

Air Permit Review

Permit Issue Date: **December 10, 2008**

Region: Winston-Salem Regional Office
County: Wilkes
NC Facility ID: 9700005
Inspector's Name: Eric Hudson
Date of Last Inspection: 09/11/2007
Compliance Code: 3/In Compliance – Insp.

Facility Data			Permit Applicability	
Applicant (Facility's Name): American Drew, Inc. - Plant 13 P.O. Box 489 North Wilkesboro, NC 28659 SIC: 2511 / Wood Household Furniture NAICS: 337122 / Nonupholstered Wood Household Furniture Mfg. Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: 2D .0504, .0512, .0516 and .0521 NSPS: Not applicable NESHAP: 40 CFR Part 63, Subparts JJ, DDDD, and ZZZZ PSD: Not applicable PSD Avoid.: 2Q .0317 for VOC NC Toxics: 2Q .0705 112(r): Not applicable Other: 2D .1806	
Contact Data			Application Data	
Facility Contact	Authorized Contact	Technical Contact	Application Number: 9700005.08A Date Received: 08/22/2008 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 02641/T21 Existing Permit Issue Date: 06/10/2004 Existing Permit Expiration Date: 05/31/2009	
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Review Engineer's Signature: _____ Date: _____			Issue 02641/T22 Permit Issue Date: December 10, 2008 Permit Expiration Date: November 30, 2013	

I Reason for Application:

Facility Description: American Drew, Inc. is a division of La-Z-Boy Furniture and operates a wood children's bedroom furniture manufacturing operation at the Plant 13 facility in North Wilkesboro, Wilkes County, North Carolina, under the Lea brand name.

Requested Permit Modifications: The Permittee submitted permit application 9700005.08A to renew Permit No. 02641T21. This application indicates that Compliance Assurance Monitoring (CAM) requirements do not apply to this facility. DAQ requested additional information to confirm that CAM applicability determination. The Permittee provided additional information to DAQ confirming that CAM does not apply in a letter dated 09/11/08.

II Regulatory Review for Individual Source Categories:

A. Wood furniture finishing operations (ID No. ES-1) including:

Twenty dry filter-type spray booths (ID Nos. SB-1 through SB-16, SB-18 through SB-20, and SB-22);

Six steam-heated drying ovens (ID Nos. DO-1 through DO-6);

One wash-off tank (ID No. WO1); and

Gluing operations (ID No. GL1)

The Permittee performs limited gluing operations to assemble wooden children's bedroom furniture and subsequently applies various finishes to the furniture before drying it in the drying ovens. This source was reportedly installed after 07/01/71.

i. 2D .0512 “Particulates from Wood Products Finishing Plants”

This rule applies to the spray booths and requires that the Permittee “shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged ... into the environment without providing ... adequate ductwork and properly designed collectors ...” No excessive VEs were noted during the most recent compliance inspection on 09/02/08 – suggesting compliance with this regulation.

Compliance with this regulation is expected for the spray booths due to the presence of dry filters installed on those devices.

Permit No. 02641T22 will include the standard shell language for the control requirements of 2D .0512 but will not require any testing to demonstrate compliance for these sources.

For the wood furniture finishing operations Permit No. 02641T22 will require weekly dry filter/annual ductwork monitoring and recordkeeping associated with rule 2D .0512. Also, the Permittee is required to submit semiannual summary reports and the results of maintenance performed on the filters/ductwork within 30 days of a written request by DAQ.

ii. 2D .0516 “Sulfur Dioxide Emissions from Combustion Sources”

This rule applied to the former propane-fired drying oven (ID No. DO-7) and limits the SO₂ emissions from this combustion device to 2.3 (lb/10⁶ Btu).

Table 1.5-1 of the current AP-42 document predicts PM emissions of 0.6 (lb/10³ gallons) from propane combustion in an industrial boiler. If we assume similar emissions from propane combustion in a drying oven and a propane heat value of 90,500 (Btu/gallon) then we can estimate PM emissions from this source as follows:

$$[0.6 \text{ (lb/10}^3 \text{ gallons)}]/[90.5 \text{ (10}^6 \text{ Btu/10}^3 \text{ gallons)}] = 0.007 \text{ (lb PM/10}^6 \text{ Btu)}$$

Compliance with this rule is indicated.

