



ATTACHMENT #13

7-20-87

(10)

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State of Wisconsin / DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny
Secretary

June 16, 1987

4530-1

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. John D. Kennedy
Owens-Illinois Tomahawk and Timber STS, Inc.
N9090 Highway E
Tomahawk, Wisconsin 54487

Dear Mr. Kennedy:

Your application for an air pollution control permit has been processed in accordance with Section 144.3925, Wisconsin Statutes.

The enclosed permit is issued to provide authorization for your source to operate in accordance with the requirements and conditions set forth within Parts I and II of the permit. Please read it carefully.

This permit is effective immediately unless a petition for a contested case hearing for administrative review of the permit is filed with the Department under Section 144.403, Wisconsin Statutes, within 30 days after the date of the permit. Any petition for a hearing should name the Wisconsin Department of Natural Resources as respondent. The petition should set forth specifically the issue sought to be reviewed, the interest of the petitioner, the reasons why a hearing is warranted and the relief desired.

A copy of this permit should be available at the source for inspection by any authorized representative of the Department. Questions about this permit should be directed to the Bureau of Air Management, P.O. Box 7921, Madison, WI 53707, (608)266-7718, or the Wisconsin Department of Natural Resources, North Central District Air Program, P.O. Box 818, Rhinelander, WI 54501, (715)362-7616.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

Neal Baudhuin
Neal Baudhuin, Engineer
North Central District Air Program

Attach.

cc: Air Enforcement Branch, EPA, Region V
North Central District Air Program, Rhinelander

AIR POLLUTION CONTROL PERMIT
MANDATORY OPERATION PERMIT
FOR AN EXISTING AIR CONTAMINANT SOURCE

FACILITY ID No. 735008010 SIC No. 2631

MANDATORY OPERATION PERMIT NO. 735008010-J01

TYPE OF SOURCE: Semi-Chemical Pulp and Paper Mill

THIS OPERATING PERMIT IS PERMANENT UNLESS ALTERED, REVOKED OR SUSPENDED.

In compliance with the provisions of Chapter 144, Wisconsin Statutes, and Chapters NR 154, NR 155 and NR 400 to 499, Wisconsin Administrative Code,

Name of Source: Owens-Illinois Tomahawk and Timber STS, Inc.
Street Address: N9090 Highway E, Tomahawk, Wisconsin 54487
Principal Officer or Authorized Representative, & Title:
John D. Kennedy, Environmental Control and Technical
Superintendent

is authorized to operate a semi-chemical pulp and paper mill located at N9090 Highway E, Tomahawk, Wisconsin 54487 in accordance with the alternate sulfur dioxide emission limit request dated February 27, 1985, the permit application dated April 4, 1985, and subsequent submittals in support of the application and in accordance with the conditions stated herein.

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Madison, Wisconsin, this 16th day of June, 1987.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By Donald F. Theiler DSP
Donald F. Theiler, Director
Bureau of Air Management

PART I
SPECIFIC PERMIT CONDITIONS

BY CATEGORY OF EMISSION UNITS:

A. Boiler B25 emitting from Stack S11

1. Categorical Emission Limitation

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wisconsin Statute</u>	<u>Limitation/Requirement</u>
Particulate matter	s. NR415.06(1)(a), WI Adm. Code	*0.6 pounds per million BTU input to any stack
SO ₂	s. NR417.07(4), WI Adm. Code and 144.394(3), WI Stats.	84.59 pounds per hour
NO ₂	s. NR428.03, WI Adm. Code	29.32 pounds per hour
CO	s. NR426.025, WI Adm. Code	2.67 pounds per hour
Lead	s. NR427.03, WI Adm. Code	0.00015 pounds per hour
Visible Emissions	s. NR431.04(1), WI Adm. Code	No. 2 of the Ringelman Chart or 40% opacity

*Total particulate matter emissions from Boilers B25, B24, B27 and B28 shall not exceed 314.80 pounds per hour. This limitation is a "cap" determined by use of ASME Standard number APS-1 referenced in s. NR 415.06(1)(a), Wis. Adm. Code.

