

General Telephone (604) 432-6200 Fax (604) 432-6251

Air Quality and Source Control Department - Tel (604) 436-6700 Fax (604) 436-6707

### **PERMIT**

(Under the provisions of the GVRD Air Quality Management Bylaw No. 725)

STELLA-JONES INC.
IS AUTHORIZED TO DISCHARGE AIR CONTAMINANTS
FROM A WOOD PRESERVING PLANT
LOCATED AT 25 BRAID STREET,
COQUITLAM, B.C. V3L 3P2

This permit has been issued under the terms and conditions prescribed in the attached Schedules A, B, C, D, E, F, G & H for emission sources and works existing or planned on March 15, 1993.

ÁSSÍSTANT AIR QUALITY DIRECTOR

PERMIT NUMBER GVA0063

### **INDEX OF SCHEDULES**

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| Schedule G Authorized Works and Procedures                          |
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## SCHEDULE B - PAGE 1 to PERMIT GVA0063

### A. OBJECTIVES AND AMENDMENTS

Ambient air quality guidelines and objectives are prescribed under provisions of applicable legislation. If the level of air quality as prescribed by these criteria is exceeded, the conditions of this Permit may be revised, in order that the desired air quality can be maintained. This Permit may also be amended for other reasons, as authorized by applicable legislation.

### B. MAINTENANCE AND OPERATION OF WORKS

Works and procedures, which this Permit authorizes to control the discharge of air contaminants, shall be employed during all operating periods of the related facilities. The Permittee shall regularly inspect and maintain all such works in good repair.

#### C. EMERGENCY PROCEDURES

An emergency or other condition may prevent the continuous utilization of the above authorized works and procedures, or may result in a discharge of air contaminants which is not authorized by this Permit. If such a situation occurs, the Permittee shall report the circumstances of this event to the Greater Vancouver Regional District, Air Quality and Source Control Department at 436-6777 (24 hours), at the first available opportunity.

No discharge that has bypassed control works is authorized unless the Air Quality Director's approval has been obtained. In the event of an emergency, bypassing facilities may be used for such periods as are necessary to effect a shutdown of the related processes.

### D. AIR CONDITIONING, HEATING AND VENTILATION SYSTEMS

Air contaminants discharged from any natural gas-fired air conditioning, heating or ventilation systems for buildings located at the discharge site are not specified in this Permit. These works shall be maintained and operated in a manner prescribed by the manufacturer to ensure good combustion of the fuel with minimum discharge of air contaminants. Notwithstanding the above, the Air Quality Director may at his discretion stipulate limits for emission of contaminants from these sources in the Permit at a future date under provisions of the Bylaw.

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### GR ... FER VANCOUVER REGIONAL DIS...ICT

## SCHEDULE B - PAGE 2 to PERMIT GVA0063

### E. GENERAL SITE RESTRICTIONS

No air contaminant(s) from any single source, or combination of sources shall pass the boundary of the property, described in Section H of this Schedule B, such that the Air Quality Director determines that air pollution has occurred.

### F. ENGINEERING UNITS

The engineering units specified in this Permit are in accordance with the Metric System of measure. Approximate equivalent values for the British System can be calculated using the following conversion factors.

 $mg/m^3 \times 0.000437$  = gr/cf  $m^3/min \times 35.3$  = cf/min  $kg/m^3 \times 0.0624$  = lbs/cf  $kg/L \times 10.0$  = lbs/gal $mg/m^3 \times 24.0/M$  = ppm (by volume)

#### where

| $m^3$ | = | cubic metre | min | = | minute            |
|-------|---|-------------|-----|---|-------------------|
| mg    | = | milligram   | cf  | = | cubic feet        |
| S     | = | second      | lb  | = | pound             |
| kg    | = | kilogram    | gal | = | gallon            |
| L     | = | litre       | M   | = | molecular weight  |
| gr    | = | grain       | ppm | = | parts per million |

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### GREATER VANCOUVER REGIONAL DISALICT

### SCHEDULE B - PAGE 3 to PERMIT GVA0063

#### G. STANDARD CONDITIONS AND DEFINITIONS

Except where otherwise indicated, the following standard conditions and definitions apply to this Permit.

