOC-solvent added to coating, i, (kg/l); n = number of coatings used with the control device in operation; and m = number of different VOC solvents added to coatings used without the control device in operation; 4). Calculate the volume-weighted average mass of VOCs consumed per unit volume of coating solids applied (G_n) without the control device in operation: $G_n = \frac{M_{on} + M_{dn}}{L_{sn}}$ [Eq. 4] Where: M_{on} = mass of VOCs in coating consumed, as received (kg); M_{dn} = mass of VOC-solvent added to coatings (kg); and L_{sn} = volume of coating solids consumed (l);	Monthly	EU01 & EU02	40 CFR 60.463(c)(1) subpart TT	

Table 5 – Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
5. cont	VOC Emissions	5). Calculate the volume-weighted average of the total mass of VOCs used per unit volume of coating solids applied with the control device in operation (G_c): $G_c = \frac{M_{oc} + M_{dc}}{L_{sc}}$ [Eq. 5] Where: M_{oc} = mass of VOCs in coating consumed, as received (kg); M_{dc} = mass of VOC-solvent added to coatings (kg); and L_{sc} = volume of coating solids consumed (l); 6). Calculate the volume-weighted average of VOC emissions to the atmosphere (N) during each calendar month as follows: $N = \frac{G_n L_{sn} + G_c L_{sc}(1-R)}{L_{sn} + L_{sc}}$ [Eq. 6] Where: R = the overall reduction efficiency for the capture and control device as determined in the latest performance stack test 7). Calculate the emission limit(s) for each calendar month: $S = \frac{(0.28 \times L_{sn}) + (0.1 \times G_c \times L_{sc})}{L_{ns} + L_{sc}}$ [Eq. 7] OR $S = \frac{(0.28 \times L_{sn}) + (0.14 \times L_{sc})}{L_{ns} + L_{sc}}$ [Eq. 8] Whichever is greater. If the volume-weighted average mass of VOCs emitted to the atmosphere for each calendar month (N) is less than or equal to the calculated emission limit (S) for the calendar month, the affected facility is in compliance.	Monthly	EU01 & EU02	40 CFR 60.463(c)(1) subpart TT	

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
6.	Organic HAP	The Owner or Operator shall demonstrate: a) Initial compliance with the emission limitation specified in Table 4, Item 12.c) of TV-0061 using information from the supplier or manufacturer of the slashing material; and b) Continuous compliance by applying only slashing material that contains no organic HAP.	When received from manufacturer / supplier	EU03 & EU04	40 CFR 63.4321(e)(iv) & 63.4322(a) subpart OOOO	**Yes**
7.	HAP Emissions	The Owner or Operator shall perform the following calculations on a monthly basis for each coating, thinning, and cleaning material applied during the compliance period determined as the mass fraction of organic HAP for each material using one of the following: a) 40 CFR Part 63 Appendix A, Method 311; 1). Count each organic HAP that is measured to be present at 0.1 percent by mass or more for OSHA defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent for other compounds; and 2). Calculate the total mass fraction of organic HAP in the regulated material being tested by adding up the individual organic HAP mass fractions and truncating the results to no more than three places after the decimal point. b) 40 CFR Part 60 Appendix A, Method 24; c) Determine solids content of each coating material applied using: 1). ASTM D2697-86; 2). ASTM D 6093-97; or 3). An EPA approved alternative method; d) Information from the supplier or manufacturer of the material; or e) An alternative method approved by the Administrator.	Monthly	EU01, EU02, EU09 & EU10	40 CFR 63.4321(e), 63.4351(d)(1) & 63.4352(b) subpart OOOO & 63.5160 subpart SSSS	**Yes**

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
8.	HAP Emissions for Fabric Printing, Coating & Dying	The Owner or Operator shall perform the following calculations on a monthly basis for each coating, thinning, and cleaning material applied during the compliance period: a) For the compliant material option: 1). Determine the mass fraction of solids for each coating and printing material as applied using the following methods: i) 40 CFR Part 60 Appendix A, Method 24; ii) An alternative method approved by the Administrator; or iii) Information from the supplier or manufacturer of the material; 2). Calculate the organic HAP content of each coating or printing material applied during the compliance period using the following equation: $H_c = (W_c)/(W_f)$ [Eq. 9] Where: H_c = Organic HAP content of the coating or printing material, kg organic HAP per kg solids in the coating or printing material. W_c = Mass fraction of organic HAP in the coating or printing material, kg organic HAP per kg material, determined according to Table 5, Item 7 of TV-0061 W_f = Mass fraction of solids in coating or printing material, kg solids per kg coating or printing material, determined according to Table 5, Item 8. c) of TV-0061.	Monthly	EU01 & EU02	40 CFR 63.4321(e)(2) subpart OOOO	**Yes**

Table 5 – Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
8. cont	HAP Emissions for Fabric Printing, Coating & Dying	b) If using the emission rate with add-on control or the organic HAP overall control efficiency option for fabric printing, coating and dying calculate the mass of uncontrolled organic HAP emissions before add-on control using the following equation: $H_e = A + B - R_w$ [Eq. 10] Where: H_e = Mass of organic HAP emissions during the compliance period (kg); A = Total mass of organic HAP in the coating materials applied during the compliance period, kg, as calculated in Equation 10A below; B = Total mass of organic HAP in the thinning and cleaning materials applied during the compliance period, kg, as calculated in Equation 10B below; R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg; 1). Calculate A (the organic HAP in the coating and printing materials applied during the compliance period, kg) as follows: $A = \sum_{i=1}^{m} \left(M_{c,i}\right) \times \left(W_{c,i}\right)$ [Eq.10A] Where: $M_{c,i}$ = Total mass of coating material, i, applied during the compliance period, (kg); $W_{c,i}$ = Mass fraction of organic HAP in coating material, i, (kg organic HAP/kg material); m = number of different coating materials applied during the compliance period; 2). Calculate B (the organic HAP in the thinning and cleaning materials applied during the compliance period, kg) as follows:	Monthly	EU01, EU02, EU09 & EU10	40 CFR 63.4321(e)(3) subpart OOOO 40 CFR 63.4351(d) (2) 63.4331(a) (4)(i) & 63.4341(e)(2) subpart OOOO 40 CFR 63.4351(d) (4)& 63.4341(e) subpart OOOO	

Table 5 – Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
8. cont	HAP Emissions for Fabric Printing, Coating & Dying	$B = \sum_{j=1}^{n} (M_{t,j}) \times (W_{t,j})$ [Eq. 10B] Where: $M_{t,j}$ = Total mass of thinning or cleaning material, j, applied during the compliance period, (kg); $W_{t,j}$ = Mass fraction of organic HAP in thinning or cleaning material, j, (kg); n = number of different thinning and cleaning materials applied during the compliance period. 3). Calculate the total mass of the solids contained in all coating and printing material applied during the compliance period, H_t (kg): $H_t = \sum_{i=1}^{m} (M_{c,i})(W_{f,i})$ [Eq. 11] Where: $M_{c,i}$ = Total mass of coating material, i, applied during the compliance period, (kg); $W_{c,i}$ = Mass fraction of organic HAP in coating material, i, (kg organic HAP/kg material); m = number of different coating materials applied during the compliance period; 4). Calculate the mass of organic HAP emission reduction by the emission capture systems and add-on control devices using Equation 12 below; 5). Calculate the organic HAP emission rate for the compliance period, H_{yr} (kg organic HAP/kg solids) using the equation below: $H_{yr} = \frac{H_e}{H_t}$ [Eq. 12] Where:	Monthly	EU01, EU02, EU09 & EU10	40 CFR 63.4331(a)(5) subpart OOOO	

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
8. cont	HAP Emissions for Fabric Printing, Coating & Dying	H_e = Mass of organic HAP emissions during the compliance period (kg); H_t = Mass of the solids contained in all coating and printing material applied during the compliance period c) For each controlled web coating/printing operation using an emission capture system and add-on control device calculate the organic HAP emissions reductions during the compliance period as follows: $H_c = (A_I + B_I - H_{UNC})\left(\frac{CE}{100} \times \frac{DRE}{100}\right)$ [Eq 13] Where: H_C = Mass of organic HAP emission reduction for the controlled web coating/printing operation, kg; A_I = Total mass of organic HAP in the coating and printing materials applied in the controlled web coating operation, kg, as calculated in Equation 13A below; B_I = Total mass of organic HAP in the thinning and cleaning materials applied in the controlled web coating/printing operation, kg, as calculated in Equation 13B below; H_{UNC} = Total mass of organic HAP in the coating, printing, thinning and cleaning materials applied during all deviations specified in Table 5, Item 10. a.) & b.) that occurred during the compliance period in the controlled web coating operation, kg, as calculated in Equation 13C below; CE = Capture efficiency of the emission capture system vented to the add-on control system and add-on control device, percent; as determined during the latest performance test; DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent, as determined during the latest performance test;	Monthly	EU01, EU02, EU09 & EU10	40 CFR 63.4341(a)(5) 63.4351(d) (4) & 63.4331(a)(6) subpart OOOO	

Table 5 – Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
8. cont	HAP Emissions for Fabric Printing, Coating & Dying	1). Calculate A_1 (total mass organic HAP in the coating and printing materials applied in the controlled web coating/printing operations during the compliance period, kg) as follows: $A_I = \sum_{i=1}^{m} (M_{c,i})(W_{c,i})$ [Eq 13A] Where: $M_{c,i}$ = Mass of coating or printing material, i, applied, kg; $W_{c,i}$ = Mass fraction of organic HAP in coating or printing material, i, kg per kg; m = Number of different coating and printing materials applied; 2). Calculate the total mass of organic HAP in the thinning and cleaning materials applied in the controlled web coating/printing operation during the compliance period, kg, as calculated below: $B_I = \sum_{j=1}^{n} (M_{t,j})(W_{t,j})$ [Eq 13B] Where: $M_{t,j}$ = Mass of thinning or cleaning material, j, applied, kg; $W_{t,j}$ = Mass fraction of organic HAP in thinning or cleaning material, j, kg organic HAP/kg material; n = Number of different thinning and cleaning materials applied; 3). Calculate H_{UNC} (total mass of organic HAP in the coating, thinning, and cleaning materials applied during all deviations specified in Table 5, Item 10. a.) & b.), kg: $H_{UNC} = \sum_{h=1}^{q} (M_h)(W_h)$ [Eq. 13C]	Monthly	EU01, EU02, EU09 & EU10	40 CFR 63.4351(d)(4) & 63.4341(e)(4) subpart OOOO	

