

Facility Name: **Temple-Inland – Rome Lumber Mill**
 City: Rome
 County: Floyd
 AIRS #: 04-13-115-00016

Application #: TV-16057
 Date Application Received: November 23, 2005
 Permit No: 2421-115-0016-V-02-0

Program	Review Engineers	Review Managers
SSPP	Joe Aisien	John Yntema
ISMP	Frank Nederhand	DeAnna Oser
SSCP	Mark McDonald	Stacey Wix
Toxics	Arthur Stelson	Karen Hays

Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to **Temple-Inland – Rome Lumber Mill** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Facility Identification**

1. Facility Name:

Temple-Inland – Rome Lumber Mill

2. Parent/Holding Company Name

TIN, Inc.

3. Previous and/or Other Name(s)

Georgia Kraft Company

Inland-Rome, Inc.

Inland Container Corporation-Rome Lumber Division

Temple-Inland Corporation-Rome Lumber Division

Inland Paperboard and Packaging, Inc.-Rome Lumber Mill

4. Facility Location

380 Mays Bridge Road
Rome, Georgia 30162-0000

5. Attainment, Non-attainment Area Location, or Contributing Area

The Rome Lumber Mill is located in Floyd County, which is considered to be in "attainment" for all criteria air pollutants except PM_{2.5} in accordance with Section 107 of the Clean Air Act, as amended August 1997. Floyd County is inside the 32 county Atlanta area for the additional VOC and NO_x control rules.

6. Class I Area Impacts

The facility is located within 200 kilometers of the Sipsey Wilderness Area, the Cohutta Wilderness Area, the Joyce Kilmer Wilderness Area, and the Great Smoky Mountain National Park.

B. Site Determination

Temple-Inland - Rome Lumber Mill (AFS No. 115-00016), Temple-Inland – Rome Corrugated Container Plant (AFS No. 115-00088), and Temple-Inland – Rome Linerboard Mill (AFS No. 115-00021) are parts of the same Title V Site.

This Title V Permit will cover only the Rome Lumber Mill. The Rome Corrugated Container Plant (AFS No. 115-00088) and the Rome Linerboard Mill (AFS No. 115-00021) have separate Title V Permits.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/Effectiveness	Purpose of Issuance
2421-115-0016-V-01-0	September 7, 2001	Initial Title V permit
2421-115-0016-V-01-1	November 2, 2004	Amendment to increase the crib height of each kiln to allow for an increase in production.
2421-115-0016-V-01-2	August 9, 2006	Amendment to replace the planer mill baghouse.
2421-115-0016-V-01-3	May 24, 2006	Amendment to increase the production capacity of the drying kilns, resulting in a PSD permit.

D. Process Description

1. SIC Codes(s)

2421

2. Description of Product(s)

The facility produces dried planed southern pine lumber.

3. Overall Facility Process Description

The Rome Lumber Mill receives logs by truck. Log Processing (LP) is conducted in two steps. First, logs are debarked and then sawn to standard lengths. Bark from the debarker is combined with the sawdust from the sawmill and is mechanically conveyed off site. Waste log sections are sent to the whole-log chipper. The whole-log chipper produces chips that are combined with the chips from the sawmill and mechanically conveyed off site. After debarking, logs are sent to the sawmill (SM) where they are sawn in a series of operations into rough-cut green lumber.

The majority of the rough-sawn lumber from the sawmill is put into one of three indirect steam heated lumber drying kilns (Emission Unit ID Nos. LDK1, LDK2, and LDK3). On occasion, the Rome Lumber Mill will sell a portion of the green lumber. For estimating emissions, it is assumed that a maximum of 180 million board feet (MMBF) per year is processed in the lumber drying kilns. The steam used to heat all the kilns is provided by an off-site source.

