



**AMENDMENT**  
to

**Permit No. GVA0277**

Issued under the provisions of  
GVRD Air Quality Management Bylaw No. 937, 1999

to

**Safety Kleen Ltd.**  
7842 and 7783 Progress Way  
Delta, B.C.

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Effective November 25, 2002 Permit No. GVA0277 is amended as follows:

**Face Page**

The company name is changed from Safety Kleen Ltd. to Clean Harbors Canada, Inc.

All other terms and conditions of Permit No. GVA0277 remain unchanged.



Greater Vancouver Regional District  
4330 Kingsway, Burnaby, British Columbia, Canada V5H 4G8

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

Air Quality Department - Tel (604) 436-6700 Fax (604) 436-6707  
Located at: 4720 Kingsway, Burnaby, B.C.

# PERMIT

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

SAFETY KLEEN LTD.

IS AUTHORIZED TO DISCHARGE AIR CONTAMINANTS

FROM A SPECIAL WASTE TREATMENT FACILITY

LOCATED AT 7842 AND 7783 PROGRESS WAY, DELTA, B.C. V4G 1A4

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 October 16, 1998.



ASSISTANT AIR QUALITY DIRECTOR

PERMIT NUMBER GVA0277

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Schedule A ..... Site Plan

Schedule B.....General Requirements

Schedule C..... Emission Monitoring, Sampling and Reporting Requirements

Schedule D ..... Emission Sources and Discharge Points

Schedule E..... Authorized Rates of Discharge

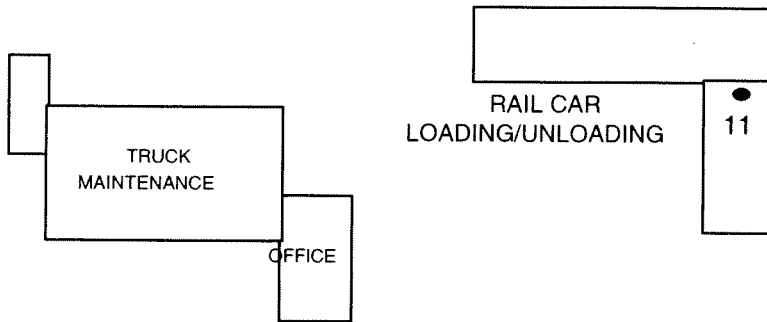
Schedule F ..... Authorized Discharge Criteria

Schedule G ..... Authorized Works and Procedures

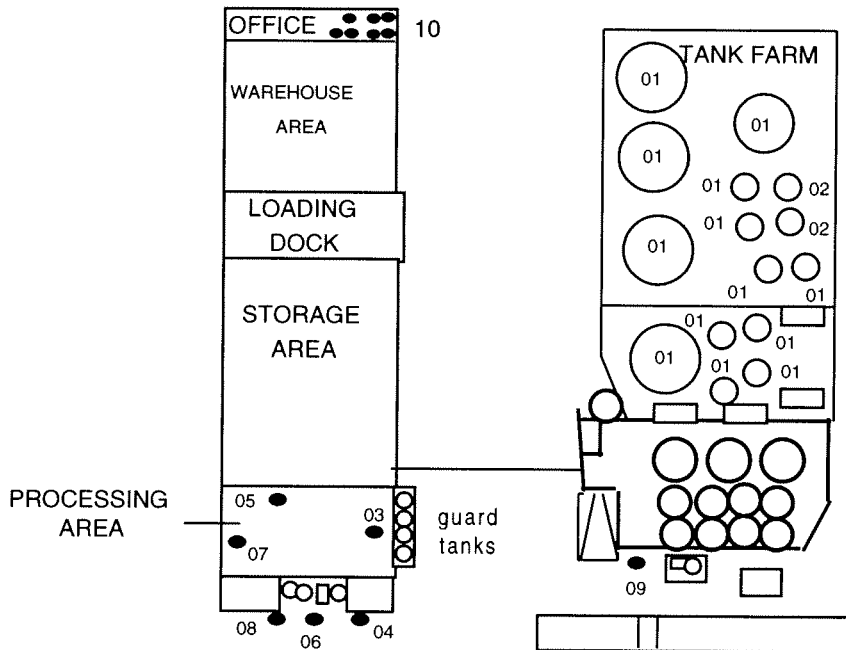
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SITE PLAN



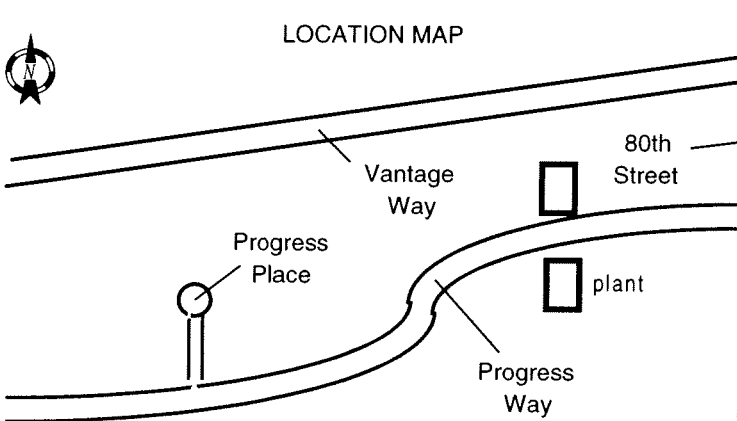
PROGRESS WAY



THE NUMBERED LOCATIONS OF THE DISCHARGE POINTS ARE APPROXIMATE

N.T.S.

LOCATION MAP



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Schedule A to Permit No. GVA0277

SCHEDULE B - PAGE 1  
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**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 extraordinary condition may prevent the continuous utilization of the above authorized works and procedures, or may result in a temporary 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 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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**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 I of this Schedule B, such that the Air Quality Director determines that air pollution has occurred.