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
		Where: M_h = Total mass of coating, thinning or cleaning material, h, applied in the controlled web operation during deviations (kg); W_h = Mass fraction of organic HAP in coating, thinning or cleaning material, h, (kg organic HAP/kg material); q = Number of different coating, thinning and cleaning materials applied and used;				
Finding: WMI is using the emission rate with add-on control device to calculate the organic HAP emission reductions for the compliance period. WMI is assuming a capture efficiency of 100% and a destruction removal efficiency of 98%. The testing conducted to determine the capture efficiency and removal efficiency was conducted in 2010.						
9.	HAP Emissions for Metal Coil Coating	For the compliant materials option: a) As purchased compliant coatings that individually meet the organic HAP emission limit in Table 4, Item 13.a.)1.) as purchased, to which no HAP is added during distribution or application: 1). Determine the organic HAP content for each coating material and the volume solids content in accordance with Table 5, Item 7; 2). Combine these results using Equation 14 below: $H_{siap} = \frac{C_{hi} \times D_i}{V_{si}}$ [Eq. 14] Where: H_{siap} = as-purchased, organic HAP to solids ratio of coating material, i, kg organic HAP/liter solids applied; C_{hi} = organic HAP content of coating material, i, expressed as a weight-fraction, kg/kg; D_i = density of coating material, i, kg/l; V_{si} = volume fraction of solids in coating, i, l/l;	Monthly	EU02	40 CFR 63.5170(a) subpart SSSS	**Not Applicable**

Table 5 – Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
9. cont	HAP Emissions for Metal Coil Coating	b) As-applied compliant coatings meet the organic HAP emission limit in Table 4, Item 13. a.) 2.) for the 12-month compliance period using Equation 14A below: $$H_{Si\,yr} = \frac{\sum_{y=1}^{12}\left[V_i D_i C_{ahi} + \sum_{i=1}^{q} V_j D_j C_{hij}\right]}{\sum_{y=1}^{12} V_i V_{si}}$$ [Eq. 14A] Where: $H_{Si\ yr}$ = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of material, i, kg organic HAP/liter solids applied; V_i = volume of coating material, i, l D_i = density of coating material, i, kg/l C_{ahi} = monthly average, as-applied, organic HAP content of solids-containing coating material, i, expressed as a weight fraction, kg/kg V_j = volume of solvent, j, l D_j = density of solvent, j, kg/l C_{hij} = organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg V_{si} = volume fraction of solids in coating, i, l/l y = identifier for months q = number of different solvents, thinners, reducers, diluents or other non-solids-containing coating materials applied in a month	Monthly	EU02	40 CFR 63.5170(b) subpart SSSS	

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
9. cont	HAP Emissions for Metal Coil Coating	c) Demonstrate that the average organic HAP content meet the emission limitation specified in Table 4, Item 13. a.) 3.) using Equation 14B below: $H_{s\ yr} = \frac{\sum_{y=1}^{12}\left[\sum_{i=1}^{p} V_i D_i C_{ahi} + \sum_{j=1}^{q} V_j D_j C_{hij}\right]}{\sum_{y=1}^{12}\left[\sum_{i=1}^{p} V_i V_{si}\right]}$ [Eq. 14B] Where: $H_{s\ yr}$ = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of material, i, kg organic HAP/liter solids applied; V_i = volume of coating material, i, l D_i = density of coating material, i, kg/l C_{ahi}= monthly average, as-applied, organic HAP content of solids-containing coating material, i, expressed as a weight fraction, kg/kg V_j = volume of solvent, j, l D_j = density of solvent, j, kg/l C_{hij}= organic HAP content of solvent, j, added to coating material, i, expressed as a weight fraction, kg/kg V_{si} = volume fraction of solids in coating, i, l/l y = identifier for months q = number of different solvents, thinners, reducers, diluents or other non-solids-containing coating materials applied in a month	Monthly	EU02	40 CFR 63.5170(b) subpart SSSS	
Finding: WMI used the add-on control device to meet the HAP emission requirements of Table 4, Item #13.						

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
10.	VOC/HAP Emissions	The Owner or Operator shall: a) Assume that the emission capture system and add-on control devices are achieving zero efficiency during the time-period of a deviation if an operating parameter is out of the allowed range determined during the compliance testing. The regulated materials applied during a deviation on a controlled coating operation shall be treated as if they were an uncontrolled coating operation for the time-period of the deviation as indicated in Equation 13 in Table 5, Item 8 above; b) Treat the regulated materials applied if any by-pass line is opened and emissions are diverted to the atmosphere when the web coating operation is running during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time-period of the deviation as indicated in Equation 13 in Table 5, Item 8 above; c) Continuously monitor the combustion temperature and coating enclosure ΔP operating parameters listed in Table 4, Item 14 to ensure capture and control efficiency; and d) Monitor and record when EU01 is operated with low solvent content coatings, and the exhaust routed through EU10.	Monthly Monthly Continuous	EU01, EU02, EU09 & EU10 EU01, EU02, EU09 & EU10 EU02, EU09 & EU10	40 CFR 63.4342(c) subpart OOOO 40 CFR 63.4342(d) subpart OOOO 40 CFR 63.5170(i) subpart SSSS	**Yes**
11.	Oxidizer Temperature Monitoring	The Owner or Operator shall: a) Install, calibrate, maintain, and operate temperature monitoring equipment according to manufacturer's specifications; 1). The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months, or replace the chart recorder, data logger, or temperature indicator equipment either if	Continuous	EU09 & EU10	40 CFR 63.5150(a) subpart SSSS & 40 CFR 63.4364(c) subpart OOOO	**Yes**

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
		you choose not to perform the calibration or if the equipment cannot be calibrated properly; and 2). Each temperature-monitoring device must be equipped with a continuous recorder. The device must have an accuracy of ±1% of the temperature being monitored in degrees Celsius, or ±1°C, whichever is greater; b) Install the thermocouple or temperature sensor in the combustion chamber at a location in the combustion zone; and c) Demonstrate continuous compliance with the operating limits specified in Table 4, Item 14 a).				
12.	Capture System Monitoring Plan	The Owner or Operator shall: a) Develop a site-specific monitoring plan containing the information specified below, and monitor the capture system in accordance with b.)3.) below; b) The capture system monitoring plan must: 1). Identify the operating parameter to be monitored to ensure that the capture efficiency determined during the initial compliance test is maintained; 2). Explain why this parameter is appropriate for demonstrating ongoing compliance; 3). Identify the specific monitoring procedures; 4). Specify the operating parameter value or range of values that demonstrate compliance with the emission standards in Table 4, Items 12 b.)2.) and 13 b.); and 5). The specified operating parameter value or range of values must represent the conditions present when the capture system is being properly operated and	Continuous	EU01 & EU02	40 CFR 63.4364(e) subpart OOOO & 40 CFR 63.5150(a)(4) & 63.5170(i) subpart SSSS	**Yes**

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
		maintained; c) Conduct all capture system monitoring in accordance with the plan; d) Review and update the capture system-monitoring plan at least annually; and e) The monitoring plan must be available for inspection upon request.				
13.	Continuous Parameter Monitoring System (CPMS)	The Owner or Operator shall install, calibrate, operate, and maintain each CPMS to continuously monitor the oxidizer operating parameters according to the following: a) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. There must be a minimum of four equally spaced successive cycles of CPMS operation to have a valid hour of data; b) Have valid data from at least 90% of the hours during which the process operated; c) Determine the hourly average of all recorded readings - There must be at least three of four equally spaced data values from that hour from a continuous monitoring system (CMS) that is not out-of-control to calculate a valid hourly value; d) Provided all of the readings recorded in accordance with paragraph b.) above clearly demonstrate continuous compliance with the standard, the Owner or Operator is not required to determine the hourly average of all recorded readings;	Continuously	EU09 & EU10	40 CFR 63.4364(a) subpart OOOO & 40 CFR 63.5150(a) subpart SSSS	**No**

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
13. cont	Continuous Parameter Monitoring System (CPMS)	e) Determine the rolling 3-hour average of all recorded readings for each operating period. To calculate the average for each 3-hour averaging period, the Owner or Operator must have at least two of three of the hourly averages for that period using only average values that are based on valid data (i.e., not from out-of-control periods); f) Maintain the monitoring system in proper working order including, but not limited to, maintaining parts for routine repairs of the monitoring equipment at all times; g) Except for monitoring malfunctions, associated repairs, or required quality assurance or control activities (including calibration checks or required zero and span adjustments) the Owner or Operator must: 1). Conduct all monitoring at all times that the unit is operating. Data recorded during monitoring malfunctions, associated repairs, out-of control periods, or required quality assurance or control activities shall not be used for purposes of calculating the emissions percent reductions of 98%; 2). Use all the valid data collected during all other periods in assessing compliance of the control device and associated control system; h) Any averaging period for which there is no valid monitoring data and such data are required constitutes a deviation, and the Owner or Operator must notify the Division in accordance with Table 7, Item 6.	Continuously	EU09 & EU10	40 CFR 63.4364(a) subpart SSSS & 40 CFR 63.5150(a) subpart OOOO	
Finding: See Table 5 Item #3.						