Drying oven DO-7 has been removed from the facility and the Permittee has requested its removal from Permit No. 02641T22 (see discussions in Sections X and XI, below). Therefore, neither drying oven DO-7 nor this rule will appear in Permit No. 02641T22.

iii. 2D .0521 “Control of Visible Emissions”

The furniture finishing operations were manufactured after 7/1/71. Therefore, except for those visible emissions (VEs) occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from these sources be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

For the furniture finishing operations, Permit No. 02641T22 will include the standard language for the emission limits of this rule and the methods of testing for compliance (if/when testing is required by DAQ) but will not require additional compliance testing unless the Permittee notes VEs that are above “normal” when conducting the required monitoring for these sources.

This source has a history of compliance with the monthly MRR in past permits. Therefore, Permit No. 02641T22 will require semiannual monitoring and recordkeeping of VEs and semiannual reporting associated with 2D .0521 for the furniture finishing operations.

iv. 2D .1111 “Maximum Achievable Control Technology”

See discussion in Section III A of this document, below.

v. 2D .1806 “Control and Prohibition of Odorous Emissions”

See discussion in Section III B.i of this document, below.

**vi. 2Q .0317 “Avoidance Conditions” to avoid
2D .0530 “Prevention of Significant Deterioration”**

This facility is considered a major source for PSD purposes. The Permittee requested a PSD avoidance condition when they added spray booth SB-22 to this facility. That avoidance condition limits VOC emissions from SB-22 to less than 40 tons per consecutive 12-month period. That condition requires monthly monitoring/recordkeeping and semiannual reporting of VOC emissions from SB-22. There are no changes to the PSD avoidance condition associated with SB-22 in Permit No. 02641T22.

B. Two wood-fired boilers (30 million Btu per hour maximum heat input rate, each; ID Nos. ES-2 and ES-3) and two associated multicyclones (18 nine-inch diameter tubes, each; ID Nos. MC-1 and MC-2)

These boilers were manufactured by Keeler, Inc. in 1973 and are used to generate process heat, comfort heat, and steam for use throughout the facility.

i. 2D .0504 “Particulates from Wood Burning Indirect Heat Exchangers”

This rule applies to wood-fired boilers ES-2 and ES-3 and limits the allowable PM emissions (E) from these indirect heat exchangers to those described in the following equations:

$$E = \begin{matrix} 0.15 & \text{If } Q \geq 10,000, \\ 0.70 & \text{If } Q \leq 10, \text{ and} \\ 1.1698(Q)^{-0.223} & \text{If } Q \text{ is any other value} \end{matrix}$$

Where: E = allowable emissions (lb PM/10⁶ Btu), and
Q = maximum heat input (10⁶ Btu/hr)

In accordance with paragraph 2D .0504(e) for the subject boilers: Q = 60 (10⁶ Btu/hr); and
E = 0.47 (lb PM/10⁶ Btu).

The Permittee conducted PM stack testing on boilers ES-2 and ES-3 on 10/17/01 and 10/18/01, respectively. These tests indicated PM emission rates of 0.343 pounds per million Btu (lb/MMBtu) and 0.306 (lb/MMBtu) for boilers ES-2 and ES-3, respectively, indicating compliance with this rule.

Note also that, according to Table 1.6-1 of Supplement G to the 5th edition of the AP-42 document, we expect total (condensable and filterable) PM emissions of 0.417 (lb/MMBtu) from dry wood combustion, indicating compliance with this rule before control.

For boilers ES-2 and ES-3, Permit No. 02641T22 will include the standard language for the emission limits of 2D .0504 and the methods of testing for compliance (if/when required by DAQ). However, since previous testing has already confirmed compliance, Permit No. 02641T22 will not require any additional testing to demonstrate compliance with 2D .0504 for these two wood-fired boilers.

For these two wood-fired boilers Permit No. 02641T22 will require monthly external multicyclone/ductwork monitoring/recordkeeping and annual internal multicyclone monitoring/recordkeeping. The Permittee is required to submit semiannual summary reports of this monitoring and the results of multicyclone/ductwork maintenance within 30 days of a written request by DAQ.

ii. 2D .0516 “Sulfur Dioxide Emissions from Combustion Sources”

This rule applies to wood-fired boilers ES-2 and ES-3 and limits the SO₂ emissions from these combustion devices to 2.3 (lb/10⁶ Btu).

Table 1.6-2 of Supplement G to the 5th edition of the AP-42 document predicts SO₂ emissions of 0.025 (lb SO₂/10⁶ Btu) from wood combustion. Compliance with this rule is indicated, without controls.