After drying, the lumber is sent to the planer mill (PM) for planing to finished dimensions. The finished lumber is then prepared for shipment to customers. A pneumatic process transfers shavings from the planer mill to a planer mill cyclone. The shavings are then

collected in a shavings bin, loaded on a truck, and then shipped off site. The exit air stream from the planer mill cyclone is sent to the planer mill baghouse (PMBH2), which is vented to the atmosphere.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

The facility is a major source with regards to the New Source Review (NSR) Prevention of Significant Deterioration of Air Quality (PSD) regulations. The facility is a major source with regards to the PSD rules because the potential to emit (PTE) Volatile Organic Compounds (VOCs) is greater than the PSD major source threshold of 250 tons per year (ton/yr).

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM ₁₀	Yes			✓
SO ₂	N/a			
VOC	Yes	✓		
NO _x	N/a			
CO	N/a			
TRS	N/a			
H ₂ S	N/a			
Individual HAP	Yes	✓		
Total HAPs	Yes			✓

3. MACT Standards

Subpart DDDD ["4D"] regulates HAP emissions from Plywood and Composite Wood Products (PCWP) facilities that are major sources. The Plywood and Composite Wood Products (PCWP) MACT, 40 CFR Part 63 Subpart DDDD, published in the Federal Register (Vol. 69, No. 146/Friday, July 30, 2004), indicates that the MACT is applicable to sawmills with lumber kilns (SIC # 2421) which are major for HAPs. The potential to emit methanol is over 10 tons per year, which is the major source threshold for any single HAP. Therefore, this facility is major for HAPs and the MACT is applicable.

The provisions of 40 CFR 63, Subpart DDDD, include no control requirements for lumber kilns. However, the rule indicates that facilities with non-colocated (i.e., lumber kilns located at stand-alone kiln-dried lumber manufacturing facilities or at any other type of facility) lumber kilns that are classified as major sources of HAP must submit an initial notification form by January 26, 2005. The Permittee submitted the required initial notification on February 5, 2005.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	y
Program Code 8 – Part 61 NESHAP	n
Program Code 9 - NSPS	n
Program Code M – Part 63 NESHAP	y
Program Code V – Title V	y

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

None applicable.

C. Compliance Status

The facility did not indicate any non-compliance and did not submit a Form F2.

D. Operational Flexibility

None applicable.

E. Permit Conditions

None.

III. Regulated Equipment Requirements

A. Brief Process Description

See Section ID2

B. Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
LDK1	Lumber Drying Kiln No. 1	40 CFR 52.21, PSD/BACT 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	N/A	None
LDK2	Lumber Drying Kiln No. 2	40 CFR 52.21, PSD/BACT 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	N/A	None
LDK3	Lumber Drying Kiln No. 3	40 CFR 52.21, PSD/BACT 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	N/A	None
PM	Planer Mill	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	PMC PMBH2	Planer Mill Cyclone Planer Mill Baghouse
	Plant Roads	GA Rule 391-3-1-.02(2)(n)	N/A	None

C. Equipment & Rule Applicability

Equipment and Rule Applicability specified in Permit No. 2421-115-0016-V-01-0 is discussed in the initial Title V permit narrative for this permit. Please refer to this narrative.

Since the initial Title V permit was issued, there have been three permit amendments: Permit Amendment 2421-115-0016-V-01-1 increased the crib height of each kiln, thereby increasing the drying capacity of the kilns to 151.25 million board feet of lumber during any period of twelve consecutive months. Permit Amendment 2421-115-0016-V-01-2 replaced the planer mill baghouse PMBH with a new baghouse PMBH2. Permit Amendment 2421-115-0016-V-01-3 was a prevention of significant deterioration of air quality (PSD) permit in which authority was granted to increase the quantity of lumber dried in the kilns to 180 million board feet during any period of twelve consecutive months.

The only new rules and regulations that are applicable to this facility are 40 CFR 52.21 “Prevention of Significant Deterioration of Air Quality” and 40 CFR 63, Subpart DDDD “National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.” The pollutant subject to PSD was VOC and Best Available Control Technology (BACT) was determined to be “no control.” However, the facility is required to operate with good operating practices.

Modeling for ambient air quality impact analysis from VOC sources regarding the secondary formation of ozone was not required because the increase in VOC emissions was less than 100 tons per year.

As indicated, the only requirement of 40 CFR 63, Subpart DDDD for non co-located (stand alone) lumber kilns facilities is the initial notification, which the facility has submitted.