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
14.	Bypass Monitoring	The Owner or Operator shall: a) Monitor or secure the valve or closure mechanism controlling the bypass line in a non-diverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened; b) Use a method to monitor or secure the valve or closure mechanism where, the automatic shutdown system will stop the web and coil coating lines when flow is diverted away from the control device to any bypass line when the control device is in operation; and c) Inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down operations.	Continuous Monthly	EU01, EU02, EU09 & EU10	40 CFR 63.4364(b) subpart OOOO & 63.5152(d) subpart SSSS 40 CFR 63.4364(b)(1)(iv) subpart OOOO	**Yes**
15.	Minor Core & Insignificant Activities Capture/ Control Equipment	a) Conduct visual external integrity inspection of the capture devices for holes and defects: 1). The inspection shall include an evaluation of whether all emissions are being vented through the stack exit; and 2). The inspection shall be conducted by plant personnel familiar with the operation of the capture equipment. b) Monitor and record the flow-rates of the down draft tables; and c) Monitor and record the combustion temperature listed in Table 3, Item 4.e.) of TV-0061to ensure control efficiency ; and d) Test for fume capture of EU11 and/or EU12 using either smoke tubes or dry ice.	Twice per year and when conditions indicate inspection is warranted Daily Continuously After modification and/or relocation and prior to use	EU05, EU06, EU11 & EU12 EU09 & EU10 EU11 & EU12	RSA 125-C:6, XI & Consent Decree Docket #09-E-0336 (State Only Enforceable)	**Yes**

Table 5 – Monitoring/Testing Requirements						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
16.	Boiler Tune-up	The biennial tune-up of the boilers shall consist of the following: Inspect the burner, and clean or replace any components of the burner as necessary; Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications if available; Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly; Optimize total emissions of carbon monoxide [CO]. This should be consistent with the manufacturer's specifications if available; and Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen [O_2] in volume percent, before and after the adjustments are made.	Initially by March 21, 2012 and biennially thereafter	EU09 & EU10	40 CFR 63.11223(b) subpart JJJJJJ	**Unknown**
Finding: On December 20, 2012, EPA revised 40 CFR 63 subpart JJJJJJ. In this revision, the compliance date for the initial tune-up was delayed to March 21, 2014. At the time of the inspection, WMI had not yet conducted the initial tune-up on EU09 or EU10.						

Table 5a below, lists additional monitoring and testing requirements, as identified in permit TP-0088, for the facility and any deficiencies noted during the inspection.

Table 5a- Monitoring and Testing Requirements from TP-0088

Item #	Parameter	Method of Compliance	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
3.	Oxidizer Temperature Monitoring	The Owner or Operator shall: a) Install, calibrate, maintain, and operate temperature monitoring equipment according to manufacturer's specifications; 1). The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months, or replace the chart recorder, data logger, or temperature indicator equipment either if you choose not to perform the calibration or if the equipment cannot be calibrated properly; and 2). Each temperature-monitoring device must be equipped with a continuous recorder. The device must have an accuracy of ±1% of the temperature being monitored in degrees Celsius, or ±1°C, whichever is greater; b) Install the thermocouple or temperature sensor in the combustion chamber at a location in the combustion zone; and c) Demonstrate continuous compliance with the operating limits specified in Table 3, Item 13 a) of TP-0088.	Continuously	EU13	40 CFR 63.5150(a) subpart SSSS & 40 CFR 63.4364(c) subpart OOOO	**Unknown[1]**

Table 5a- Monitoring and Testing Requirements from TP-0088						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
4.	Continuous Parameter Monitoring System (CPMS)	The Owner or Operator shall install, calibrate, operate, and maintain each CPMS to continuously monitor the oxidizer operating parameters according to the following: a) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. There must be a minimum of four equally spaced successive cycles of CPMS operation to have a valid hour of data; b) Have valid data from at least 90% of the hours during which the process operated; c) Determine the hourly average of all recorded readings - There must be at least three of four equally spaced data values from that hour from a continuous monitoring system (CMS) that is not out-of-control to calculate a valid hourly value; d) Provided all of the readings recorded in accordance with paragraph c.) above clearly demonstrate continuous compliance with the standard, the Owner or Operator is not required to determine the hourly average of all recorded readings; e) Determine the rolling 3-hour average of all recorded readings for each operating period. To calculate the average for each 3-hour averaging period, the Owner or Operator must have at least two of three of the hourly averages for that period using only average values that are based on valid data (i.e., not from out-of-control periods); f) Maintain the monitoring system in proper working order including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment at all times;	Continuously	EU13	40 CFR 63.4364(a) subpart OOOO & 40 CFR 63.5150(a) subpart SSSS	**Unknown**[1]
4. cont	Continuous Parameter	g) Except for monitoring malfunctions, associated repairs, or required	Continuously	EU13	40 CFR 63.4364(a)	

Table 5a- Monitoring and Testing Requirements from TP-0088						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
	Monitoring System (CPMS)	quality assurance or control activities (including calibration checks or required zero and span adjustments) the Owner or Operator must: 1). Conduct all monitoring at all times that the unit is operating. Data recorded during monitoring malfunctions, associated repairs, out-of control periods, or required quality assurance or control activities shall not be used for purposes of calculating the emissions percent reductions of 98%; 2). Use all the valid data collected during all other periods in assessing compliance of the control device and associated control system; h) Any averaging period for which there is no valid monitoring data and such data are required constitutes a deviation, and the Owner or Operator must notify the Division in accordance with Table 6, Item 7 of TP-0088.			subpart OOOO & 40 CFR 63.5150(a) subpart SSSS	
5.	Bypass Monitoring	The Owner or Operator shall: a) Monitor or secure the valve or closure mechanism controlling the bypass line in a non-diverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened; b) Use a method to monitor or secure the valve or closure mechanism where, the automatic shutdown system will stop the web and coil coating lines when flow is diverted away from the control device to any bypass line when the control device is in operation; and	Continuously	EU01, EU02 & EU13	40 CFR 63.4364(b) subpart OOOO & 63.5150(a) subpart SSSS	**Unknown[1]**
5 Cont.	Bypass Monitoring	c) Inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down operations.	Monthly	EU01, EU02 & EU13	40 CFR 63.4364(b)(1) (iv)	

Table 5a- Monitoring and Testing Requirements from TP-0088						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
7.	Stack Emissions	a) Conduct emissions testing to evaluate compliance with the emission reduction requirements specified in Table 3, Item 11, and Item 12 of TP-0088; b) Compliance testing shall be planned and carried out in accordance with the following schedule: 1). A pre-test protocol shall be submitted to the Division at least 30 days prior to the commencement of testing; 2). The Owner or Operator and any contractor retained by the Owner or Operator to conduct the test shall meet with a Division representative at least 15 days prior to the test date to finalize the details of the testing; and 3). A test report shall be submitted to the Division within 60 days after the completion of testing, and shall meet the reporting requirements specified in Env-A 802.11. c) The following test methods, or Division approved alternatives, shall be used: 1). USEPA Methods 1-4 for exit flow rate, percentage of carbon dioxide, oxygen and moisture; 2). USEPA Method 5 for particulate matter; 3). USEPA Method 7e for oxides of nitrogen; 4). USEPA Method 10 for carbon monoxide; 5). USEPA Method 18 for methane; 6). USEPA Method 25 or 25A for total non-methane VOCs;	Within 180 days from the date the new boiler is brought on-line	EU13	Env-A 802	**Unknown**[1]

Table 5a- Monitoring and Testing Requirements from TP-0088						
Item #	**Parameter**	**Method of Compliance**	**Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
7. Cont	Stack Emissions	7). Testing shall be performed for total non-methane VOC emissions at the inlet and outlet of EU01 and/or EU02, and the inlet to EU09, EU10 and/or EU13 to determine the destruction efficiency; 8). Testing shall be performed for total non-methane VOC emission to determine the facility-wide capture efficiency as specified in Env-A 805; 9). Monitor and record the flow-rates of the downdraft tables (EU05, EU06, EU11 and EU12); and d) Test for fume capture using either smoke tubes or dry ice for the downdraft tables. e) The Owner or Operator shall be subject to fees for any testing and monitoring which Division personnel undertake or audit in accordance with this permit.	Within 180 days from the date the new boiler is brought on-line	EU13	Env-A 802	
8.	Boiler Tune-up	The biennial tune-up of the boiler shall consist of the following: a) Inspect the burner, and clean or replace any components of the burner as necessary; b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications if available; c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly; d) Optimize total emissions of carbon monoxide [CO]. This should be consistent with the manufacturer's specifications if available; and e) Measure the concentrations in the effluent stream of CO in ppmv, and oxygen in volume percent, before and after the adjustments are made.	Within 180 days of startup and biennially thereafter	EU13	40 CFR 63.11210(d) & 63.11223(b) subpart JJJJJJ	**Unknown**[1]

[1] EU13 is not yet operational, therefore, compliance with this permit condition can not be determined at this time.

VII. Compliance with Recordkeeping Requirements

Table 6 below, taken from permit TV-0061, lists the recordkeeping requirements for the facility and any deficiencies noted during the evaluation.

Table 6- Recordkeeping Requirements

Item #`	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
1.	The Owner or Operator shall retain records of all required monitoring data, recordkeeping and reporting requirements, and support information for a period of at least 5 years from the date of origination.	Retain for a minimum of 5 years	Facility Wide	40 CFR 70.6(a)(3)(ii)(B)	**Yes**
2.	*Regulated Toxic Air Pollutants* Maintain records documenting compliance with Env-A 1400. Compliance was demonstrated at the time of permit issuance as described in the Application Review Summary prepared by the Division for permit application 10-0055. The compliance demonstration must be updated if: a) There is a revision to the list of RTAPs lowering the AAL for any RTAP emitted at the facility; b) The amount of any RTAP emitted is greater than the amount that was evaluated in the Application Review Summary (e.g., use of a coating will increase); c) An RTAP that was not evaluated in the Application Review Summary will be emitted (e.g., a new coating will be used); d) If emissions from EU01 and/or EU02 are not vented through EU09 and/or EU10 for destruction, or if the destruction efficiency decreases to less than 98%; or e) If the destruction efficiency of EU09 and/or EU10 falls below 95% only when emissions are vented from EU05, EU06, EU11 and/or EU12; and f) Stack conditions (e.g. air flow rate) change.	Maintain Up-to-Date Data	Facility Wide	Env-A 902.01 (State-Only Enforceable)	**Yes**
3.	*Minor Core Activities* Record the VOC emissions from all minor core activities.	Continuously	EU05, EU06, EU07, EU08, EU11 & EU12	Env-A 1204.02(d)	**Yes**