For boilers ES-2 and ES-3, Permit No. 02641T22 will include the standard language for the emission limits of 2D .0516 and the methods of testing for compliance (if/when required by DAQ). However, since the permitted fuel is inherently compliant, Permit No. 02641T22 will not require any additional testing or any MRR to demonstrate compliance with 2D .0516 for wood-fired boilers ES-2 or ES-3.

iii. 2D .0521 “Control of Visible Emissions”

Boilers ES-2 and ES-3 were manufactured after 7/1/71. Therefore, except for those visible emissions (VEs) occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from these boilers be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

For boilers ES-2 and ES-3, Permit No. 02641T22 will include the standard language for the emission limits of 2D .0521 and the methods of testing for compliance (if/when required by DAQ) but will not require any additional testing to demonstrate compliance with this rule unless the Permittee notes VEs that are above “normal” when conducting the required monitoring for these sources.

Permit No. 02641T22 will require daily monitoring and recordkeeping of VEs (with an allowance to miss up to 3 days of monitoring/recordkeeping per semiannual period) and semiannual reporting associated with rule 2D .0521 for these two wood-fired boilers.

iv. 2D .1806 “Control and Prohibition of Odorous Emissions”

See discussion in Section III B.i of this document, below.

v. 2Q .0705 “Existing Facilities and SIC Calls”

See discussion in Section III B.ii of this document, below.

C. Wood working operations (ID No. ES-4) and associated fourteen bagfilters (1,530; 960; 7,106; 2,300; 3,825; 2,300; 2,300; 2,300; 510; 4,614; 510; 3,018 and 6,980 square feet of filter area; ID Nos. BH-1 through BH-5 and BH-7 through BH-15, respectively), two simple cyclones (96 and 18 inches in diameter; ID Nos. C1 and C2, respectively), and two OPTIONAL simple cyclones (160 and 128 inches in diameter; ID Nos. C3 and C4, respectively)

The bagfilters and cyclones collect the wood dust generated by the wood working operations utilized at this facility. Most wood is currently received at this facility as dimensional lumber. Therefore, very little “rough end” wood working is conducted.

i. 2D .0512 “Particulates from Wood Products Finishing Plants”

This rule applies to the wood working operations and requires that the Permittee “shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of

wood to be discharged ... into the environment without providing ... adequate ductwork and properly designed collectors ...” No excessive VEs were noted during the most recent compliance inspection on 09/02/08. Compliance with this regulation is expected due to the presence of the bagfilter and cyclones installed on the wood working operations.

Permit No. 02641T22 will include the standard shell language for the control requirements of 2D .0512 but will not require any testing to demonstrate compliance for these sources.

Permit No. 02641T22 will require monthly external (cyclones/ductwork/bagfilter) and annual internal (bagfilter) monitoring (with the associated recordkeeping) and semiannual reporting associated with rule 2D .0512 for the wood working operations. Permit No. 02641T22 will also require the Permittee to submit the results of maintenance performed on the bagfilters/cyclones within 30 days of a written request by DAQ.

ii. 2D .0521 “Control of Visible Emissions”

The wood working operations were manufactured after 7/1/71. Therefore, except for those visible emissions (VEs) occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from this source be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

Permit No. 02641T22 will include the standard shell language for the emission limits and testing for 2D .0521 but will not require any additional testing for the wood working operations to demonstrate compliance with this rule unless the Permittee notes VEs that are above “normal” when conducting the required monitoring for this source.

Permit No. 02641T22 will require weekly monitoring and recordkeeping of VEs and semiannual reporting associated with 2D .0521 for the wood working operations.

D. Roll coating print line (ID No. ES-9) consisting of four roller coaters, three printer rollers, one embosser roller, one ink sealer roller, two steam heated ovens and one infrared oven

The Permittee performs roll coating operations to apply a basecoat and print inks to create a wood grain appearance on the furniture.

i. 2D .1111 “Maximum Achievable Control Technology”

See discussion in Section III A of this document, below.

ii. 2D .1806 “Control and Prohibition of Odorous Emissions”

See discussion in Section III B.i of this document, below.

**iii. 2Q .0317 “Avoidance Conditions” to avoid
2D .0530 “Prevention of Significant Deterioration”**

This facility is considered a major source for PSD purposes. The Permittee requested a PSD avoidance condition when they added roll coating print line ES-9 to this facility. That avoidance condition limits VOC emissions from ES-9 to less than 40 tons per consecutive 12-month period. That condition requires monthly monitoring/recordkeeping and semiannual reporting of VOC emissions from ES-9. There are no changes to the PSD avoidance condition associated with ES-9 in Permit No. 02641T22.