B. Boiler B29 emitting from Stack S14

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wisconsin Statute</u>	<u>Limitation/Requirement</u>
Particulate matter	secs. NR415.06(1)(a), WI Adm. Code and 144.394(3), WI Stats.	0.536 pounds per million BTU input to any stack
SO ₂	secs. NR417.07(4), WI Adm. Code and 144.394(3), WI Stats.	145.33 pounds per hour
NO ₂	s. NR428.03, WI Adm.Code	47.85 pounds per hour
CO	s. NR426.025, WI Adm.Code	4.76 pounds per hour
Lead	s. NR427.03, WI Adm.Code	0.0037 pounds per hour
Visible Emissions	s.NR431.04(1), WI Adm.Code	No. 2 of the Ringelman Chart, or 40% opacity

C. Boiler B24 emitting from Stack S15

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wisconsin Statute</u>	<u>Limitation/Requirement</u>
Particulate matter	s.NR415.06(2)(c), WI Adm. Code	*0.10 pounds per million BTU input to any stack
SO ₂	s.NR417.07(5), WI Adm.Code	5.5 pounds per million BTU heat input from the boiler to any stack
NO ₂	s. NR428.03, WI Adm.Code	267.43 pounds per hour
CO	s. NR426.025, WI Adm.Code	768.60 pounds per hour
Lead	s. NR427.03, WI Adm.Code	0.00079 pounds per hour
Visible Emissions	s.NR431.05(1), WI Adm. Code	No. 1 of the Ringelman Chart, or 20% opacity

*Total particulate matter emissions from Boilers B25, B24, B27 and B28 shall not exceed 314.80 pounds per hour. This limitation is a "cap" determined by use of ASME Standard number APS-1 referenced in s. NR 415.06(1)(a), Wis. Adm. Code.

D. Boiler B27 emitting from Stack S15

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wisconsin Statute</u>	<u>Limitation/Requirement</u>
Particulate Matter	s.NR415.06(1)(a), WI Adm. Code	*0.6 pounds per million BTU input to any stack
SO ₂	s.NR417.07(5), WI Adm.Code	5.5 pounds per million BTU heat input from the boiler to any stack
NO ₂	s. NR428.03, WI Adm.Code	100.91 pounds per hour
CO	s. NR426.025, WI Adm.Code	380.18 pounds per hour
Lead	s. NR427.03, WI Adm.Code	0.0004 pound per hour
Visible Emissions	s.NR431.05(1), WI Adm.Code	**No. 1 of the Ringelman Chart, or 20% opacity

*Total particulate matter emissions from Boilers B25, B24, B27 and B28 shall not exceed 314.80 pounds per hour. This limitation is a "cap" determined by use of ASME Standard number APS-1 referenced in s. NR 415.06(1)(a), Wis. Adm. Code.

**When Boiler B24 is not operating, the visible emissions limitation shall be No. 2 of the Ringelmann Chart, or 40% opacity, as stated in s. NR 431.04(1), Wis. Adm. Code.

E. Boiler B28 emitting from Stack S15

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wisconsin Statute</u>	<u>Limitation/Requirement</u>
Particulate Matter	s.NR415.06(1)(a), WI Adm.	*0.6 pound per million BTU input to any stack
SO ₂	s. NR417.07(5), WI Adm.Code	5.5 pounds per million BTU input from the boiler to any stack
NO ₂	s. NR428.03, WI Adm.Code	351.50 pounds per hour
CO	s. NR426.025, WI Adm.Code	5.70 pounds per hour
Lead	s. NR427.03, WI Adm.Code	0.0023 pound per hour
Visible Emissions	s.NR431.05(1), WI Adm.Code	**No. 1 of the Ringelman Chart, or 20% opacity

*Total particulate matter emissions from Boilers B25, B24, B27 and B28 shall not exceed 314.80 pounds per hour. This limitation is a "cap" determined by use of ASME Standard number APS-1 referenced in s. NR 415.06(1)(a), Wis. Adm. Code.

**When Boiler B24 is not operating, the visible emissions limitation shall be No. 2 of the Ringelmann Chart, or 40% opacity, as stated in s. NR 431.04(1), Wis. Adm. Code.