Table 6- Recordkeeping Requirements

Item #`	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
4.	*General Recordkeeping Requirements for Combustion Devices* Maintain the following records of fuel characteristics and utilization for the fuel used in the combustion devices: a) Type (e.g. diesel fuel, natural gas) and amount of fuel burned in each device, or type and amount of fuel burned in multiple devices; b) The hours of operation of each device to be used to apportion fuel use between the multiple devices; and c) Sulfur content in terms of percent sulfur by weight.	Daily Monthly	EU09 & EU10	Env-A 901.03 (SIP approved rule), Env-A 903.03 (effective 4-21-2007) & 40 CFR 63.11223(b)(6) & 63.11225(c) subpart JJJJJJ	**Yes**
5.	*Liquid Fuel Oil Recordkeeping Requirements* In lieu of sulfur testing pursuant to Table 5, Item 2, the Owner or Operator may maintain fuel delivery tickets that contain the following information: a) Records showing the maximum weight percentage of sulfur and quantity of each fuel delivery shipment received; and b) Records showing either: 1). The analytical method used and the specific fuel analysis results of the shipment or consignment from which the shipment came; or 2). Delivery records sufficient to allow for traceability of the analytical results corresponding to each shipment received by the stationary source, showing: i) The date of delivery; ii) The quantity of delivery; iii) Type of fuel; iv) The maximum weight percentage of sulfur; and v) The name, address and telephone number of the company making the delivery.	For each delivery of fuel oil/diesel to the facility	EU09& EU10	Env-A 806.05	**Yes**

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
6.	*General Recordkeeping Requirements for Process Operations* Maintain records shall be kept regarding process operations including the following information for each process/device: a) Monthly hours of operation; b) Quantity of raw materials used per month; and c) Distribution of the process discharges if the process discharges air pollutants through more than one discharge point.	Monthly	EU01 through EU08, EU11 & EU12	Env-A 903.02 (effective 4-21-2007)	**Yes**
7.	*VOC Recordkeeping for Polymeric Coating of Supporting Substrates* Maintain records of: Actual consecutive 12-month VOC use; and The semiannual estimates of projected VOC use.	Maintain Up-to-Date Data	EU01 & EU02	40 CFR 60.744(b)(2) & 60.747(c)(1) subpart VVV	**Yes**
8.	*VOC Emission Statements Recordkeeping Requirements* If the actual annual VOC emissions from the Facility are greater than or equal to 10 tpy, then the Owner or Operator shall record the following information: a) Identification of each VOC-emitting process or device; b) The operating schedule during the high ozone season (June 1 through August 31) for each VOC-emitting process or device identified in a.) above, including: 1). Typical hours of operation per calendar month; and 2). Typical days of operation per calendar month. c) The following VOC emission data from all VOC-emitting processes or devices identified in a.) above, including: 1). Actual VOC emissions for: i. The calendar year, in tons; ii. A typical high ozone season day during that calendar year, in pounds per day; and 2). The emission factors and the origin of the emission factors used to calculate the VOC emissions.	Maintain Up-to-Date Data	Facility Wide	Env-A 904 (effective 4-21-2007)	**Not Applicable**
Finding: During the inspection period, WMI's VOC emissions were less than 10 tpy.					
9.	*VOC Recordkeeping for Surface Coating and Printing Operations* If the actual annual VOC emissions from the Facility are greater than or equal to 10 tpy, then	Maintain Up-to-Date Data	Facility Wide	Env-A 904.03 (effective 4-21-2007)	**Not Applicable**

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
	the Owner or Operator shall record the following information for each coating operation identified in Table 6, Item 8. a.), above: a) Coating formulation and analytical data, as follows: 1). Supplier; 2). Name and color; 3). Type; 4). Identification number; 5). Density described as lb/gal; 6). Total volatile content described as weight percent; 7). Water content described as weight percent; 8). Exempt solvent content described as weight percent; 9). VOC content described as volume percent; 10). Solids content described as volume percent; 11). Diluent name and identification number; 12). Diluent solvent density described in lb/gal; 13). Diluent VOC content described as weight percent; 14). Diluent exempt solvent content described as weight percent; 15). Volume of diluent VOC described as gal; and 16). Diluent/solvent ratio described as gal diluent solvent per gal coating; b) The number of gallons or pounds of each coating, including solvents and diluents, utilized during a typical high ozone season day; and c) Process information for a typical high ozone season day, including: 1). Method of application; 2). Number of coats; 3). Drying method; and 4). Substrate type and form.				
Finding: During the inspection period, WMI's VOC emissions were less than 10 tpy.					

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
10.	*Format for Recordkeeping Information* The information recorded pursuant to Table 6, Item 9 shall be recorded on standard forms included in the *Recordkeeping Guidance Document for Surface Coating Operations and the Graphic Arts Industry*, USEPA, July 1988, or alternative forms that contain all the data recorded pursuant to Table 6, Item 9.	Maintain Up-to-Date Data	EU01 & EU02	Env-A 904.04 (effective 4-21-2007)	**Not Applicable**
Finding: During the inspection period, WMI's VOC emissions were less than 10 tpy.					
11.	*Additional Recordkeeping Requirements - Facility-wide Emission Limitations* Maintain a 12-month running total of Facility-wide emissions of VOCs, which shall include emissions from non-permitted devices, for the purpose of demonstrating that the total emissions of these pollutants are below the major source threshold of 50 tpy for these pollutants.	Monthly	Facility Wide	Env-A 906 (effective 4-23-1999)	**Yes**
12.	*Metal Surface Coil Coating Recordkeeping Requirements* The Owner or Operator shall compute and record the average VOC content of coatings applied during each calendar month according to the equations in Table 5, Item 5.	Monthly	EU01 & EU02	40 CFR 60.464(b) subpart TT	**Yes**
13.	*Fabric and Coil Coating Recordkeeping Requirements* Record the following information: a) A copy of each notification and report that was submitted to the Division and the documentation supporting each notification and report; b) A current copy of the information provided by material suppliers or manufacturer's such as: 1). Manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP for coating, printing, thinning and cleaning materials; 2). The mass fraction of coating solids for coating and printing materials; 3). A copy of the complete test report if testing was conducted to determine mass fraction of organic HAP of coating materials, or the mass fraction of solids of coating materials; 4). The summary sheet of results provided by the manufacturer or supplier if the information was based on testing;	Continuously	EU01, EU02, EU03, EU04 & EU08	40 CFR 63.4312 subpart OOOO & 63.5190 subpart SSSS	**Yes**

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
14.	*Fabric Coating Recordkeeping Requirements* a) For each compliance period, a record of each compliance option and the time-periods (beginning and ending dates) for each option used in the web coating operations; b) For the compliant material option – a record of the calculation of the organic HAP content, as purchased for each coating/printing material applied using Equation 9 from Table 5, Item 8. a.); c) For the emission rate with add on control option – 1). A record of the calculation of the total mass of organic HAP emissions before add-on controls for the coating, printing, thinning, and cleaning materials applied each compliance period using the equations in Table 5, Item 8 b.); 2). The calculation of the total mass of the solids contained in all coating and printing materials applied each compliance period using Equation 11 from Table 5, Item 8. b.) 3.); 3). The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 13, 13A, and 13B, from Table 5, Item 8; and 4). The calculation of the organic HAP emission rate for each compliance period using Equation 12 from Table 5, Item 8. b.) 5.);	Continuously	EU01, EU02, EU03, EU04 & EU08	40 CFR 63.4312(c) subpart OOOO	**Yes**
	d) A record of the name and mass of each regulated material applied in the web coating and printing operation during each compliance period;		EU01, EU02, EU09 & EU10	40 CFR 63.4312(d)	
	e) A record of the mass fraction of organic HAP for each regulated material applied during each compliance period	Continuously	EU01, EU02, EU09 & EU10	40 CFR 63.4312(e)	
	f) A record of the mass fraction of coating and printing solids for each coating and printing material used during each compliance period			40 CFR 63.4312(f)	
	g) Records of the date, time and duration of each deviation;			40 CFR 63.4312(i)	

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
14. cont	h) The following add-on control device information: 1). For each deviation, a record of whether the deviation occurred during a period of startup, shutdown or malfunction; 2). The records related to startup, shutdown and malfunction as specified in Table 6, Item 16; 3). The records required to show continuous compliance with each operating limits specified in Table 4, Item 14; 4). For each capture system that is a PTE: i.) Data and documentation used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100%; and ii.) Current capture system monitoring plan as required in Table 5, Item 12;			40 CFR 63.4312(j)	
	i) The following records for each add-on control device organic HAP destruction or removal efficiency determination as specified in Table 4, Items 12 and 13: 1). Records of each add-on control device performance test conducted; and 2). Records of the web coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions;			40 CFR 63.4312(i) & (j)	
	j) Records of the data and calculations used to establish the emission capture and add-on control device operating limits as specified in Table 4, Item 14 and to document compliance with the operating limits as specified in Table 4, Items 14. a.) and 14. c.);	Monthly		40 CFR 63.4312(j) & 63.5190(a)(2)	
	k) Records of the times EU01 is operated with low solvent content coatings, and the exhaust routed through EU10;	As specified	EU01		

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
14. cont	l) A record of the work practice plan (WWP) required by Table 4, Item 17 and documentation that the plan is being implemented on a continuous basis; and m) The following records for the continuous monitoring system (CPMS): 1). All required CPMS measurements, including monitoring data recorded during unavoidable CPMS breakdowns and out-of-control periods; 2). The date and time identifying each period during which the CPMS was inoperative except for zero (low-level) and high-level checks; 3). The date and time identifying each period during which the CPMS was out of control; 4). The specific identification of each period of excess emissions and parameter monitoring exceedances, that occurs during startups, shutdowns, and malfunctions; 5). The nature and cause of any malfunction; 6). The corrective action taken or preventative measures adopted; 7). The nature of the repairs or adjustments to the CPMS that was inoperative or out of control; 8). The total process operating time during the reporting period; and 9). All procedures that are part of a quality control program developed and implemented for CPMS under Table 4, Item 18.	Continuously Continuously	EU01, EU02, EU05, EU06 & EU08 EU09 & EU10	40 CFR 63.4312(j) 40 CFR 63.10(c) subpart A	

