



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

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

OTTER FARM AND HOME CO-OPERATIVE  
IS AUTHORIZED TO DISCHARGE AIR CONTAMINANTS  
FROM AN ANIMAL FEED MANUFACTURING PLANT  
LOCATED AT 3548 - 248TH STREET, ALDERGROVE, B.C., V0X 1A0

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 July 18, 1997

  
ASSISTANT AIR QUALITY DIRECTOR

PERMIT NUMBER GVA0435

**INDEX OF SCHEDULES**

Schedule A ..... Site Plan

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

Schedule E..... Authorized Rates of Discharge

Schedule F ..... Authorized Discharge Criteria

Schedule G ..... Authorized Works and Procedures

Schedule H ..... Record of Permit Issuance Dates

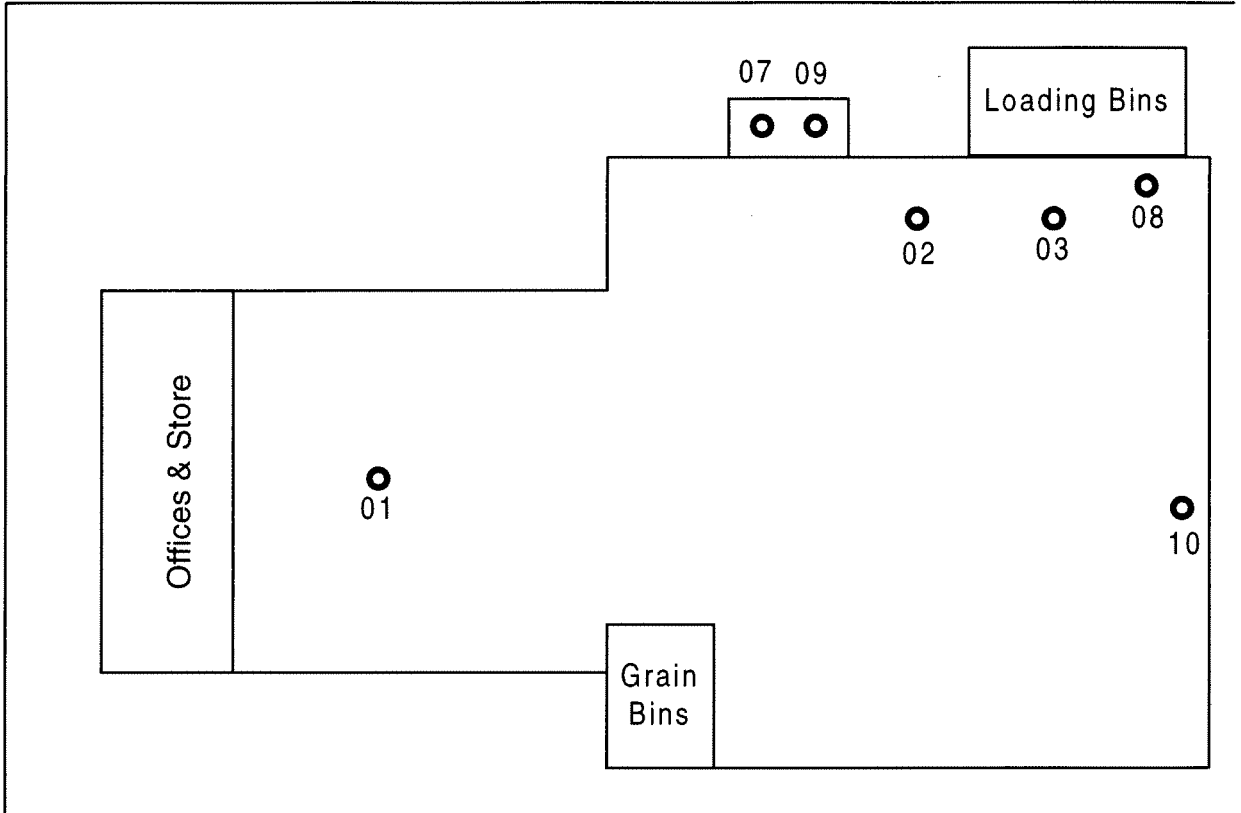
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SITE PLAN



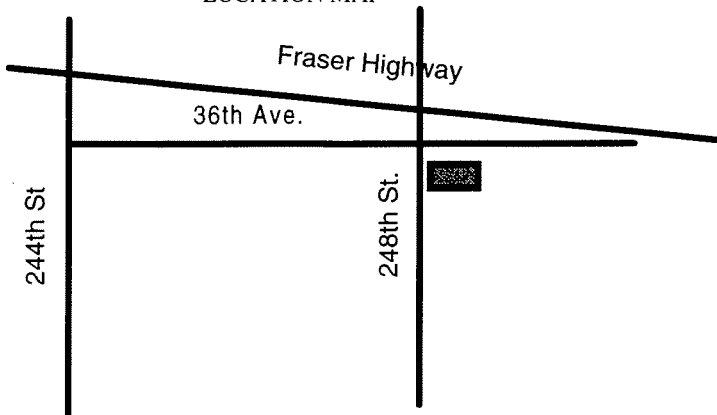
248th STREET

36th AVENUE



THE NUMBERED LOCATIONS OF THE DISCHARGE POINTS ARE APPROXIMATE N.T.S.