E. Diesel-fired emergency water pump (155 horsepower maximum rated power output; ID No. ES-6)

The Permittee maintains a diesel-fired emergency water pump for use in case of fire. According to the Permittee (refer to letter dated 09/11/08) this device was installed in 1973. This device is not included in the list of insignificant activities because it is subject to the RICE MACT (i.e. 40 CFR Part 63, Subpart ZZZZ – see the discussion of 2D .1111, below). Note that 2D .0503 does not apply since this device is not an indirect heat exchanger and 2D .0515 does not apply by DAQ policy (see discussion of Internal Combustion Engines on page 5-11 of version S-9 of Appendix 5 to the North Carolina Air Quality Rules).

i. 2D .0516 “Sulfur Dioxide Emissions from Combustion Sources”

This rule limits the SO₂ emissions from combustion devices to 2.3 (lb/10⁶ Btu). Note, however, that paragraph 2D .0516(b) exempts sources that are subject to an emission standard for sulfur dioxide pursuant to a NSPS or a MACT from the sulfur dioxide limits in 2D .0516. The emergency water pump is subject to MACT, however, the applicable MACT does not limit SO₂ emissions for this source. Therefore, 2D .0516 does apply to the emergency water pump.

According to Table 3.3-1 of Supplement B to the 5th edition of the AP-42 document, we can predict SO_x emissions of 0.29 pounds per million Btu of heat input from the combustion of diesel fuel in a small (< 600 hp) diesel engine, indicating compliance without controls.

For 2D .0516 (as applicable to the emergency water pump), Permit No. 02641T22 will include the standard language for the emission limits of, and the methods of testing (if/when required by DAQ) for compliance with, this rule. However, since the permitted fuel is inherently compliant and since compliance with this rule by a large margin is expected, no additional testing or MRR requirements will appear in the permit.

ii. 2D .0521 “Control of Visible Emissions”

The emergency water pump was manufactured after 7/1/71. Therefore, except for those visible emissions (VEs) occurring during startup, shutdown and malfunctions that are regulated under Rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from this source be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

Note that paragraph 2D .0521(b) exempts sources that are subject to an opacity limit pursuant to a NSPS or a MACT from the opacity limits in 2D .0521. Although the emergency water pump is subject to MACT, that standard does not include opacity limits for this source. Therefore, 2D .0521 does apply to this source.

For 2D .0521 (as applicable to the emergency water pump), Permit No. 02641T22 will include the standard language for the emission limits of, and the methods of testing (if/when required by DAQ) for compliance with, this rule but will not require additional testing. Since operation of this source is unpredictable and uncommon and compliance with this rule by a large margin is expected, no MRR requirements will appear in the permit.

iii. 2D .0524 “New Source Performance Standards”

Applicability: The new source performance standards (NSPS) for this source category (i.e. compression ignition internal combustion engines (CI ICE) found in 40 CFR Part 60, Subpart IIII) apply to owners and operators of stationary CI ICE that: [§60.4200(a)]

- Commence construction after 07/11/05 where the stationary CI ICE are:
 - Manufactured after 04/01/06 and are not fire pump engines; or
 - Manufactured as a certified NFPA fire pump engine after 07/01/06.
- Modify or reconstruct their stationary CI ICE after 07/11/05.

The emergency water pump pre-dates this rule (it was installed in 1973 – refer to letter from the Permittee dated 09/11/08) and the Permittee indicated that this source has not been modified or reconstructed since 07/11/05. Therefore, the emergency water pump is **not subject** to the NSPS requirements.

iv. 2D .1111 “Maximum Achievable Control Technology”

The emergency water pump is subject to 2D .1111 due to the applicability of 40 CFR Part 63, Subpart ZZZZ (i.e. the MACT for reciprocating internal combustion engines - RICE).

The Permittee indicated that the emergency water pump has not been modified or reconstructed since its installation. Therefore, the emergency water pump is considered an existing source under this MACT [see §63.6590(a)(1)] and, in accordance with §63.6590(b)(3), this source does not have to meet the requirements of Subparts ZZZZ or A (i.e. no initial notification is necessary).

Permit No. 02641T22 is modified to show applicability of Subpart ZZZZ and indicate that there are no associated requirements.

v. 2D .1806 “Control and Prohibition of Odorous Emissions”

See discussion in Section III B.i of this document, below.