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
15.	*Metal Coil Coating Recordkeeping Requirements* a) For each compliance period, a record of each compliance option and the time-periods (beginning and ending dates) for each option used in the web coating operations; b) Control device and capture system operating parameter data in accordance with Table 6, Item 17, below; c) Organic HAP content and volatile matter and solids data collected in accordance with Table 5, Item 9; and d) Overall control efficiency determination outlet HAP concentration using capture efficiency tests and control device destruction or removal efficiency tests collected in accordance with Table 6, Items 14. h.) and 14. i.) above.	Continuously	EU01 & EU02	40 CFR 63.5190(a) subpart SSSS & 63.10(b) subpart A	**Yes**
16.	*Startup, Shutdown and Malfunction Recordkeeping Requirements* Keep the following records related to startup, shutdown, and malfunction: a) Keep records of each startup, shutdown and/or malfunction event if the procedures in the SSMP were followed, including the occurrence and duration of each startup, shutdown or malfunction for the air pollution control equipment; b) Record the actions taken if an action taken during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the SSMP, and the source exceeds the applicable emission limitation specified in Table 4, Items 12 or 13; and c) Keep the written SSMP on record after it is developed to be made available for inspection upon request, for the life of the affected source; and d) If the SSMP is revised, previous versions of the SSMP shall be kept for a period of 5 years and be made available for inspection upon request.	Continuously	EU01, EU02, EU09 & EU10	40 CFR 63.6(e)(3) subpart A	**Yes**

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
17.	*Additional Recordkeeping Requirements - Pollution Control Equipment* Maintain records of all air pollution control equipment activities required in Table 5, including: a) Pressure differential and/or flow measurements for each capture device/enclosure; b) Combustion temperatures; c) Air pollution control equipment inspection and maintenance activities including calibration and validation checks as specified by the manufacturer; and d) Corrective actions.	As specified in Table 5	EU01, EU02, EU09 & EU10	Env-A 906, 40 CFR 63.4364(a) subpart OOOO & 63.5190(a)(2) subpart SSSS	**Yes**
18.	*Liquid Fuel Flow Meters* Record the results of each inspection, calibration, and validation check of the liquid fuel flow meters.	Annually	EU09 & EU10	Env-A 906	**Yes**
19.	*Add-on Pollution Control Equipment* The Owner or Operator of any stationary source or device with add-on VOC control equipment shall maintain the following information: a) The air pollution control device identification number, type, model number, and manufacturer; b) Installation date; c) Processes or devices controlled; d) The type and location of the capture system, capture efficiency percentage, and method of determining capture efficiency; e) Information as to whether or not the control device is always in operation when the processes or devices are in operation; f) Pressure differential and/or flow measurements for each capture device/enclosure;	Continuously	EU01, EU02, EU05, EU06, EU09, EU10, EU11 & EU12	Env-A 904.07	**Yes**

Table 6- Recordkeeping Requirements

Item #`	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
19. cont	g) The destruction or removal efficiency of the add-on pollution control equipment, including: 1). Destruction or removal efficiency, in percent; 2). Date tested; 3). The emission test results, including: i.) The inlet VOC concentration in ppm; ii.) The outlet VOC concentration in ppm; and iii.) The method of determination of the inlet and outlet concentrations in i.) and ii.) above; and iv.) The design combustion temperature in °C.	Continuously	EU01, EU02, EU05, EU06, EU09, EU10, EU11 & EU12	Env-A 904.07	
20.	*By-Pass System Recordkeeping* If any bypass line is opened, the Owner or Operator must record a description of why the bypass line was opened and the length of time it remained open.	Whenever any bypass line is open	EU01, EU02, EU09 & EU10	40 CFR 63.4364(b)(2) subpart OOOO	**Yes**
21.	*Minor Core & Insignificant Activity* Maintain records of all air pollution control equipment activities required in Table 5, including: a) Record the result of the monitoring required in Table 5, Item 15. a.), b.) and c.); and b) Results of fume capture pursuant to Table 5, Item 15. d.).	As specified in Table 5, Item 15	EU05, EU06 EU11 & EU12	Env-A 904.07 (State Only Enforceable)	**Yes**
22.	*Boiler Tune-up Recordkeeping* Maintain on-site and submit to USEPA, Region I and the Division if requested: a) The concentrations of CO in the effluent stream in parts per million by volume, and O_2 in volume percent, measured before and after the tune-up of the boiler; and b) A description of any corrective actions taken as a part of the tune-up of the boilers.	As specified in Table 5, Item 16	EU09 & EU10	40 CFR 63.11223 (b)(6) subpart JJJJJJ	**Unknown**
Finding: On December 20, 2012, EPA revised 40 CFR 63 subpart JJJJJJ. In this revision, the compliance date for the initial tune-up was delayed to March 21, 2014. At the time of the inspection, WMI had not yet conducted the initial tune-up on EU09 or EU10.					

Table 6- Recordkeeping Requirements					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
23.	*Additional Recordkeeping – 40 CFR 63 subpart JJJJJJ* Maintain the following records: a) Each notification and report that was submitted, including all documentation supporting Initial Notifications, or Notification of Compliance Status submitted according to the requirements in Table 7, Item 12; b) Records documenting conformance with the boiler tune-up required by Table 5, Item 16, including: 1). Records identifying each boiler; 2). The date of tune-up; 3). The procedures followed for the tune-up; and 4). The manufacturer's specifications to which the boilers were tuned; c) Documentation of fuel type and use required by Table 6, Item 4; d) The occurrence and duration of each malfunction of the boiler; and e) Actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emission in Table 4, Item 20, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation.	As specified in Table 7 Item 12, Table 5 Item 16, & Table 4 Item 19 As specified in Table 7 Item 12, Table 5 Item 16, & Table 4 Item 20	EU09 & EU10	40 CFR 63.11225(c) subpart JJJJJJ	**Yes**
Finding: At the current time, the facility has not conducted a Boiler tune-up, as specified in Table 6, Item #23b, as it is not yet required. However, WMI complies with all other requirements of this permit condition.					

Table 6a below, lists the additional recordkeeping requirements for the facility, as specified in permit TP-0088 and any deficiencies noted during the inspection.

Table 6a- Additional Recordkeeping Requirements from TP-0088					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
4.	*Biomass Fuel Recordkeeping Requirements* Maintain records of the type (e.g. wood, whole tree chips, etc.) and amount (e.g. tons) of biomass fuel used in the combustion device.	Monthly	EU13	Env-A 903.03	**Unknown**[1]

Table 6a- Additional Recordkeeping Requirements from TP-0088					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
5.	*Fabric Coating Recordkeeping Requirements* The following add-on control device information: a) For each deviation, a record of whether the deviation occurred during a period of startup, shutdown or malfunction; b) The records related to startup, shutdown and malfunction as specified in Table 5, Item 6 of TP-0088; c) The records required to show continuous compliance with each operating limits specified in Table 3, Item 13 of TP-0088; d) For each capture system that is a PTE: 1). Data and documentation used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100%; and 2). Current capture system monitoring plan as required in Temporary Permit TP-0057 Table 4, Item 12 ; e) The following records for each add-on control device organic HAP destruction or removal efficiency determination as specified in Table 3, Items 11 and 12 of TP-0088: 1). Records of each add-on control device performance test conducted; and 2). Records of the web coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions; f) Records of the data and calculations used to establish the emission capture and add-on control device operating limits as specified in Table 3, Item 13 of TP-0088 and to document compliance with the operating limits as specified in Table 3, Items 13 of TP-0088;	Continuously Continuously Monthly	EU01, EU02 & EU13 EU13	40 CFR 63.4312(j) subpart OOOO 40 CFR 63.4312(i) & (j) subpart OOOO 40 CFR 63.4312(j) & 63.5190(a)(2) subpart OOOO	**Unknown[1]**

Table 6a- Additional Recordkeeping Requirements from TP-0088					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
5. cont	g) The following records for the continuous monitoring system (CPMS): 1). All required CPMS measurements, including monitoring data recorded during unavoidable CPMS breakdowns and out-of-control periods; 2). The date and time identifying each period during which the CPMS was inoperative except for zero (low-level) and high-level checks; 3). The date and time identifying each period during which the CPMS was out of control; 4). The specific identification of each period of excess emissions and parameter monitoring exceedances, that occurs during startups, shutdowns, and malfunctions; 5). The nature and cause of any malfunction; 6). The corrective action taken or preventative measures adopted; 7). The nature of the repairs or adjustments to the CPMS that was inoperative or out of control; 8). The total process operating time during the reporting period; and 9). All procedures that are part of a quality control program developed and implemented for CPMS under Table 3, Item 14 of TP-0088.	Continuously	EU13	40 CFR 63.10(c) subpart A	
6.	*Startup, Shutdown and Malfunction Recordkeeping Requirements* Keep the following records related to startup, shutdown, and malfunction: a) Keep records of each startup, shutdown and/or malfunction event if the procedures in the SSMP were followed, including the occurrence and duration of each startup, shutdown or malfunction for the air pollution control equipment; b) Record the actions taken if an action taken during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the SSMP, and the source exceeds the applicable emission limitation specified in Table 3, Items 11 or 12 of TP-0088; and c) Keep the written SSMP on record after it is	Continuously	EU01, EU02 & EU13	40 CFR 63.6(e)(3) subpart A	**Unknown[1]**

Table 6a- Additional Recordkeeping Requirements from TP-0088					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
	developed to be made available for inspection upon request, for the life of the affected source; and d) If the SSMP is revised, previous versions of the SSMP shall be kept for a period of 5 years and be made available for inspection upon request.				
7.	*Additional Recordkeeping Requirements - Pollution Control Equipment* Maintain records of all air pollution control equipment activities required in Table 4 of TP-0088, including: a) Pressure differential measurements for each capture device/enclosure; b) Results of fume capture pursuant to Table 4, Item 6. d) of TP-0088; c) Combustion temperatures; d) Air pollution control equipment inspection and maintenance activities including calibration and validation checks as specified by the manufacturer; and e) Corrective actions.	As specified in Table 4 of TP-0088	EU13	Env-A 906	**Unknown[1]**
8.	*Add-on Pollution Control Equipment* The Owner or Operator of any stationary source or device with add-on VOC control equipment shall maintain the following information: a) The air pollution control device identification number, type, model number, and manufacturer; b) Installation date; c) Processes or devices controlled; d) The type and location of the capture system, capture efficiency percentage, and method of determining capture efficiency; e) Information as to whether or not the control device is always in operation when the processes or devices are in operation; f) The destruction or removal efficiency of the add-on pollution control equipment, including: 1). Destruction or removal efficiency, in percent; 2). Date tested; 3). The emission test results, including: i.) The inlet VOC concentration in ppm; ii.) The outlet VOC concentration in ppm; and iii.) The method of determination of	Continuously	EU13	Env-A 904.07	**Unknown[1]**