F. Process P32, Smelt Dissolving, emitting from Stack S52

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wisconsin Statute</u>	<u>Limitation/Requirement</u>
Particulate Matter	s.NR415.05(1)(o), WI Adm. Code	0.4 pounds per 1,000 lbs. of gas
Visible Emissions	s.NR431.04(1), WI Adm.Code	No. 2 of the Ringelman Chart or 40% opacity

G. Facility General

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wisconsin Statute</u>	<u>Limitation/Requirement</u>
Fugitive Dust	s.NR415.04(1), WI Adm.Code	See Note 1 below
Hazardous Compounds	s.NR445.03, WI Adm. Code	See Note 2 below
Malodorous Emissions	s.NR429.03 WI Adm. Code	See Note 3 below

NOTE 1: Precautions shall be taken to prevent particulate matter from becoming airborne whenever any materials are being handled, transported or stored. No structure, parking lot or road shall be used, constructed, altered, repaired, sand blasted or demolished without taking such precautions. Such precaution shall include, but not be limited to:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures or construction operations.
2. Application of asphalt, oil, water, suitable chemicals or plastic covering on dirt roads, material stockpiles, and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor or water pollution problem.
3. Installation of hoods, fans and air cleaning devices to enclose and vent the areas where dusty materials are handled.
4. Covering or securing of materials likely to become airborne while being moved on public roads, railroads or navigable waters.
5. Conduct of agricultural practices such as tilling land or application of fertilizers in such manner as not to create pollution.
6. The paving or maintenance of roadways or parking lots so as not to create air pollution.

NOTE 2: No person may cause, allow or permit emissions into the ambient air of hazardous substances in such quantity, concentration, or duration as to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include, but are not limited to, the following materials, their mixtures, or compounds: asbestos, beryllium, cadmium, chromium, chlorine, fluorine, mercury, pesticides, or radioactive material.

NOTE 3: No person shall cause, suffer, allow or permit emission into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate or control such emission.

GENERAL CONDITIONS APPLICABLE TO THE ENTIRE FACILITY

- A. Source performance emission stack tests shall be conducted within 90 days after the issuance of this permit to prove compliance with these sulfur dioxide limitations:
1. Boiler B25, Stack S11, 84.59 pounds per hour from the boiler to any stack, while operating with residual fuel oil.
 2. Boiler B29, Stack S14, 145.33 pounds per hour from the boiler to any stack, while operating with residual fuel oil.
 3. Boilers B24, B27 and B28, Stack S15, 5.5 pounds per million BTU heat input from each boiler to any stack, while operating with bituminous coal.
- B. Source performance emission stack tests shall be conducted within 90 days after the issuance of this permit to prove compliance with these particulate matter limitations:
1. Boiler B25, Stack S11, 0.6 pounds per million BTU input to any stack.
 2. Boiler B29, Stack S14, 0.536 pounds per million BTU input to any stack.
 3. Boiler B24, Stack S15, 0.1 pounds per million BTU input to any stack.
 4. Boiler B27, Stack S15, 0.6 pounds per million BTU input to any stack.
 5. Boiler B28, Stack S15, 0.6 pounds per million BTU input to any stack.
 6. Process P32-Smelt Dissolving, Stack S52, 0.4 pounds per 1,000 pounds of gas.
 7. 314.80 pounds per hour total from Boilers B25, B24, B27 and B28.
- C. The Department shall be informed at least 20 working days prior to the tests so a Department representative can witness the testing. At the time of notification, a stack test plan following the provisions set forth in NR 439.05(1), Wisconsin Administrative Code, shall be submitted for approval.
- Two copies of the report on the tests shall be submitted to the Department for evaluation within 30 days after the tests.
- D. All source performance emission stack tests shall be performed with the equipment operating at a minimum of 80% of maximum rated heat input capacity.