F. Lumber drying operations consisting of six steam-heated kilns (three with 70,000 board foot capacity, each, and three with 30,000 board foot capacity, each; ID No. ES-5); and

Miscellaneous gluing operations (ID No. ES-10)

There are six steam-heated lumber kilns located at this facility that are currently leased to, and operated by, another company but are still under the control of American Drew, Plant 13 (see the 09/26/08 phone log). These lumber kilns were included on the list of insignificant activities attached to Permit No. 02641T21 but are moved to the equipment list of Permit No. 02641T22 because they are subject to the PCWP MACT (i.e. 40 CFR Part 63, Subpart DDDD – see the discussion of 2D .1111, below).

The Permittee conducts miscellaneous gluing operations at this facility. These operations are added to the equipment list of Permit No. 02641T22 because they are subject to the PCWP MACT (i.e. 40 CFR Part 63, Subpart DDDD).

i. 2D .1111 “Maximum Achievable Control Technology”

The lumber drying operations and the miscellaneous gluing operations are subject to this rule due to the applicability of 40 CFR Part 63, Subpart DDDD (i.e. the NESHAP for Plywood and Composite Wood Products - see §63.2231) but, in accordance with §63.2252, these sources are not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of Subpart DDDD, or any other requirements in Subpart A “General Provisions” of part 40 of CFR, except for the initial notification requirements in §63.9(b). The Permittee has fulfilled these initial notification requirements.

Language is added to Permit No. 02641T22 showing the applicability of Subpart DDDD with only initial notification requirements.

ii. 2D .1806 “Control and Prohibition of Odorous Emissions”

See discussion in Section III B.i of this document, below.

iii. 2Q .0705 “Existing Facilities and SIC Calls”

See discussion in Section III B.ii of this document, below.

III Regulatory Review for Multiple Source Categories:

A. Affected Sources -All facilities subject to 40 CFR Part 63 Subpart JJ “National Emissions Standard for Wood Furniture Manufacturing Operations”

• Wood furniture finishing operations (ID No. ES-1) including:

Twenty dry filter-type spray booths (ID Nos. SB-1 through SB-16, SB-18 through SB-20, and SB-22)

Six steam-heated drying ovens (ID Nos. DO-1 through DO-6);

One wash off tank (ID No. WO1)

Gluing operations (ID No. GL1)

• Roll coating print line (ID No. ES-9) consisting of four roller coaters, three printer rollers, one embosser roller, one ink sealer roller, two steam heated ovens and one infrared oven:

i. 2D .1111 “Maximum Achievable Control Technology”

The sources listed in Section III A are subject to this rule due to the applicability of 40 CFR Part 63, Subpart JJ (i.e. the NESHAP for Wood Furniture Manufacturing Operations).

Current Permit No. 02641T21 includes detailed MACT language associated with Subpart JJ and application 9700005.08A indicates that the Permittee has not made any changes since the issuance of Permit No. 02641T21 that would affect the applicable requirements pursuant to Subpart JJ. Therefore, the relevant language from Permit No. 02641T21 is “carried over” into Permit No. 02641T22 unchanged.

B. Facility-wide affected sources

i. 2D .1806 “Control and Prohibition of Odorous Emissions”

This rule requires the Permittee to prevent odorous emissions from the facility from causing or contributing to objectionable odors [as defined at 2D .1801(9)] beyond the facility’s boundary. The Permittee conducts operations that could reasonably be expected to create objectionable odors but, according to information in Central Files, does not have a history of violations of this rule. Therefore, this rule is added to Permit No. 02641T22, but with only the standard shell language.

ii. 2Q .0705 “Existing Facilities and SIC Calls”

The requirement for a facility-wide toxics demonstration is added to Permit No. 02641T22 for the wood-fired boilers (ES-2 and ES-3) plastic parts heating operation (IES-7), the storage tanks (IES-ST-1 through IES-ST-7), the lumber drying operations (ES-5) and the miscellaneous gluing operations (ES-10).

The wood-fired boilers have been used to burn adulterated fuels in the past and, therefore, do not qualify as “combustion sources” under rule 2Q .0703(6) or the associated exemption at 2Q .0702(a)(18). Therefore, in accordance with 2Q .0705, the “due date” for the facility-wide toxics demonstration will be the date of submission of the permit application to comply with the MACT for the wood-fired boilers.