Table 6a- Additional Recordkeeping Requirements from TP-0088					
Item #`	**Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Basis**	**Compliant**
	the inlet and outlet concentrations in a.) and b.) above; and iv.) The design combustion temperature in °C.				
9.	*Boiler Tune-up Recordkeeping* Maintain on-site and submit to USEPA, Region I and the Division if requested: a) The concentrations of CO in the effluent stream in parts per million by volume, and O_2 in volume percent, measured before and after the tune-up of the boiler; and b) A description of any corrective actions taken as a part of the tune-up of the boilers.	As specified in Table 4, Item 8 of TP-0088	EU13	40 CFR 63.11223 (b)(6) subpart JJJJJJ	**Unknown[1]**
10.	*Additional Recordkeeping – 40 CFR 63 subpart JJJJJJ* Maintain the following records: a) Each notification and report that was submitted, including all documentation supporting Initial Notifications, or Notification of Compliance Status submitted according to the requirements in Table 6, Item 6 of TP-0088; b) Records documenting conformance with the boiler tune-up required by Table 4, Item 8 of TP-0088, including: 1). Records identifying each boiler; 2). The date of tune-up; 3). The procedures followed for the tune-up; and 4). The manufacturer's specifications to which the boilers were tuned; c) Documentation of fuel type and use required by Table 5, Items 2 and 4 of TP-0088; d) The occurrence and duration of each malfunction of the boiler; and e) Actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emission in Table 3, Item 10 of TP-0088, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation.	As specified in Table 6 Item 6, Table 4 Item 8, Table 5 Items 2 and 4, & Table 3 Item 10 of TP-0088	EU13	40 CFR 63.11225(c) subpart JJJJJJ	**Unknown[1]**

[1] EU13 is not yet operational, therefore, compliance with this permit condition can not be determined at this time.

VIII. Compliance with Reporting Requirements

Table 7 below, taken from permit TV-0061, lists the applicable reporting requirements for the facility and any deficiencies noted during the evaluation.

Table 7- Reporting Requirements					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
1.	Any report submitted to the DES and/or EPA shall include the certification of accuracy statement outlined in Section XXI.B of this Permit and shall be signed by the responsible official.	As specified in Section XXI.B.	Facility Wide	40 CFR 70.6(c)(1)	**Yes**
2.	*Semi-annual Permit Deviation and Monitoring Report* The Owner or Operator shall submit a semi-annual permit deviation and monitoring report, which contains: a) Summaries of all monitoring and testing requirements contained in this Permit; and b) A summary of all permit deviations that have occurred during the reporting period.	Semiannually by July 31st and January 31st of each calendar year	Facility Wide	40 CFR 70.6(a)(3)(iii)(A)	**Yes**
3.	*VOC Reporting Requirements* If the actual annual emission for the facility are greater than or equal to 10 tpy, the Owner or Operator shall submit each year the following information: a) Facility information including: 1). Source name; 2). Standard Industrial Classification (SIC) Code; 3). North American Industrial Classification System (NAICS) code; 4). Physical address; and 5). Mailing address. b) A break down of VOC emissions reported pursuant to Table 7, Item 5 by month; and c) All data recorded pursuant to Table 6, Items 8 and 9	Annually (received by DES no later than April 15th of the following year)	Facility Wide	Env-A 908 (effective 4-21-07)	**Yes**
4.	*Payment of Emission-Based Fee* Annual reporting of emission based fees shall be conducted in accordance with Section XXIII of the Permit.	Annually (received by DES no later than April 15th of the following year)	Significant & Insignificant Activities	Env-A 705.04	**Yes**

Table 7- Reporting Requirements					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
5.	*Annual Emissions Report* Submit an annual emissions report which shall include the following information: a) Actual calendar year emissions from each fuel burning device of NO_x, CO, SO_2, VOCs, and TSP; b) Actual calendar year emissions from each process device of VOCs (speciated by individual VOC), HAPs (speciated by individual HAP), and RTAPs (reported by CAS number); c) The methods used in calculating such emissions in accordance with Env-A 705.02, *Determination of Actual Emissions for Use in Calculating Emission-Based Fees*; and d) The information recorded in accordance with Table 6, Items 4 and 6 compiled on a monthly basis.	Annually (received by DES no later than April 15th of the following year)	Facility Wide	Env-A 907.01	**Yes**
6.	Prompt reporting of deviations from Permit requirements shall be conducted in accordance with Section XXVIII of this Permit.	Prompt reporting (within 24 hours of an occurrence)	Facility Wide	40 CFR 70.6(a)(3)(iii)(B)	**Yes**
7.	Annual compliance certification shall be submitted to USEPA Region 1 and the Divisions in accordance with Section XXI of this Permit.	Annually (received by DES no later than April 15th of the following year)	Facility Wide	40 CFR 70.6(c)(1)	**Yes**
8.	*Estimates of VOC Use for Polymeric Coating of Supporting Substrates* The Owner or Operator shall report: a) The actual VOC use records at the end of the initial year; b) The first semiannual estimate in which the projected annual VOC use exceeds the limitation specified in Table 4, Item 10; and c) The first 12-month period in which the actual VOC use exceeds the limitation specified in Table 4, Item 10.	As specified	EU01 & EU02	40 CFR 60.747(b) & 60.747(c)(2) & (c)(3) subpart VVV	**Yes**
9.	*Quarterly Reporting* The Owner or Operator shall report: a) Each instance in which the volume-weighted average of the total mass of VOCs emitted to the atmosphere per volume applied of coating solids (N) is greater than the limit specified in Table 4, Item 11, calculated in accordance with Table 5, Item 5; b) Reporting frequency may be reduce to	Every calendar quarter (no later than the 30th day of the following month of each calendar quarter)	EU01, EU02, EU09 & EU10	40 CFR 60.462(a)(3), 60.465 subpart TT & 60.7 subpart A	**Yes**

Table 7- Reporting Requirements					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
	semiannually if the following conditions are met: 1). The facility continues to comply with all recordkeeping and monitoring requirements specified for EU01, EU02, EU09 and EU10; 2). The request for reduced reporting frequency is in writing and is approved by the Division.				
10.	*Semiannual Compliance Report* The semiannual compliance report shall contain the following information: a) Company name and address; b) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report; c) Date of report and beginning and ending dates of the reporting period; d) Identification of the compliance option or options that were used on each web coating operation during the reporting period; e) The calculation results for each compliance period ending each month during the 6-month reporting period; f) If there were no deviations: 1). A statement that there were no deviations from the emission limitations specified in Table 4, Items 12 and 13 during the reporting period; 2). A statement that there were no periods during which the CPMS were out of control as specified in Table 5, Item 13 during the reporting period; g) If there was a deviation from the emission limitation for the slashing process as specified in Table 4, Item 14. c): 1). Identification of each slashing material; and 2). The determination of the mass fraction of	Every 6 months (no later than the 30th day of the following month of each calendar half year)	EU01 through EU10 EU03 & EU04	40 CFR 63.4311(a) subpart OOOO & 63.5180(g) subpart SSSS 40 CFR 63.4311(a)(5) subpart OOOO	**Yes**

Table 7- Reporting Requirements					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
10. Cont.	organic HAP for each regulated material identified in g.) 1.) above. h) If there was a deviation from an emission limitation specified in Table 4, Items 12 or 13 for the web coating/printing operations, including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere, and periods of startup, shutdown, and malfunction during which deviations occurred: 1). The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the emission limit specified in Table 4, Item 12 or 13; 2). The calculations used to determine the organic HAP overall control efficiency for each compliance period in which a deviation occurred, including the calculations used, and the equations in Table 5, Items 5, 7, 8, and 9 of TV-0061. Background data supporting these calculations (e.g., test reports) do not need to submitted; 3). The date and time that each malfunction started and stopped; 4). For the CPMS: i.) A brief description of the CPMS; ii.) The date of the latest CPMS certification or audit; iii.) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks; iv.) The date, time, and duration that each CPMS was out-of-control, including: v.) Start and end dates and hours; and vi.) Description of corrective actions taken; A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period;	Every 6 months (no later than the 30th day of the following month of each calendar half year)	EU01, EU02, EU09 & EU10	40 CFR 63.4311(a)(7) subpart OOOO, 63.5180(h) subpart SSSS & 60.465(d) subpart TT	

Table 7- Reporting Requirements					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
10. cont	5). A description of any changes in the CPMS, web coating operation, emission capture system, or add-on control device since the last semiannual reporting period; 6). When emissions bypassed the add-on control device during the semiannual reporting period: i.) The date and time period of each deviation from an operating limit in Table 4, Item 12 or 13; ii.) Date and time period of any bypass of the add-on control device; iii). Whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period; iv). The total duration as a percent of the total source operating time during that semiannual reporting period; 7). A breakdown of the total duration of the deviations from the operating limits in Table 4, Item 12 or 13 and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes; 8). For each deviation from the work practice standards: i.) A description of the deviation, the date and time period duration of the deviation, and the actions taken to correct the deviation; and ii.) A statement of the cause of each deviation.	Every 6 months (no later than the 30th day of the following month of each calendar half year) Every 6 months (no later than the 30th day of the following month of each calendar half year)	EU01, EU02, EU09 & EU10 EU01, EU02, EU09 & EU10	40 CFR 63.4364(b)(2) & 63.4311(a)(7) subpart OOOO 40 CFR 63.4364(b)(2) & 63.4311(a)(7) subpart OOOO	