**F. INTERNAL COMBUSTION ENGINES**

Air contaminants discharged from any natural gas, propane, gasoline, diesel, or other fossil fuel fired internal combustion engines operated at the discharge site may not be specifically authorized in this Permit. These works shall be maintained and operated in a manner prescribed by the manufacturer to ensure good combustion of the fuel and to minimize emissions such that the requirements of Section E of this Schedule B are not exceeded. The Air Quality Director may at his discretion stipulate further limits for emission of contaminants from these sources in the Permit at a future date under provisions of the Bylaw.

**G. 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 <sup>3</sup> x 0.000437	=	gr/cf
m <sup>3</sup> /min x 35.3	=	cf/min
kg/m <sup>3</sup> x 0.0624	=	lbs/cf
kg/L x 10.0	=	lbs/gal
mg/m <sup>3</sup> x 24.0/M	=	ppm (by volume)
GJ/h x 0.9478	=	MMBTU/h

where

m <sup>3</sup>	=	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
GJ	=	GigaJoule	MMBTU	=	Million British Thermal Unit
			h	=	hour

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**H. 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 year 1996.
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.

**I. DESCRIPTION OF DISCHARGE SITE**

The land from which the air contaminants are discharged is described as "Municipality of Delta Parcel Identifier: 005-727-260 Lot 163 District Lot 120 Group 2 New Westminster District Plan 58995" and "Municipality of Delta Parcel Identifier: 012-387-487 Lot 2 District Lot 120 Group 2 New Westminster District Plan 79909".

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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 NUMBER	DUE DATE(S)	REQUIREMENT(S)
General	March 31, 1997 and annually thereafter	Written report detailing the type and amount of special wastes processed during the preceding calendar year.
01, 02 & 09	March 31, 1997 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.
08	March 31, 1997 and annually thereafter	Written report indicating inspection frequency, bag condition and action taken or proposed to solve any problems detected for the baghouses described in Schedule G of this Permit 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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This Schedule describes the emission sources and discharge points located approximately as shown on Schedule A.

EMISSION NUMBER	EMISSION SOURCE	DISCHARGE POINT
01	Waste oil, oily water, virgin naptha and waste antifreeze storage tanks	Thirteen vents
02	Two virgin solvent or waste solvent storage tanks	Two vents
03	Fuels blending tank	Vent
04	Inorganic Neutralization Reactor	Scrubber exhaust
05	Lab Pack Bulking Stations	Vent
06	Metal Shredder	Vent
07	Paint Bulking Stations	Vent
08	Vermiculate System	Baghouse exhaust
09	Eleven bulk organic waste storage tanks and four fuel blend guard tanks	Activated carbon column vent
10	Laboratory ventilation	Seven vents
11	Rail car loading/unloading facility	Activated carbon column vent

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

EMISSION NUMBER	MAXIMUM AUTHORIZED RATE OF DISCHARGE			NOTES & ADDITIONAL REQUIREMENTS
	FLOW m <sup>3</sup> /min	DURATION hours/day	FREQUENCY days/week	
01	See notes	24	7	The authorized maximum rate of discharge is that resulting from vapour venting during tank filling, breathing, and blending.
02	See notes	24	7	The authorized maximum rate of discharge is that resulting from vapour venting during tank filling and breathing.
03	65	24	7	
04	57	24	7	
05	29	24	7	
06	29	24	7	
07	47	24	7	
08	29	24	7	
09	See notes	24	7	The authorized maximum rate of discharge is that resulting from vapour venting during tank filling and breathing.
10	83	24	7	
11	See notes	24	7	The authorized maximum rate of discharge is that resulting from vapour venting during truck tank or railcar filling.

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This Schedule describes the authorized maximum discharge criteria for emission sources which are described in Schedule D.

EMISSION NUMBER	PARAMETER	RESTRICTION	NOTES
01, 02, 03, 04, 05, 06, 07, 09, 10 & 11	Chemical Contaminants	See notes	The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants is less than 10.
01, 02, 03, 04, 05, 06, 07, 09, 10 & 11	Odour	See notes	None from any single source, or combination of sources, past the plant boundary such that the Air Quality Director determines that air pollution has occurred.
03, 05, 06, 07, 09 & 11	Total Hydrocarbons	102 mg/m <sup>3</sup>	Expressed as methane (CH <sub>4</sub> ).
04	Hydrogen Chloride	75 mg/m <sup>3</sup>	
04	Hydrogen Fluoride	26 mg/m <sup>3</sup>	
04	Sulphuric Acid	10 mg/m <sup>3</sup>	
08	Particulate matter	50 mg/m <sup>3</sup>	

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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 NUMBER	COMPLETION DATE	DESCRIPTION OF WORKS/PROCEDURES
01, 02, 03, 05, 06, 07 & 10	Completed	Good operating practices.
04	Completed	Packed bed alkaline scrubber and related appurtenances together with good operating practices.
08	Completed	Cyclone, baghouse and related appurtenances together with good operating practices.
09 & 11	Completed	Activated carbon column and related appurtenances together with good operating practices. Activated carbon to be replaced prior to contaminant breakthrough or at annual intervals, whichever occurs first.

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RECORD OF PERMIT ISSUANCE

DATE	ACTION	SECTIONS AFFECTED
November 30, 1992	Issuance	Face, Schedules A, B, C, D, E, F, G & H
July 15, 1994	Amended	Face, Schedules A, B, C, D, E, F, G & H
December 20, 1996	Amended	Face, Schedules A, B, C, D, E, F, G & H
October 16, 1998	Amended	Face, Schedule H

October 16, 1998

  
ASSISTANT AIR QUALITY DIRECTOR