- 1. The Restrictions in the attached Schedules are maximum limits.
- 2. Gaseous volumes are corrected to dry conditions of 20° Celsius & 760mm Hg.
- 3. Particulate matter from combustion sources is corrected to 12% Carbon Dioxide.
- 4. Opacity is measured at the point of maximum density, nearest the discharge point.
- 5. Opacity measurements exclude the effect of condensed, uncombined water droplets.
- 6. Definitions in the Waste Management Act and GVRD Air Quality Management Bylaw No. 725 apply to terminology used in this Permit.
- 7. Threshold Limit Values (TLV) refer to the Time Weighted Average (TWA) exposure limits for substances specified in the American Conference of Governmental Industrial Hygienists Threshold Limit Values handbook for the years 1991 1992.
- 8. Any production, storage, transportation, handling, treatment, processing or ownership of a special waste must comply with the requirements of the Waste Management Act, Special Waste Regulation.

#### H. DESCRIPTION OF DISCHARGE SITE

The land from which the air contaminants are discharged is described as "Municipality of Coquitlam Parcel Identifier: 011-131-713 LOT "D" EXCEPT: FIRSTLY: Part subdivided by Plan 24152, SECONDLY: Part subdivided by Plan 42455 AND THIRDLY: Parcel "ONE" (Reference Plan 49372); District Lot 16 Group 1 New Westminster District Plan 4724".

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# SCHEDULE C - PAGE 1 to PERMIT GVA0063

This Schedule describes emission monitoring, sampling and reporting requirements.

The Permittee shall conduct the following monitoring and sampling program on the discharges and submit the results to the Air Quality Director. The need for increased or decreased monitoring may be reviewed periodically by the Air Quality Director.

| EMISSION<br>NUMBER | DUE DATE(S)                            | REQUIREMENT(S)   |
|--------------------|--|--|
| General            | March 31, 1993 and annually thereafter | Written report detailing the types and amounts of principal products produced and principal raw materials used in the preceding calendar year.                                       |
| 20                 | March 31, 1993 and annually thereafter | Written report detailing the types and amounts of fuel burned in the preceding calendar year.  |
| General            | March 31, 1993 and annually thereafter | Written report detailing the types, amounts and end use of organic solvents, organic solvent-containing materials and wood preserving chemicals used in the preceding calendar year. |
| 17 & 22            | March 31, 1992 and annually thereafter | Written report detailing the organic storage tank capacity, the material stored and the annual throughput for each tank for the preceding calendar year.                             |

Emission testing and ambient air sampling and monitoring, shall be undertaken by the Permittee when required by the Air Quality Director.

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SCHEDULE C - PAGE 1

### GRILLER VANCOUVER REGIONAL DISLICT

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## SCHEDULE D - PAGE 1 to PERMIT GVA0063

This Schedule describes the emission sources and discharge points located approximately as shown on Schedule A.

| EMISSION<br>NUMBER | EMISSION SOURCE  | DISCHARGE POINT                  |
|--------------------|--|----------------------------------|
| 01                 | ACA mix tank, storage tank and ammonia tank                                      | Tank vent                        |
| 10                 | Three centrifugal vacuum pumps associated with No. 1, 2 & 3 retorts              | Seal water tanks and baffle tank |
| 12                 | No. 5 retort cylinder  | Two cylinder doors               |
| 13                 | No. 4 retort cylinder  | Cylinder door                    |
| 14                 | No. 3 retort cylinder  | Cylinder door                    |
| 15                 | No. 2 retort cylinder  | Cylinder door                    |
| 16                 | No. 1 retort cylinder  | Cylinder door                    |
| 17                 | Nine storage tanks containing creosote, creosote-petroleum and pentachlorophenol | Tank vents                       |
| 18                 | Centrifugal vacuum pump associated with the No. 5 retort and rueping tank        | Separator                        |
| 19                 | Centrifugal vacuum pump associated with the No. 4 retort.                        | Tank vent                        |
| 20                 | Process boiler   | Stack                            |
| 21                 | Bulk creosote transfer station   | Rail car and gauge tank vents    |
| 22                 | Fuel oil storage tank  | Tank vent                        |

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SCHEDULE D - PAGE 1

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# SCHEDULE E - PAGE 1 to PERMIT GVA0063