- E. The source performance emission stack tests for Boiler B25 emitting to Stack S11, Boiler B29 emitting to Stack S14 and Boilers B24, B27 and B28 emitting to Stack S15 shall be performed at least once every 24 months as long as this permit remains valid. Each biennial test shall be performed within 90 days of the anniversary date of the issuance of the permit. If the most recently completed test results demonstrate that emissions are 50% or less of the applicable emission limitation, the next scheduled test may be waived, provided the Department grants a written waiver.
- F. The sulfur content of residual fuel oil fired in Boilers B25 and B29 shall not exceed 1.0%, by weight.
- G. Residual fuel oil fired in Boiler B25 shall not provide more than 80 million BTU per hour heat input.
- H. Copies of the supplier's analyses for each shipment of residual fuel oil received shall be retained at the facility. The supplier's analyses shall include, at a minimum, each shipment's residual fuel oil quantity, sulfur content and heat content.
- I. The facility owner shall obtain certification from the residual fuel oil supplier that the following methods and procedures, or Department approved equivalents were followed for sampling and testing:
1. ASTM D4057-81 or ASTM D4177-82, Standard Practice for Manual and Automatic Sampling of Petroleum and Petroleum Products.
 2. ASTM D129-78 or ASTM D4294-83, Sulfur content in Petroleum Products.
 3. ASTM D240-76, Heat of Combustion of Liquid Hydrocarbon Fuels by a Bomb Calorimeter.
- J. Coal sampling shall be performed using the procedures in ASTM D2234, which result in data at least as reliable as classification II-D-2, defined in ASTM D2234 as manual sampling - stationary coal, on a monthly basis.
- K. Coal samples shall be analyzed for ash content, sulfur content and heat content according to the following methods, or Department approved equivalents:
1. ASTM D2013-72, Preparing Coal Samples for Analysis.
 2. ASTM D3177-75 or ASTM D4239-83, Sulfur in the Analysis Sample of Coal and Coke.
 3. ASTM D2015-77, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter.
 4. ASTM D3174-82, Ash in the Analysis of Coal and Coke.

L. Quarterly reports shall be submitted within 30 days following the end of each calendar quarter beginning with the first quarter of 1988. Each report shall include the following information for each month during the calendar quarter:

1. Total quantity of coal burned expressed in tons.
2. Weighted average percent of the ash content of the coal burned.
3. Weighted average percent of the sulfur content of the coal burned.
4. Weighted average heat content expressed in BTU per pound of the coal burned.
5. Weighted average sulfur dioxide emission rate in terms of pounds sulfur dioxide per million BTU heat input from the coal burned.

M. The following air pollution control equipment shall be monitored on a regular basis for the indicated operating variables:

1. Boiler B25, electrostatic precipitator - primary voltage, primary current and sparking rate.
2. Boiler B24, cyclone - pressure drop across collector.
3. Boiler B27, cyclone - pressure drop across collector.
4. Boilers B24, B27 and B28, electrostatic precipitator - primary voltage, primary and secondary current, and sparking rate.

A written record of these monitored operating variables shall be maintained at the facility.

N. A written malfunction prevention and abatement plan shall be prepared and updated as necessary to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. This plan shall include the items specified in Section NR 439.09, Wisconsin Administrative Code.

O. Use of municipal waste derived cardboard and internal boxplant clippings as fuel in Boilers B24 and B27 shall not exceed 2,500 tons per year unless written authorization is obtained from the Department.

P. As stated under Part I, Section B.3. of permit number MAA-10-IRS-82-35-025, shredded rubber shall be used in amounts not to exceed 35% of total heat input to Boiler B24, based on the heat values of the fuels.

Q. The company shall keep records of the fuel usages of Boilers B25, B29, B24, B27 and B28. These records shall be made available for inspection by Department staff any time during normal working hours.

- R. Source performance emission stack tests used to determine compliance shall be conducted in accordance with the following test methods and procedures described in 40 C.F.R. pt. 60, Appendix A, unless the Department approves the use of an equivalent method:
1. Method 6, 6A, 6B, 6C or 8 for sulfur dioxide emissions.
 2. Method 5, 5A, 5D or 17 for nonfugitive particulate emissions.
- S. Use of P.E.T. (polyethylene terephthalate) bottles as fuel in Boilers B24 and B27 and shredded rubber as fuel in Boiler B27 are allowed as stated in the permit exemption letter dated May 27, 1983. Burning of P.E.T. bottles shall not exceed 40 tons per week unless written authorization is obtained from the Department. Use of shredded rubber as fuel in Boiler B27 shall not exceed 35% of the total heat input to the boiler, based on the heat value of the fuels.