

207 Pioneer Building

Mount Vernon, Washington 98273

Area Code 206: Mount Vernon 336-9399 Bellingham 676-2223 Scan 738-2223

September 15, 1981

Glen F. Hallman
AIR POLLUTION
CONTROL OFFICER

Gene Terrell
CHEMCO, INC.
P.O. Box 2792
Eugene, Oregon 97402

Dear Mr. Terrell:

A "Notice of Construction and Application for Approval", together with the required \$25.00 filing fee and completed Environmental Checklist, was received in this office August 14, 1981 to install a wood pressure treating facility located on the Grandview Road approximately 800 feet West of the intersection of the Kickerville Road, Ferndale, Washington (Section 8, Township 39, Range 4E).

The application, together with supporting data and information provided, has been reviewed in order to determine that the equipment and facilities are designed and will be installed and operated in such a manner as to provide all known, available and reasonable methods of air pollution control and therefore, with proper maintenance and operation should be able to meet the applicable air pollution control emission standards. A final Declaration of Non-Significant Environmental Impact for this proposed project was issued August 18, 1981 by the Whatcom County Bureau of Buildings & Code Administration.

Upon my recommendation, the Board of Directors of the NWAPA granted approval, at their September 9, 1981 meeting to construct and install this wood pressure treating facility contingent upon your payment of the required \$50.00 plan, examination and inspection fee and the ground level concentration of formaldehyde not exceeding 0.05 parts per million at the property line. This fee is in addition to the original \$25.00 filing fee. Final approval to install and operate this installation is conditioned upon payment of this fee and emissions from the wood treating pressure facility when in actual operation, meeting the applicable air pollution control regulations.

In accordance with NWAPA Regulation - Section 303, before placing this wood pressure treating facility into operation, please notify me, in writing, when the installation is substantially complete, all air pollution control facilities have been installed, and the date when you propose to commence operation of this wood pressure treating facility. A Certificate of Approval to Operate" is required in accordance with NWAPA Regulation - Section 310.

September 15, 1981

Final inspection is required of the wood pressure treating facility herewith approved for construction, including an on-site inspection prior to startup and again after being placed into normal operation for a period of time. If found to be satisfactory and emissions therefrom in compliance with the Regulations of this Authority, and this approved Notice of Construction, a "Certificate of Approval to Operate" will be issued.

Upon your written request, provisional approval to startup and test this wood pressure treating facility prior to final inspection and possible acceptance, may be granted. If there is any question concerning the emissions from these facilities, when operating under normal conditions meeting the applicable regulations of this Authority, it may be required that you conduct, or have conducted, approved appropriate emission tests in order to demonstrate that the emissions therefrom are within the limits set forth in the applicable air pollution control regulations and in accordance with this approved Notice of Construction.

Please find enclosed statement in the amount of \$50.00 for the required plan, examination and inspection fee.

Sincerely,

Glen F. Hallman
Air Pollution Control Officer

GFH:sh

Enclosure

cc: Charles Mixon

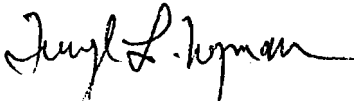
Chemco
September 19, 1988
Page 2

5. All tanks with a capacity of 6,000 gallons or greater containing liquids with a true vapor pressure of 1.5 lbs/sq. in. or greater shall be constructed with either a floating roof, a vapor recovery system or other equipment of equal efficiency provided prior approval is obtained from the Control Officer.

Please notify me, in writing, when the installation is complete and provide the expected date that you propose to begin operating the facility. An on-site inspection may be required before startup and again after the process has operated for a period of time. A "Certificate of Approval to Operate" will be issued after we determine that the process was installed in accordance with the plans and specifications submitted with the application and can operate in compliance with the Regulations of this Authority and the conditions of approval.

Please call me if you have questions about the Board's approval of this project. A statement is enclosed for the plan examination and inspection fee and the legal publication costs in the amount of \$78.40.

Sincerely,



Terry L. Nyman
Air Pollution Control Officer

:sd

Enclosure



April 9, 2001

John Gibb
President
Chemco, Inc.
P.O. Box 845
Ferndale, WA 98248

Order of Approval to Construct No. 758
Fire Retardant Manufacturing Process

Dear Mr. Gibb:

On February 13, 2001, Chemco, Inc. submitted a "Notice of Construction and Application for Approval" to the Northwest Air Pollution Authority (NWAPA) to install a system to synthesize chemical fire retardant to be used in an existing wood treatment process located at 4191 Grandview Road, Ferndale, Washington. The existing fire retardant wood treating facility was approved by the NWAPA in 1988.