The authorized rates of discharge for the emission sources described in Schedule D are:

| EMISSION<br>NUMBER        |                | XIMUM AUT<br>FE OF DISCH |                     | NOTES & ADDITIONAL REQUIREMENTS   |
|---------------------------|----------------|--------------------------|---------------------|---|
|                           | FLOW<br>m³/min | DURATION<br>hours/day    | FREQUENCY days/week |   |
| 01, 17 &<br>22            | See notes      | 24                       | 7                   | The authorized maximum rate of discharge is that resulting from vapour venting during tank filling and breathing.           |
| 10                        | 33             | 20                       | 7                   |   |
| 12, 13,<br>14, 15 &<br>16 | See notes      | 24                       | 7                   | The authorized rate of discharge is that resulting from the opening of the retort and the venting of the treated materials. |
| 18                        | 11             | 1.5                      | 7                   |   |
| 19                        | 11             | 20                       | 7                   |   |
| 20                        | 75             | 24                       | 7                   |   |
| 21                        | See notes      | 10                       | 1                   | The authorized maximum rate of discharge is that resulting from vapour venting during tank filling and breathing.           |

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SCHEDULE E - PAGE 1

### GRALLER VANCOUVER REGIONAL DISTLICT

# SCHEDULE F - PAGE 1 to PERMIT GVA0063

This Schedule describes the authorized maximum discharge criteria for emission sources which are located approximately as shown on Schedule D.

| EMISSION<br>NUMBER     | PARAMETER              | RESTRICTION           | NOTES   |
|------------------------|------------------------|-----------------------|---|
| 01,10,12-19<br>21 & 22 | Odour                  | See notes             | None from any single source, or<br>combination of sources, past the<br>plant boundary such that the Air<br>Quality Director determines that air<br>pollution has occurred |
| 20                     | Combustion<br>Products | See notes             | Typical products of natural gas combustion at a maximum firing rate of 14.7 MM Btu/hr.  |
| 20                     | Sulphur Oxides         | 800 mg/m <sup>3</sup> | Expressed as SO <sub>2</sub> . Restriction applies only during standby firing with No. 2 fuel oil.  |
| 20                     | Particulate matter     | 150 mg/m <sup>3</sup> | Restriction applies only during standby firing with No. 2 fuel oil.   |
| 20                     | Opacity                | 10%                   | May be exceeded for a total of 3 min/hour. Restriction applies only during standby firing with No. 2 fuel oil.  |

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SCHEDULE F - PAGE 1

### SCHEDULE G - PAGE 1 to PERMIT GVA0063

The authorized works and procedures to control the discharge of air contaminants from the emission sources described in Schedule D are indicated below. The Air Quality Director may require that further works be installed, if the existing works, in his opinion, do not provide an acceptable level of emission control. New works or alterations to existing works must be approved, in principle, by the Air Quality Director.

Where the Air Quality Director has specified that additional works are required, the maximum discharge criteria described in Schedule F of this Permit are applicable as specified by the Completion Date(s) listed below. Prior to the specified date(s) the existing control works and procedures must be maintained in good operating condition and operated in a manner to minimize emissions.

| EMISSION<br>NUMBER | COMPLETION DATE | DESCRIPTION OF WORKS/PROCEDURES  |
|--------------------|-----------------|--|
| 01, 17, 21 & 22    | Completed       | Good operating practices.  |
| 10 & 18            | Completed       | The existing condensers and related appurtenances together with good operating practices.  |
| 12                 | Completed       | The use of pentachlorophenol or CCA in the No. 5 retort together with good operating practices.  |
| 13                 | Completed       | The use of ammoniacal copper arsenate (ACA) or chromated copper arsenate (CCA) in the No. 4 retort together with good operating practices. |
| 14                 | Completed       | The use of pentachlorophenol or creosote in the No. 3 retort together with good operating practices.                                       |
| 15                 | Completed       | The use of a creosote or creosote-petroleum blend in the No. 2 retort together with good operating practices.                              |
| 16                 | Completed       | The use of creosote in the No. 1 retort together with good operating practices.  |

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SCHEDULE G - PAGE 1

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| EMISSION<br>NUMBER | COMPLETION DATE | DESCRIPTION OF WORKS/PROCEDURES   |
|--------------------|-----------------|---|
| 19                 | Completed       | The venting of the vacuum pump discharge into an ACA or CCA recycle tank together with good operating practices.                                  |
| 20                 | Completed       | The firing of the Saskatoon package boiler with natural gas and No. 2 fuel oil standby, using good combustion practices and operating procedures. |

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### GR. ATER VANCOUVER REGIONAL DIS.AICT

### SCHEDULE H - PAGE 1 to PERMIT GVA0063

### RECORD OF PERMIT ISSUANCE

DATE ACTION SECTIONS AFFECTED

November 30, 1992 Issuance Face, Schedules A, B, C, D, E, F, G & H

March 15, 1993 Amended Face, Schedules A, B, C, D, E, F, G & H

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SCHEDULE H - PAGE 1