Floyd County is non attainment for PM_{2.5} and since the increase in the PM_{2.5} emission rate is insignificant, non attainment area new source review and modeling for ambient air quality impact analysis are not required for PM_{2.5}.

D. Compliance Status

The facility has not indicated any noncompliance.

E. Operational Flexibility

None requested.

F. Permit Conditions

Condition 3.2.1 was modified, by the PSD permit, pursuant to the PSD rules, and increased to 180 million board feet the quantity of lumber that can be dried in all three drying kilns during any period of twelve consecutive months.

Condition 3.2.2 was modified to specify that the new baghouse PMBH2, which replaced baghouse PMBH, and existing Cyclone PMC, must be in operation at all times that the planer mill is in operation. This is necessary to reduce the emissions from the planer mill.

Pursuant to 40 CFR 63, Subpart A, new Condition 3.3.1 requires the facility to comply with the applicable portions of this subpart as indicated in Table 10 to Subpart DDDD of Part 63.

Pursuant to 40 CFR 63, Subpart DDDD, new Condition 3.3.2 indicates that Lumber Kilns LDK1, LDK2, and LDK3 are subject to the provisions of this subpart. However, the lumber kilns are subject only to the initial notification requirement. The Permittee has already submitted the initial notification letter.

Condition 3.4.1 requires that the particulate matter emitted from the lumber drying kilns not exceed the Rule (e) allowable emission rate. This is an existing condition.

Condition 3.4.2 requires that the particulate matter emitted from the planer mill not exceed the Rule (e) allowable emission rate. This is an existing condition.

Condition 3.4.3 requires that visible emissions from the drying kilns and the planer mill, each, comply with Rule (b). This is an existing condition.

Condition 3.4.4 requires that fugitive emissions from roads comply with Rule (n). This is an existing condition.

Condition 3.4.5 requires that fugitive dust generated be minimized by adopting reasonable precautions such as the application of water. This is an existing condition.

Condition 3.5.1 requires that an inventory of filter bags be available to replace defective bags and hence minimize emissions. This is a modified condition because baghouse PMBH2 replaced baghouse PMBH.

IV. Testing Requirements (with Associated Record Keeping and Reporting)**A. General Testing Requirements**

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

None applicable.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

The planer mill is subject to Georgia Rule (b) for visible emissions and Rule (e) for particulate matter emissions. The Permittee is required to install, calibrate, maintain, and operate monitoring devices to measure the pressure drop across the planer mill baghouse (PMBH2). Monitoring of the pressure drop across baghouse PMBH2 is required and is to be recorded once per week. This provides a secondary monitoring tool to assure that the baghouse is working properly. In addition to the monitoring of the pressure drop across the baghouse, a daily check for visible emissions from baghouse PMBH2 is required, weather permitting. This check will provide early warning of a possibly malfunctioning baghouse. Any visible emissions observed for two consecutive occasions is to be recorded as an excursion and reported. The development and implementation of a preventive maintenance program (PMP) for baghouse PMBH2, to satisfy the requirement that the source be operated in a manner consistent with good air pollution control practice for minimizing emissions, is required by the permit.

Weekly inspection of Cyclone PMC is required to assure that proper operation and maintenance are taking place. Any adverse condition discovered by the inspection of the cyclone is required to be recorded as an excursion and reported. The monitoring of the baghouse and the cyclone will assure that compliance with both Rules (b) and (e) is likely.

The permit also requires the development and implementation of a Work Practice and PMP for the lumber drying kilns to satisfy the best available control technology (BACT) requirement for the kilns.

Finally the permit requires that baghouse PMBH2 comply with the CAM performance criteria stipulated therein.

Note: Cyclone PMC is not required to comply with the CAM requirement because, in our considered judgment, the cyclone is more aptly described as process or recovery equipment vis-à-vis control equipment.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis. [Note: The Permittee indicates in the permit application that the pressure drop across baghouse PMBH2 is not expected to exceed 2 inches of water column based on the historical records from baghouse PMBH, which is being replaced. Therefore, the Permittee is required in Condition 6.1.7c.iii to report as an excursion any pressure drop across baghouse PMBH2 that exceeds 2 inches of water column.]