IV NSPS/NESHAP/PSD/Toxics/112(r)/CAM/RACT Applicability:

NSPS: The applicability of new source performance standards (i.e. NSPS in 40 CFR Part 60) to sources at this facility are discussed briefly below:

- **Subpart Dc** for Small Steam Generating Units: The boilers at this facility **are not subject** to the relevant standard for Small Industrial-Commercial-Institutional Steam Generating Units because their construction dates (i.e. 1973) pre-date this rule (applicability date of 06/09/89).
- **Subpart Kb** for VOL Storage Vessels: The storage tanks at this facility **are not subject** to this regulation which applies to VOL storage tanks that were constructed/reconstructed/modified after 7/23/84, and either (1) have storage capacities > 151 m³ (39,898 gallons) and store liquids with maximum true vapor pressures ≥ 3.5 kPa; or (2) have storage capacities of ≥ 75 m³ (19,817 gallons) but < 151 m³ and store liquids with maximum true vapor pressures of ≥ 15.0 kPa. None of the storage tanks at this facility meet the storage capacity threshold of 19,817 gallons (refer to the discussion of insignificant activities in Section X of this document, below).
- **Subpart IIII** for Compression Ignition Internal Combustion Engines (CI ICE): Diesel-fired emergency water pump ES-6 **is not subject** to this regulation because it was installed in 1973 and pre-dates this rule (see letter dated 09/11/08 and the discussion in Section II E.iii, above).

NESHAP: The applicability of national emission standards for hazardous air pollutants (i.e. NESHAP in 40 CFR Part 63) to sources at this facility are discussed briefly below:

- **Subpart JJ** for Wood Furniture Manufacturing Operations: The wood furniture finishing operations and roll coating print line **are subject** to the requirements of this regulation. Refer to the discussion in Section III A of this document, above, for more information.
- **Subpart DDDD** for Plywood and Composite Wood Products: The lumber drying operations and miscellaneous gluing operations **are subject** to this regulation but with no applicable requirements (see discussion in Section III B of this document, above, for more information).
- **Subpart ZZZZ** for Reciprocating Internal Combustion Engines (RICE): Diesel-fired emergency water pump ES-6 **is subject** to this regulation but only to the initial notification requirements pursuant to §63.6590(b)(3) (refer to the discussion in Section II E.iv, above).

PSD: This facility does not fall into one of the PSD categories listed at 40 CFR §51.166(b)(1)(i)(a) with a 100 ton per year threshold but does have the potential to emit > 250 tons of VOC per consecutive 12-month period before controls/limits but pre-dates the PSD rules. Therefore, this facility is classified as major for PSD purposes under 40 CFR §51.166(b)(1)(i)(b) but is “grandfathered” from the associated PSD requirements. To avoid PSD requirements for major modifications when installing spray booth SB-22 and roll coating print line ES-9 the Permittee accepted PSD avoidance conditions for VOC emissions from those sources (see discussion in Sections II A.v and II D.i, above).

Permit application 9700005.08A is a renewal without modification and does not represent a major source or major modification for PSD purposes – therefore neither PSD review nor increment tracking is triggered at this time.

Toxics: Initial Title V Permit No. 02641T15 included conditions associated with 2D .1100 for toluene, xylene and formaldehyde. However, 2D .1100 was removed from Permit No. 02641T19 at the request of the Permittee [citing the exemption for wood furniture manufacturing operations subject to MACT JJ at 2Q .0702(a)(23)]. Note that the emergency water pump is fire fighting equipment and is exempted from toxics demonstrations by 2Q .0702(a)(12). The Permittee is required to demonstrate compliance with the NC toxics program on a facility-wide basis when they submit the application to comply with the last applicable non-combustion MACT (i.e. the boiler MACT– see discussion of 2Q .0705 in Section III B.ii, above, for more information).

112(r): According to Section A.3 of application 9700005.08A and a letter from the Permittee dated 09/11/08, this facility does not use/handle/store any regulated substances in quantities above their associate thresholds and is therefore not subject to the requirements of this regulation.

CAM: According to Form E6 of application 9700005.08A, this facility is not subject to the requirements of 40 CFR Part 64 “Compliance Assurance Monitoring.” None of the sources at this facility meets the criteria for applicability cited at 2D .0614(a) [refer to the Summary of CAM Applicability (Attachment A to this document) for more information].

RACT: This facility is not located in an area listed in either paragraph 2D .0902(f) or 2D .1402(d). Therefore, existing source RACT requirements are not applicable or discussed here.

V Permit Modifications/Changes:

The following table summarizes the changes to Air Quality Permit No. 02641T21 resulting from Permit Application No. 9700005.08A:

Old Page(s)	New Page(s)	Condition/Item	Description of Change(s)
Global	Global	N/A	<ul style="list-style-type: none"> Change the issuance/effective dates of the permit; Amend the application number and complete date; Change permit revision number to T22; Modify limits/standards tables to add rules 2D .1806 and 2Q .0705, where applicable; Correct and make the descriptions of sources ES-1 and ES-9 consistent throughout the permit; Remove propane-fired drying oven DO-7; Change testing citation to 2D .2601; and Update MRR requirements associated with 2D .0521
3 - 4	3 - 4	Equipment List	<ul style="list-style-type: none"> Add miscellaneous gluing operations (ES-10); Add lumber drying operation (ES-5); and Add diesel-fired emergency water pump (ES-6)
6	6	2.1 A.2.c	Change required monitoring of ES-1 under 2D .0521 from monthly to semiannual
6	NA	2.1 A.2 (02641T21)	Section addressing sulfur dioxide emissions from oven DO-7 under 2D .0516 is removed from permit
7	8	2.1 B	Modify descriptions of boilers and multicyclones to include heat input rates and tube dimensions
9	10	2.1 C	Modify descriptions of bagfilters and cyclones of wood dust collection system to show filter areas/cyclone sizes
11	12	2.1 D	Modify description of the roll coating print line to include all associated sources
N/A	13	2.1 E	Add new section to permit for MRR requirements associated with diesel-fired emergency water pump
NA	14	2.1 F	Add new section to permit for MRR requirements associated with the lumber drying operations (ES-5) and the miscellaneous gluing operations (ES-10)
14	18	2.2 B	Rename the section containing 2D .1806 requirements as Section 2.2 B.1 and add Section 2.2 B.2 to include the rule 2Q .0705 requirements (i.e. the requirement to submit a facility-wide NC toxics demonstration).
15 - 22	19 - 26	Section 3	Update Section 3 General Conditions

Note: Condition/Item numbers are as they appear on Permit No. 02641T22, unless otherwise noted.

VI Title V Permit History:

The following table provides a very brief summary of Title V permit revisions for this facility:

Permit No.	Issuance	Description of Revision
02641T15	10/20/99	Initial Title V permit (effective date of 11/19/99)
02641T16	02/11/02	Add bagfilter BH-14 (and optional cyclones C3 and C4)
02641T17	04/19/02	Administrative correction of typographical errors
02641T18	08/30/02	Replace existing bagfilter BH-3 with larger bagfilter (same ID No.)
02641T19	06/18/03	Remove 2D .1100 from permit; and Replace roll coating operation ES-8 with roll coating operation ES-9
02641T20	09/05/03	Add woodworking equipment to ES-4 and add bagfilter BH-15
02641T21	06/10/04	Renew permit; and Move storage tanks (ST-1 thru ST-7) and lumber drying operations (ES-5) to insignificant activities list
02641T22	12/10/08	<ul style="list-style-type: none">• Renew permit;• Add 2Q .0705 requirements to permit; and• Add the emergency fire pump (ID No. ES-6), the lumber drying operations (ID No. ES-5), and miscellaneous gluing operations (ID No. ES-10) to the equipment list

VII Application Fee:

No fee is required for the renewal without modification requested via application 9700005.08A.

VIII Compliance Status:

The facility was most recently inspected on 09/02/08 by Eric Hudson of WSRO and appeared to be operating in compliance with DAQ requirements during that inspection.

IX Zoning Consistency:

No zoning consistency determination is required for the renewal without modification requested via application 9700005.08A.

X Miscellaneous:

Equipment List: The equipment list of Permit No. 02641T22 is modified to include the steam-heated lumber drying operations (ID No. ES-5) and the diesel-fired emergency water pump (ID No. ES-6) (see discussion in the first paragraph under “Insignificant Activities List” below). Also, drying oven DO-7 has been removed from the facility and is therefore removed from Permit No. 02641T22 and the description of ES-9 has been corrected (see 10-10-08 phone log).

According to the MACT Subpart DDDD compliance certifications submitted by the Permittee, this facility utilizes miscellaneous gluing operations that are subject to MACT Subpart DDDD but with no applicable requirements other than initial notification. These operations are added (with ID No. ES-10) to the equipment list of Permit No. 02641T22.

Insignificant Activities List: The insignificant activities (IA) list attached to Permit No. 02641T21 includes lumber drying operations (ID No. ES-5) and a diesel-fired emergency water pump (ID No. ES-6). These two sources are moved to the equipment list of Permit No. 02641T22 due to the applicability of MACT Subpart DDDD and MACT ZZZZ, respectively.

According to the most recent inspection report for this facility, dated 09/02/08, the roll coating operation included on the IA list attached to Permit No. 02641T21 with ID No. ES-7 is now just an electric oven used to warm plastic parts to make them more pliable. The description of this source (with ID No. IES-7) is updated accordingly in the IA list attached to Permit No. 02641T22.

According to the 09/02/08 inspection report for this facility, the Permittee utilizes a UV roll coating line to apply filler to MDF board panels to prepare those panels for printing. This UV roll coating line was previously determined to be an insignificant activity by Mike Benson of RCO (see letter dated 01/21/04) but was never added to IA list. This source (with ID No. IES-8) is added to the IA list attached to Permit No. 02641T22.

Certification by Responsible Official: In accordance with 2Q .0520, Michael Hyatt (i.e. the responsible official for American Drew, Inc., Plant 13) provided the required certification on Form E5 of application 9700005.08A.

XI Permit Review:

Draft Permit: A draft version of Permit No. 02641T22 and the associated review were sent to the Permittee and the WSRO for a review and comment period on 10/03/08. WSRO staff did not comment on the draft permit. Comments from the Permittee resulted in:

- (1) removal of the propane-fired drying oven (ID No. DO-7) from the proposed permit;
- (2) modification of the description of source ES-9; and
- (3) reduction in monitoring of source ES-1 under 2D .0521 from monthly to semiannually.

For more information refer to the phone log dated 10-10-08.

Public Participation: In accordance with 2Q .0521, NC DAQ must provide the opportunity for public participation prior to the renewal of a Title V permit (such as that represented by application 9700005.08A). NC DAQ met this obligation with the public notice posted in The Wilkes Journal Patriot of Wilkes County on 10/20/08.

EPA & Affected States Review: In accordance with 2Q .0522, NC DAQ must provide EPA and any Affected States [as defined at 2Q .0503(1)] the opportunity to review a proposed renewal of this Title V permit. NC DAQ met this obligation by sending those agencies a copy of Proposed Permit No. 02641T22 and the associated review on 10/17/08.

XII Recommendation:

The Title V Permit renewal application for the American Drew, Inc., Plant 13 facility in North Wilkesboro, Wilkes County, North Carolina has been reviewed by NC DAQ personnel to determine compliance with all applicable procedures and requirements. NC DAQ personnel have determined that this facility is complying or will achieve compliance with all applicable requirements as specified in Permit No. 02641T22.

Issuance of Permit No. 02641T22 is recommended.

Attachment A: CAM Applicability Summary Table

Emission Source(s)	Control Device(s)	Controlled Pollutant(s)	Pre-Control PTE (tons per year)	CAM Disqualifications/Exemption(s)	CAM Applicable?
ES-1 (Finishing operations)	N/A	N/A	VOCs > 100 All others < 100	Does not meet criteria of 15A NCAC 2D .0614(a) [No control device]	No
ES-2 (Boiler)	MC-1	PM/PM ₁₀	All pollutants < 100	Does not meet criteria of 15A NCAC 2D .0614(a) [Potential emissions are below major source threshold]	No
ES-3 (Boiler)	MC-2	PM/PM ₁₀	All pollutants < 100	Does not meet criteria of 15A NCAC 2D .0614(a) [Potential emissions are below major source threshold]	No
ES-4 (Wood dust collection system)	Various cyclones and bagfilters	PM/PM ₁₀	All pollutants < 100	Does not meet criteria of 15A NCAC 2D .0614(a) [Potential emissions are below major source threshold]	No
ES-5 (Lumber kilns)	N/A	N/A	All pollutants < 100	Does not meet criteria of 15A NCAC 2D .0614(a) [No control device and not a major source]	No
ES-6 (Emergency fire water pump)	N/A	N/A	All pollutants < 100	Does not meet criteria of 15A NCAC 2D .0614(a) [No control device and not a major source]	No
ES-9 (Roll coating print line)	N/A	N/A	All pollutants < 100	Does not meet criteria of 15A NCAC 2D .0614(a) [No control device and not a major source]	No
ES-10 (Miscellaneous gluing)	N/A	N/A	All pollutants < 100	Does not meet criteria of 15A NCAC 2D .0614(a) [No control device and not a major source]	No