The subject project will be composed of a 2,500 gallon-capacity reactor vessel and four 12,000 gallon raw material/product tanks. Vapors emitted from breathing/filling losses from a heated (77° F) formaldehyde/methanol/water storage tank (T-101) will be routed through a packed tower water scrubber before venting to the outside air. The reactor vessel (R-301) will be sealed, heated, and agitated during the reaction phase. Vapors emitted from filling/emptying the reactor vessel will be passively vented through a shell and tube condenser and routed through a packed tower water scrubber before venting to the outside air. These segments of the subject installation are expected to emit small quantities of formaldehyde and methanol. No other segment of the proposed process will emit appreciable amounts of air contaminants according to data submitted by Chemco.

The fire retardant manufacturing process will emit regulated toxic air pollutants (formaldehyde and methanol) and is subject to review pursuant to NWAPA Regulation Section 300 and 302, WAC 173-400-110, and WAC 173-460. A State Environmental Policy Act Determination of Nonsignificance encompassing the subject project was issued by the NWAPA on March 5, 2001. Information submitted by Chemco was reviewed to determine that all known, available, and reasonable air pollution control measures are employed. Best Available Control Technology for emissions control is determined to be proper operation of a condenser and wet scrubber to abate emissions from the reactor and formaldehyde storage tank.

Approval to construct and operate the proposed facility in the NWAPA jurisdiction is hereby granted subject to the following conditions:


1. Emissions from the fire retardant manufacturing reactor vessel shall be routed to a functioning condenser-wet scrubber system during all periods the system contains raw materials or product and is not sealed. Emissions from formaldehyde solution storage shall be routed to a functioning wet scrubber system during all periods of operation.
2. The condenser and scrubber shall be constructed and operated in accordance with design specifications submitted with the subject Notice of Construction and Application for Approval. The scrubber liquor shall be kept at least 15% below saturation concentration levels for formaldehyde and methanol. Operation and maintenance manuals for the equipment shall be available to operators


at all times and to the NWAPA during inspections. Recommended operating ranges and monitoring procedures shall be developed and incorporated in operation and maintenance manuals.

3. No visible fugitive emissions shall be evident from the fire retardant manufacturing building.
4. Emissions resulting from operation of the fire retardant manufacturing facility shall not cause exceedance of acceptable source impact levels specified in WAC 173-460-150 and -160 as determined by methods specified in WAC 173-460-080. The facility owner or operator shall notify the Northwest Air Pollution Authority if throughput or material formulations significantly deviates from the information provided with the subject Notice of Construction and Application for Approval.
5. Within 180 days after the effective date of this order Chemco shall analyze and report to the NWAPA the free formaldehyde concentration in the fire retardant product (Chemco 1000R). Within 180 days after the effective date of this order Chemco shall propose to the NWAPA a plan to measure formaldehyde and methanol emissions from the entire facility. Based on a review of the plan the NWAPA may require emissions testing.

Plan examination and review fees in the amount of \$645.00 were received by the NWAPA on February 13, 2001. Please contact Lester Keel at (360) 428-1617 extension 209 if you have any questions about the approval of this project.

Sincerely,


James Randles
Director

Reviewed by: A. Naismith, P. E. 



1600 South Second Street
 Mount Vernon, WA 98273-5202
 ph 360.428.1617
 tel 800.622.4627
 fax 360.428.1620
 www.nwcleanair.org

Original Issuance: 01/20/2009

**Northwest Clean Air Agency (NWCAA) hereby issues
 Order of Approval to Construct (OAC) #1000**

Project Summary: Installation of a new wood hardening process at an existing facility that treats wood with fire retardant. The new process involves creation of durable furniture-grade wood by permeation of a starch-based hardening solution in a vacuum/pressure treating process utilizing an existing 6-foot by 34-foot autoclave. All wood will be kiln dried after hardening treatment in existing kilns 3 and 4 on the west side of the treatment area.

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**Chemco, Inc.
 4191 Grandview Road
 Ferndale, WA 98248**

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R**

**Verdant Wood Technologies
 4191 Grandview Road
 Ferndale, WA 98248
 John Gibb, President**

FACILITY LOCATION:

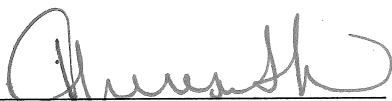
4191 Grandview Road, Ferndale WA 98248

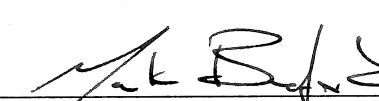
As authorized by Northwest Clean Air Agency Regulation Section 300, this order is issued subject to the following restrictions and conditions:


1. Visible emissions (other than water vapor) from the wood hardening process, including facility building vents, drying kilns and other associated equipment shall not exceed 5 percent for more than three minutes (aggregate) in any one hour as measured by Washington Department of Ecology (WDOE) Method 9A.
2. The facility shall maintain documentation of the nature and amount of all materials used in the wood hardening process. The documentation may consist of material safety data sheets or other documentation provided by the manufacturer of the material. Alternatively, the facility may maintain on file a statement from the manufacturer that the substance does not contain organic hazardous air pollutants (HAP).
3. Monthly, the facility shall determine and record all materials used for the previous twelve months and estimate total air emissions from the wood hardening process.
4. Semiannually, the facility shall submit to NWCAA monthly reports containing the emissions data required by Condition 3 of this Order. These reports shall

be submitted along with and certified in accordance with semiannual reporting required by the Chemco Title V air operating permit.

5. Treatment product, solvent, and waste containers shall be kept covered at all times they are not in use. Chlorinated organic solvents shall not be used or stored on-site without prior approval by the NWCAA and a demonstration that no satisfactory alternative exists.
6. Production facilities shall be equipped with ventilation systems designed and operated in a manner to minimize ambient ground level odors. This shall include exhaust fans of adequate capacity and vertical exhaust stacks, or where appropriate, roof vents.
7. Odors from the facility shall not result in a nuisance at or beyond the property boundary as determined by the NWCAA staff.
8. No fugitive emissions from any facility road or any other source associated with this facility shall leave the property.


Theresa (Toby) Allen
Engineer


Mark Buford, P.E.
Assistant Director,
Engineering


Lynn Billington, P.E.
Director, Engineering



1600 South Second Street
 Mount Vernon, WA 98273-5202
 ph 360-428-1617
 fax 360-428-1620
 info@nwcleanairwa.gov
 www.nwcleanairwa.gov

Issuance: May 16, 2017
 Revision a: July 13, 2020

**Northwest Clean Air Agency (NWCAA) hereby issues
 Order of Approval to Construct (OAC) 1271a**

Project Summary: Permit modification to clarify heat input capacity of the existing 300 hp gas boiler.

Approved Emission Unit:

- One Cleaver Brooks CBLE-700-300-150ST 300 hp natural gas-fired boiler with flue gas recirculation (FGR) and low NOx (9 ppm) burner with a maximum heat input capacity of 12.248 MMBtu/hour

Owner/Operator	Facility Name and Location
Chemco Inc 4191 Grandview Rd Ferndale, WA 98248 Contact: Darin Dalry	Chemco Inc 4191 Grandview Rd Ferndale, WA 98248

Permit History

- As of the date of issuance, this Order supersedes NWCAA OAC 1271 issued May 16, 2017

Note that in addition to other applicable rules and regulations, the approved emission unit is subject to applicable portions of the following federal regulations:

New Source Performance Standards (NSPS)

- 40 CFR 60 Subpart A - General Provisions
- 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

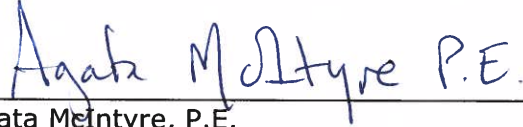
National Emission Standards for Hazardous Air Pollutants (NESHAP)/Maximum Achievable Control Technology Standards (MACT)

- 40 CFR 63 Subpart A - General Provisions
- 40 CFR 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Issuance of this Order is authorized by Northwest Clean Air Agency Regulation Section 300. The Owner/Operator must comply with the following restrictions and conditions¹:

- (1) Operate the FGR and low-NOx burner at all times the boiler is in operation.
- (2) Visible emissions from the boiler stack are prohibited that exceed 0 percent opacity for more than three minutes in any one-hour period as measured by Washington Department of Ecology Method 9A.
- (3) Do not exceed any of the following emission limits:
 - (A) 9 ppmvd NOx, corrected to 3% O₂, and
 - (B) 50 ppmvd CO, corrected to 3% O₂.
- (4) Demonstrate compliance with Condition 3 of this Order by performing tune-ups in accordance with 40 CFR 63.7540(a)(10)(i) through (vi). Retain all records documenting the work performed during tune-ups.
- (5) Develop a written operation and maintenance (O/M) manual for the boiler, FGR and low NOx burner including inspection schedules, maintenance requirements, and operating procedures. Maintain the manual onsite and keep readily available for inspection by NWCAA personnel.
- (6) Maintain all records required by this Order onsite for no less than 5 years from the date of generation and keep readily available for review by NWCAA personnel.


Shannon Logan
Air Quality Scientist


Agata McIntyre, P.E.
Engineering Manager

Revision a: Administrative modification to correct the firing rate of the boiler. Condition 7 of OAC 1271 (one-time requirement of startup notification) has been fulfilled and therefore removed.

¹ Nothing in this permit is intended to, or shall, alter or waive any applicable law [including but not limited to defenses, entitlements, challenges or clarifications related to the Credible Evidence Rule, 62 FR 8315 (Feb. 27, 1997)] concerning the use of data for any purpose under the Act, generated by the reference method specified herein or otherwise.

Pursuant to Section 300.10 of the NWCAA Regulation and ch 43.21B RCW, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon the NWCAA within 30 days of the date the applicant receives this Order. Additional information regarding appeal procedures can be found at: <http://www.eluho.wa.gov/> under PCHB.