B. Specific Record Keeping and Reporting Requirements

The Permittee is required to maintain all records describing the routine maintenance performed on all air pollution control equipment. Also, the Permittee is required to maintain monthly usage records of the lumber dried in the drying kilns and to calculate the monthly and the 12-month consecutive total lumber dried in the kilns. This record keeping is required to assure that the Permittee is operating under the limit specified in Condition No. 3.2.1; six 12-month consecutive totals are required to be submitted semiannually. In addition, the Permittee is required to notify the Division in writing whenever the drying kilns' monthly production exceeds 15,000,000 board feet and also to report semiannually as an exceedance whenever the 12-consecutive month total lumber dried, calculated monthly as indicated above, exceeds 180 million board feet. The Permittee is required to maintain a kiln operation and maintenance log book containing the date, charge quantity, actual drying time, maximum wet-bulb and set-point temperature, dry-bulb actual and set-point temperature over the lumber drying time range, final target moisture content, and the date, the initials of personnel conducting the inspection, results of the visual inspection, documentation of any maintenance performed and any calibration performed on the kiln operation control equipment. Finally, the Permittee is required to maintain records of all actions taken to suppress fugitive dust to assure compliance with Rule(n).

VII. Specific Requirements

- A. Operational Flexibility: None applicable.
- B. Alternative Requirements: None applicable.
- C. Insignificant Activities

Refer to <http://airpermit.dnr.state.ga.us/GATV/default.asp> for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
 - Form D.2 (Generic Emissions Groups)
 - Form D.3 (Generic Fuel Burning Equipment)
 - Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)
- D. Temporary Sources: None.
 - E. Short-Term Activities: None.
 - G. Emissions Trading: None.
 - H. Acid Rain Requirements: None.
 - I. Stratospheric Ozone Protection Requirements: None.
 - J. Pollution Prevention: None.
 - K. Specific Conditions: None.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Addendum to Narrative

The 30-day public review started on Friday, April 6, 2007 and ended on Monday, May 7, 2007 because May 6, 2007 fell on a Sunday.

Written Comments were received on Tuesday, April 17, 2007 from Mike Hinson, Plant Manager, Temple-Inland - Rome Lumber Mill.

Comment 1: 5.2.5 (e) – “This language has been changed from Permit Amendment No.: 2421-115-0016-01-3. We request that the original language from this amendment be included in the Title V Permit. This language was agreed upon by Temple-Inland and Mr. John Yntema and is key to clarifying language in 6.1.7 (v) as the remedy for entering corrective actions into the CMMS within 24 hours and 7 days. As per the Final PSD Determination document dated May 2006, the Division does not mean to imply that these items are necessarily reportable excursions which are defined in 6.1.7 (v).”

Response: The Division agrees with the commenter and has restored the language found in Condition 5, Paragraph e, of Permit Amendment 2421-115-0016-V-01-3, dated May 24, 2006.

Condition 5, Paragraph e had read:

- e. Any adverse condition discovered by this inspection shall be corrected in the most expedient manner possible. The Permittee shall record the incident as an excursion and note the corrective action taken. The Permittee shall also record any exceedances of the work practice standards and preventive maintenance program and corrective action taken to prevent any future exceedances. The record must include the following:
 - i. Any time a wet bulb temperature set-point-drying schedule is more than 240°F.
 - ii. Any time a final moisture content drying operation target is less than 12%.

It now reads:

- e. Any adverse condition discovered by this inspection shall be corrected in the most expedient manner possible. The Permittee shall record problems discovered in a maintenance log/checklist or the plant's Computerized Maintenance Management System (CMMS), indicating the corrective action(s) taken. If a problem discovered during daily inspection cannot be remedied within 24 hours of discovery, it shall be entered into the plant's Computerized Maintenance Management System (CMMS) as an excursion. If a problem discovered during other inspections cannot be remedied within 7 days of discovery, it shall be entered into the plant's Computerized Maintenance Management System (CMMS) as an excursion.