Table 7- Reporting Requirements					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
11.	*Startup, Shutdown, Malfunction Report* Submit the following to USEPA Region 1 and the Division if there was a startup, shutdown or malfunction during the semiannual reporting period: a) For actions consistent with the SSMP and if the startup or shutdown causes the source to exceed any applicable emission limitations specified in Table 4, Item 12 or 13: 1). Summary of actions taken to minimize emissions during such startups, shutdowns and malfunctions; 2). The number, duration and a brief description for each type of malfunction which occurred during the reporting period which caused or may have caused an exceedance of the emission limits in Table 4, Item 12 or 13; 3). The SSM report shall include the name, title, and signature of the Owner or Operator or other responsible official who is certifying accuracy b) For actions inconsistent with the SSMP and the startup or shutdown or malfunction causes the source to exceed the applicable emission limitations specified in Table 4: 1). Summary of actions taken to minimize emissions during such startups, shutdowns and malfunctions; 2). The number, duration and a brief description for each type of malfunction which occurred during the reporting period which caused or may have caused an exceedance of the emission limits in Table 4, Item 12 or 13; 3). The SSM report shall include: i.) The name, title, and signature of the Owner or Operator or other responsible official who is certifying accuracy; ii.) Explanation of the circumstances of the event; iii.) The reasons for not following the SSM plan describing all excess emission and/or parameter monitoring exceedances which are believed to have occurred; and iv.) Actions taken to minimize emissions.	With the Semiannual Report Within 2 working days after commencing inconsistent actions & a letter within 7 working days after the end of the event	EU01, EU02, EU09 & EU10	40 CFR 63.4311(c) subpart OOOO & 63.10(d)(5)(i) subpart A	**Yes**

Table 7- Reporting Requirements					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
12.	*Notifications* Initial notification shall contain the following: a) Name and address of the owner or operator; b) The address (i.e. physical location) of the source; c) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date; d) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; e) A statement of whether the affected source is a major source or an area source; Notification of Compliance Status shall contain the following certifications of compliance and signed by the responsible official: a) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of each boiler"; and b) "No secondary materials that are solid waste were combusted in any affected unit"; Biennial Compliance Report must contain: a) The company name and address; b) A statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with boiler tune-up requirements; and c) If the source experienced any deviations from the applicable requirements during the reporting period;	No later than September 17, 2011 to USEPA Region 1 and the Division No later than July 19, 2012 to USEPA Region 1 and the Division Biennially (postmarked no later than January 31st) to USEPA Region 1 and the Division	EU09 & EU10	40 CFR 63.9(b)(2) subpart A & 63.11225(a)(2) subpart JJJJJJ 40 CFR 63.9(h) subpart A & 63.11225(a)(4) subpart JJJJJJ 40 CFR 63.11225(b) subpart JJJJJJ	**Yes**

Table 7- Reporting Requirements					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
12. cont	Notice of Intent to Switch Fuels: If the Owner or Operator intends to switch fuels, and this fuel switch may result in the applicability of a different subcategory or a switch out of subpart JJJJJJ due to a switch to 100% natural gas, the Owner or Operator must submit the following: a) The name of the Owner or Operator of the affected source; The location of the source; b) The boiler(s) that will switch fuels; the date of the notice; c) The currently applicable subcategory under subpart JJJJJJ; d) The date on which the Facility became subject to subpart JJJJJJ; and e) The date upon which fuel switching will commence.	30 days prior to the date of the intended fuel switch to USEPA and the Division	EU09 & EU10	40 CFR 63.11225(g) subpart JJJJJJ	
Finding: DES received the initial notification on August 15, 2011. The initial notification of compliance status is not due until March 21, 2014. The Biennial Compliance Report is not due until two years following the tune-up. WMI has not indicated that it is changing the fuel burned in EU09 and EU10.					

Table 7a below, lists additional reporting requirements for the facility, as specified in permit TP-0088 and any deficiencies noted during the inspection.

Table 7a- Additional Reporting Requirements of TP-0088					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
1.	*Annual Emissions Report* Submit an annual emissions report which shall include the following information: a) Actual calendar year emissions from each fuel burning device of NO_x, CO, SO_2, VOCs, and TSP; b) Actual calendar year emissions from each process device of VOCs (speciated by individual VOC), HAPs (speciated by individual HAP), and RTAPs (reported by CAS number); c) The methods used in calculating such emissions in accordance with Env-A 705.02, *Determination of Actual Emissions for Use in Calculating Emission-Based Fees*; and d) The information recorded in accordance with Table 5, Items 2 and 4 of TP-0088 compiled on a monthly basis.	Annually (received by DES no later than April 15th of the following year)	EU09, EU10, EU13	Env-A 907.01	**Yes**

Table 7a- Additional Reporting Requirements of TP-0088					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
Finding: During the inspection period, WMI has submitted timely and complete Annual Emissions Reports. However, because EU13 is not yet installed, no emissions were reported from this device.					
2.	*Startup Notification* Submit notification to the Division stating the date of initial startup of the device.	Actual date of initial startup of the device, received by DES within 30 days after such date	EU13	Env-A 910.01	**Unknown[1]**
Finding: At the time of the inspection report, WMI has not yet conducted the initial startup on EU13.					
3.	*Quarterly Reporting* The Owner or Operator shall report: a) Each instance in which the volume-weighted average of the total mass of VOCs emitted to the atmosphere per volume applied of coating solids (N) is greater than the limit specified in Temporary Permit TP-0057 Table 3, Item 14, calculated in accordance with Temporary Permit TP-0057 Table 4, Item 5; b) Reporting frequency may be reduce to semiannually if the following conditions are met: 1). The facility continues to comply with all recordkeeping and monitoring requirements specified for EU01, EU02 and EU13; 2). The request for reduced reporting frequency is in writing and is approved by the Division.	Every calendar quarter (no later than the 30th day of the following month of each calendar quarter)	EU01, EU02, & EU13	40 CFR 60.462(a)(3), 60.465 subpart TT & 60.7 subpart A	**Yes**
Finding: During the inspection period, WMI has submitted timely and complete quarterly reports. However, because EU13 is not yet installed, no VOC emissions were emitted. Additionally, WMI is unable to change the reporting frequency as EU13 is not yet installed.					
4.	*Semiannual Compliance Report* The semiannual compliance report shall contain the following information: a) Company name and address; b) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report; c) Date of report and beginning and ending dates of the reporting period; d) Identification of the compliance option or options that were used on each web coating operation during the reporting period; e) The calculation results for each compliance period ending each month during the 6-month reporting period;	Every 6 months (no later than the 30th day of the following month of each calendar half year)	EU13	40 CFR 63.4311(a) subpart OOOO & 63.5180(g) subpart SSSS	**Yes**

Table 7a- Additional Reporting Requirements of TP-0088					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
4. cont	f) If there were no deviations: 1). A statement that there were no deviations from the emission limitations specified in Table 3, Items 11 and 12 of TP-0088 during the reporting period; 2). A statement that there were no periods during which the CPMS were out of control as specified in Table 4, Item 4 of TP-0088 during the reporting period; g) If there was a deviation from an emission limitation specified in Table 3, Items 11 or 12 for the web coating/printing operations, including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere, and periods of startup, shutdown, and malfunction during which deviations occurred: 1.) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the limit specified in Table 3, Item 11 or 12; 2.) The calculations used to determine the organic HAP overall control efficiency for each compliance period in which a deviation occurred, including the calculations used, and the equations in Temporary Permit TP-0057, Table 4, Items 5, 7, 8, and 9 of TP-0088. Background data supporting these calculations (e.g., test reports) do not need to submitted. 3.) The date and time that each malfunction started and stopped; 4.) For the CPMS: i.) A brief description of the CPMS; ii.) The date of the latest CPMS certification or audit; iii.) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks; iv.) The date, time, and duration that each CPMS was out-of-control, including: v.) Start and end dates and hours; and vi.) Description of corrective actions taken; vii.) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period;	Every 6 months (no later than the 30th day of the following month of each calendar half year)	EU13	40 CFR 63.4311(a)(7) subpart OOOO, 63.5180(h) subpart SSSS & 60.465(d) subpart TT	

Table 7a- Additional Reporting Requirements of TP-0088					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
4. cont	5.) A description of any changes in the CPMS, web coating operation, emission capture system, or add-on control device since the last semiannual reporting period; 6.) When emissions bypassed the add-on control device during the semiannual reporting period: i.) The date and time period of each deviation from an operating limit in Table 3, Item 11 or 12 of TP-0088; ii.) Date and time period of any bypass of the add-on control device; iii.) Whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period; iv.) The total duration as a percent of the total source operating time during that semiannual reporting period; 7.) A breakdown of the total duration of the deviations from the operating limits in Table 3, Item 11 or 12 of TP-0088 and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes; 8.) For each deviation from the work practice standards: i.) A description of the deviation, the date and time period duration of the deviation, and the actions taken to correct the deviation; and ii.) A statement of the cause of each deviation.	Every 6 months (no later than the 30th day of the following month of each calendar half year)	EU13	40 CFR 63.4364(b)(2) & 63.4311(a)(7) subpart OOOO	
Finding: During the inspection period, WMI has submitted timely and complete Semiannual Compliance Reports. However, because EU13 is not yet installed, no compliance issues were reported from this device. During the inspection, WMI indicated that they are currently preparing the CPMS for EU13.					