LOCATION MAP



July 18, 1997

*Robert S. Smid*  
ASSISTANT AIR QUALITY DIRECTOR

Schedule A to Permit No. GVA0435

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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 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 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.

$\text{mg/m}^3 \times 0.000437$	=	gr/cf
$\text{m}^3/\text{min} \times 35.3$	=	cf/min
$\text{kg/m}^3 \times 0.0624$	=	lbs/cf
$\text{kg/L} \times 10.0$	=	lbs/gal
$\text{mg/m}^3 \times 24.0/\text{M}$	=	ppm (by volume)
$\text{GJ/h} \times 0.9478$	=	MMBTU/h

where

$\text{m}^3$	=	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
GJ	=	GigaJoule	MMBTU	=	Million British Thermal Unit
			h	=	hour

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**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 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.

**H. DESCRIPTION OF DISCHARGE SITE**

The land from which the air contaminants are discharged is described as:

"Municipality of Langley,  
Parcel Identifier: 009-275-461, Lot "B", Section 26, Township 10, New Westminster District, Plan 22504, and Parcel Identifier: 009-275-398, Lot "A" except: the East 150 Feet, Section 26, Township 10, New Westminster District, Plan 22504 and  
Parcel Identifier: 009-275-444, the East 150 Feet of Lot "A" Quarter Section 26, Township 10 New Westminster District, Plan 22504."

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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, 1998 and annually thereafter	Written report detailing the types and amounts of principal products produced and principal raw materials used in the preceding calendar year.
07 & 09	March 31, 1998 and annually thereafter	Written report detailing the types and amounts of fuel burned in the preceding calendar year.
03, 08	March 31, 1998 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.
01, 02, 03, 08 & 10	March 31, 1998	Written report detailing the total number of hours and days operated during the preceding calendar year. Records are to be maintained in a written bound log or other format approved by the Air Quality Director, and made available for inspection, by Air Quality staff for a minimum period of three years.

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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The authorized emission sources and discharge points located approximately as shown on Schedule A are:

EMISSION NUMBER	EMISSION SOURCE	DISCHARGE POINT
01	Grain cleaner/roller mill	Cyclone exhaust
02	Pellet mill	Cyclone exhaust
03	Grain grinder	Baghouse vent
07	Natural gas fired boiler	Stack
08	Limestone silos	Baghouse vent
09	Natural gas fired boiler	Stack
10	Grain cooler/dryer	Cyclone exhaust

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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	57	18	6	
02	228	18	6	
03	100	18	6	
07	19	18	See notes	This emission source shall be for stand-by use only.
08	24	2.5	3	390
09	36	18	6	
10	400	18	6	

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The authorized maximum discharge criteria for emission sources described in Schedule D are:

EMISSION NUMBER	PARAMETER	RESTRICTION	NOTES
01, 02 & 10	Particulate matter	120 mg/m <sup>3</sup>	
	Opacity	10%	
02 & 10	Odour	See notes	None past the plant boundary such that the Air Quality Director determines that air pollution has occurred.
03 & 08	Particulate matter	50 mg/m <sup>3</sup>	
07	Combustion Products	See notes	Typical products of natural gas combustion at a maximum firing rate of 3.5 GJ/h.
09	Combustion Products	See notes	Typical products of natural gas combustion at a maximum firing rate of 6.6 GJ/h.

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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	Completed	Cyclone and related appurtenances, together with good operating practices.
02	Completed	Cyclone and related appurtenances, together with good operating practices.
03	Completed	Baghouse and related appurtenances, together with good operating practices.
07	Completed	The firing of the steam boiler with natural gas, using good combustion practices and operating procedures.
08	Completed	The existing baghouse and related appurtenances, together with good operating practices.
09	Completed	The firing of the steam boiler with natural gas using good combustion practices and operating procedures.
10	Completed	Cyclone and related appurtenances, together with good operating practices.

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RECORD OF PERMIT ISSUANCE

DATE	ACTION	SECTIONS AFFECTED
November 16, 1992	Issuance	Face, Schedules A, B, C, D, E, F G & H
September 15, 1995	Amended	Face, Schedules A, B, C, D, E, F G & H
July 18, 1997	Amended	Face, Schedules A, B, C, D, E, F, G & H

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