Table 7a- Additional Reporting Requirements of TP-0088					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
5.	*Startup, Shutdown, Malfunction Report* Submit the following if there was a startup, shutdown or malfunction during the semiannual reporting period: a) For actions consistent with the SSMP and if the startup or shutdown causes the source to exceed any applicable emission limitations specified in Table 3, Item 11 or 12 of TP-0088: 1.) Summary of actions taken to minimize emissions during such startups, shutdowns and malfunctions; 2.) The number, duration and a brief description for each type of malfunction which occurred during the reporting period which caused or may have caused an exceedance of the emission limits in Table 3, Item 11 or 12 of TP-0088; 3.) The SSM report shall include the name, title, and signature of the Owner or Operator or other responsible official who is certifying accuracy b) For actions inconsistent with the SSMP and the startup or shutdown or malfunction causes the source to exceed the applicable emission limitations specified in Table 3 of TP-0088: 1.) Summary of actions taken to minimize emissions during such startups, shutdowns and malfunctions; 2.) The number, duration and a brief description for each type of malfunction which occurred during the reporting period which caused or may have caused an exceedance of the emission limits in Table 3, Item 11 or 12 of TP-0088; 3.) The SSM report shall include: i.) The name, title, and signature of the Owner or Operator or other responsible official who is certifying accuracy; ii.) Explanation of the circumstances of the event; iii.) The reasons for not following the SSM plan describing all excess emission and/or parameter monitoring exceedances which are believed to have occurred; and iv.) Actions taken to minimize emissions.	With the Semiannual Report Within 2 working days after commencing inconsistent actions & a letter within 7 working days after the end of the event	EU13	40 CFR 63.4311(c) subpart OOOO & 63.10(d)(5)(i) subpart A	**Yes**

Table 7a- Additional Reporting Requirements of TP-0088					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
Finding: During the inspection period, WMI has submitted timely and complete Startup, Shutdown and Malfunction Reports. However, because EU13 has not yet started up, there have been no startups, shutdowns or malfunctions to report. WMI also has not operated EU13 inconsistently with the SSM, as EU13 has not yet begun operation.					
	Notifications: Initial notification shall contain the following: a.) Name and address of the owner or operator; b.) The address (i.e. physical location) of the source; c.) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date; d.) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; e.) A statement of whether the affected source is a major source or an area source;	Within 120 days after the source becomes subject to the rule to USEPA Region 1 and the Division		40 CFR 63.9(b)(2) subpart A & 63.11225(a)(2) subpart JJJJJJ	
6.	Notification of Compliance Status shall contain the following certifications of compliance and signed by the responsible official: a.) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of each boiler"; and b.) "No secondary materials that are solid waste were combusted in any affected unit"; Biennial Compliance Report must contain: a.) The company name and address; b.) A statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with the boiler tune-up requirements; and c.) If the source experienced any deviations from the applicable requirements during the reporting period;	No later than 120 days after the source becomes subject to the rule to USEPA Region 1 and the Division Biennially (postmarked no later than January 31st) to USEPA Region 1 and the Division	EU13	40 CFR 63.9(h) subpart A & 63.11225(a)(4) subpart JJJJJJ 40 CFR 63.11225(b) subpart JJJJJJ	**Unknown**

Table 7a- Additional Reporting Requirements of TP-0088					
Item #	**Requirement**	**Frequency**	**Applicable Emission Unit**	**Rule Citation**	**Compliant**
6. Cont.	*Notice of Intent to Switch Fuels:* If the Owner or Operator intends to switch fuels, and this fuel switch may result in the applicability of a different subcategory or a switch out of subpart JJJJJJ due to a switch to 100% natural gas, the Owner or Operator must submit the following: a.) The name of the Owner or Operator of the affected source; b.) The location of the source; c.) The boiler(s) that will switch fuels; the date of the notice; d.) The currently applicable subcategory under subpart JJJJJJ; e.) The date on which the Facility became subject to subpart JJJJJJ; and f.) The date upon which fuel switching will commence.	30 days prior to the date of the intended fuel switch to USEPA and the Division	EU13	40 CFR 63.11225(g) subpart JJJJJJ	
Finding: At the time of the inspection report, WMI had not yet submitted an Initial Notification nor a Notification of Compliance Status report to DES with reference to EU13. WMI will be required to submit these reports 120 after the startup date of EU13. Additioanlly, at the time of the insepction report, WMI has not yet been required to submit a Biennial Compliance Report nor a Notice of Intent to Switch Fuels report.					
7.	*Permit Deviation Reporting Requirements* Report permit deviations that cause excess emissions in accordance with Condition X.B of TP-0088.	Within 24 hours of discovery of excess emissions	EU13	Env-A 911.04(b)	**Yes**
8.	*Emission Based Fees* Pay emission-based fees in accordance with Condition XIII of TP-0088.	Annually (received by DES no later than April 15th of the following year)	EU13	Env-A 700	**Yes**
Finding: During the inspection period, WMI has submitted timely and appropriate emission-based fees. However, because WMI has not yet started up EU13, it has not been required to submit emission-based fees for this device.					

IX. Permit Deviations

During the inspection period, WMI has reported permit deviations of two permit conditions. One permit deviation was for violating the sulfur content of fuel oil. The other permit deviation was for bypassing the fuel flow meters.

Table 3, Item #1 of TP-0088, (referenced in this report as Table 4a, Item#1) specifies that the sulfur content of the fuel oil for EU09 and EU10 shall not exceed 1.0 % by weight. This limit is more stringent than the sulfur content specification in Table 4**,** Item 3 of TV-0061. Therefore,

WMI is required to comply with the more stringent 1% sulfur limit. The 1% sulfur limit combined with a fuel consumption limit are required such that the facility will be in compliance with the 24-hour NAAQS for SO_2 (DES Intra-office Memorandum dated August 23, 2011). With the original issuance of TP-0088 on October 11, 2011 until April 30, 2013, the facility burned No 6 fuel oil with a sulfur content of 2 %. Upon discovery on April 12, 2012, the facility submitted a timely and complete permit deviation notification and report for its burning of #6 fuel oil with a 2% sulfur content. During the inspection, DES reviewed records showing the facility had purchased 0.5% sulfur No. 6 fuel oil to be mixed with the remaining 2% sulfur #6 fuel oil in the tank, consistent with the corrective action specified in the permit deviation report. DES also reviewed records showing that subsequent fuel oil deliveries contained only 1% sulfur fuel oil. The facility reported the sulfur content as 2% in the 2011 and 2012 Annual Emissions Reports and paid the associated emissions-based fees. WMI should also do so for the amount of fuel burned at 2% sulfur for calendar year 2013.

During the inspection period, WMI has intermittently bypassed the fuel flow meters in violation of TV-0061 Table 5, Item #3a. The facility has had technical issues operating fuel flow meters on EU09 and EU010 during the entire inspection period. WMI has purchased and used various fuel flow meters. In order to determine that WMI does not exceed the 610 gallon fuel oil limit specified in TV-0061 Table 4, Item 6b and TP-0088 Table 3, Item #2b, WMI has been measuring the level of the fuel oil tank on a daily basis, regardless of whether flow meter is operating. WMI also intends to implement EU13 in late 2013 or 2014, with the intention of using EU09 and EU10 less often. Additionally, WMI has been consistently reporting this deviation in the Semi-Annual Permit Deviation and Monitoring Reports.

X. Other Findings

WMI operates a 175 HP, 1.37 MMBtu/hr diesel fire pump engine, installed prior to 2006. When the permit application was originally submitted and reviewed, the fire pump was considered an "exempt activity" pursuant to Env-A 609.03. In July 2008, DES reviewed its fire pump permitting policy to require all fire pumps meeting the applicability thresholds specified in Env-A 607.01(d) to be permitted. Additionally, with the compliance date of May 3, 2013 for 40 CFR 63 subpart ZZZZ, the device became subject to the requirements of this subpart. The facility reports emissions from this device and pays associated emission-based fees.

The requirements included in 40 CFR 63 subpart ZZZZ that are applicable to this device will be included with the permit renewal and are summarized below:

- Each fire pump may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. These activities are limited to 100 hours per year.
- The owner or operator of an emergency generator or fire pump must perform the following on the fire pump:
  - Change oil and filter annually;
  - Inspect air cleaner annually;
  - Inspect hoses and belts annually;

  - Minimize idle time during startup and minimize startup time to a period needed for appropriate and safe loading, not to exceed 30 minutes; and
  - Operate and maintain the pump according to the manufacturer's emission-related operation and maintenance instructions.
- Each fire pump shall be equipped with a non-resettable hour meter.
- The Owner or Operator shall keep records of the hours of operation of the fire pump that are recorded through the non-resettable hour meters. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as an emergency and how may hours are spent for non-emergency operation.

Also, per Env-A 606.02(c)(1), each fire pump shall be limited to 500 hours of total operation during any consecutive 12-month period.

During the inspection, DES observed that the fire pump was not equipped with a non-resettable hour meter. However, WMI complied with all other requirements listed above.

XI. Enforcement History and Status

During the inspection period, there have been no enforcement actions against WMI. However, on November 10, 2009, DES and WMI entered into a Consent Decree for violations relating to air pollution control requirements related to HAPs and VOCs, among other things. To comply with this Consent Decree, WMI paid the civil penalty of $31,908 on December 3, 2009. Also to comply, WMI completed two SEPs. The first project involved the facility making a one-time donation in the amount of $15,000 to the Town of New Ipswich for the Furnace Brook Restoration Project. The second SEP that WMI completed was the installation of a capture and control system for the robotic assembly area at the WMI facility. As a result, on December 13, 2011, the State of New Hampshire issued a letter on December 13, 2011, that WMI had met the conditions of the Consent Decree.

XII. Compliance Assistance, Recommendations and Corrective Actions

During the inspection, no compliance assistance was required and no corrective actions were made that would bring the facility into compliance.

Based on the findings of this compliance evaluation, DES recommends the following action to bring the facility into compliance with the identified deficiencies and future reporting requirements:

- Ensure that fuel oil with a sulfur content of no greater than 1% is used in EU09 and EU10;

- In the 2013 Annual Emissions Report, ensure that the appropriate gallons of fuel oil corresponding to a 2% sulfur content are reported and the appropriate emission-based fees are paid for combusting this fuel;

- Ensure that DES is notified within 30 days after the initial startup of EU13;

- Ensure that the requirements for the fire pump, as referenced in *Section X: Other Findings*, are followed, including the installation of a non-resettable hour meter;

- Include the fire pump as a significant activity in the permit renewal application; and

- Ensure that the fuel oil in the fuel oil tank is measured on a daily basis and maintain the fuel flow metering system such that it continuously monitors the flowrate. WMI can request that the requirement to monitor continuously the fuel flow rate be removed from TV-0061 and TP-0088. This request should be submitted in writing, pursuant to Env-A 612.03 to the address below:

NH Department of Environmental Services
Air Resources Division
PO Box 95
Concord, NH 03302-0095
ATTN: Permitting & Environmental Health Bureau

Report Prepared By:	Daniel F Hrobak
Title:	Senior Compliance Assessment Engineer
Signed: