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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

MVRD AIR QUALITY MANAGEMENT FEES REGULATION BYLAW NO. 1330, 2021

UNOFFICIAL CONSOLIDATION

This is a consolidation for reference purposes only

- MVRD Air Quality Management Fees Regulation Bylaw No. 1330, 2021
  (Adopted October 29, 2021)
- MVRD Air Quality Management Fees Regulation Amendment Bylaw No. 1373, 2023
  (Adopted November 24, 2023)

As of November 24, 2024

ORIGINAL BYLAWS CAN BE INSPECTED
AT THE BOARD AND INFORMATION SERVICES DEPARTMENT
AT THE METRO VANCOUVER HEAD OFFICE

METRO VANCOUVER REGIONAL DISTRICT
BYLAW NO. 1330, 2021
A Bylaw to Regulate Air Quality Management Fees

WHEREAS:

A. Metro Vancouver Regional District has enacted the "*Greater Vancouver Regional District Air Quality Management Bylaw No. 1082, 2008*"; and

B. That Bylaw contemplates the establishment and payment of fees.

NOW THEREFORE the Board of the Metro Vancouver Regional District enacts as follows:

Citation

1. The official citation of this bylaw is *"Metro Vancouver Regional District Air Quality Management Fees Regulation Bylaw No. 1330, 2021".* This bylaw may be cited as "Metro Vancouver Regional District Air Quality Management Fees Regulation Bylaw" (in this Bylaw, "this Regulation").

Schedules

2. The following Schedules are attached to and form part of this Regulation:

Schedule "A-1", Calculation of Air Contaminant Emission Fees until December 31, 2021;
Schedule "A-2", Calculation of Air Contaminant Emission Fees from January 1, 2022 to December 31, 2022;
Schedule "A-3", Calculation of Air Contaminant Emission Fees from January 1, 2023 to December 31, 2023;
Schedule "A-4", Calculation of Air Contaminant Emission Fees from January 1, 2024 to December 31, 2024;
Schedule "A-5", Calculation of Air Contaminant Emission Fees from January 1, 2025 to December 31, 2025;
Schedule "A-6", Calculation of Air Contaminant Emission Fees from January 1, 2026 to December 31, 2026;
Schedule "A-7", Calculation of Air Contaminant Emission Fees from January 1, 2027 to December 31, 2027;
Schedule "A-8", Calculation of Air Contaminant Emission Fees for January 1, 2028 and later; and
Schedule "B", Calculation of Odorous Air Contaminant Emission Fees.

General

3. This Regulation is deemed to be an integral part of the Greater Vancouver Regional District Air Quality Management Bylaw No. 1082, 2008 ("the Bylaw").

4. Terms defined in the Bylaw, or incorporated by reference into the Bylaw, have the same meaning in this Regulation.

Definitions

5. In this Regulation:

"**administrative amendment**" means an amendment to a permit or approval for any of the following purposes:

(a) a change of ownership or name; or

(b) a change of legal address or mailing address;

"authorized discharge" means:

(a) the quantity of an air contaminant that is authorized by permit, approval, or emission regulation; or

(b) if the quantity of an air contaminant in the discharge is not specified in a permit, approval, or emission regulation, the quantity of the air contaminant that is:

i. determined from discharge factors applied in accordance with procedures approved by the district director; or

ii. measured, in accordance with procedures approved by the district director;

"**billion cubic metre odour units**" means the volume of an odorous air contaminant discharge such that the product of the odour concentration, in odour units, and the volume of the discharge, in cubic metres, is equivalent to a volume of one billion cubic metres of gas with an odorous substance concentration of one odour unit;

"**coarse particulate matter**" particulate matter with an aerodynamic diameter greater than 2.5 micrometres;

"coarse particulate matter containing soy dust" means coarse particulate matter containing soy;

"**diesel particulate matter**" means particulate matter that is emitted from the combustion of diesel fuel or an alternative diesel fuel;

"**farm business**" has the same meaning as in section 1 of the *Farm Practices Protection (Right to Farm) Act*;

"**farm operation**" has the same meaning as in section 1 of the *Farm Practices Protection (Right to*
Farm) Act;

"fine particulate matter" means particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometres;

Replaced by Bylaw 1373, 2023

"**global warming potential**" means the 100-year global warming potential of a greenhouse gas, as listed in the most recent Working Group 1 Contribution (The Physical Science Basis) to the most recent Assessment Report of the Intergovernmental Panel on Climate Change, all as corrected from time to time;

"**greenhouse gases**" means gases that have a global warming potential, and includes carbon dioxide, methane, and other greenhouse gases;

"**hazardous air pollutants**" means air contaminants that:

(a) meet the definition of toxic under the *Canadian Environmental Protection Act, 1999* (Canada) and listed in Schedule 1 of that Act (List of Toxic Substances) as amended from time to time, but not including greenhouse gases, ozone, respirable particulate matter less than or equal to 10 microns and air contaminants that are precursors to particulate matter formation (nitrogen oxides, sulphur dioxide, volatile organic compounds and ammonia); or

(b) are included in the United States *Clean Air Act*, United States Code Title 42, c. 85 § 7412(b) (1) (List of Hazardous Air Pollutants), as amended from time to time; or [2011]

(c) as determined by the district director;

"**metals**" means metals that are not hazardous air pollutants, including aluminum, antimony, barium, boron, copper, iron, manganese, molybdenum, nickel, silver, tin, and zinc;

"**minor amendment**" means an amendment to a permit or approval for any of the following purposes:

(a) a decrease in the authorized quantity of the discharge;

(b) an increase in the authorized quantity of the discharge that does not exceed 10% of the authorized quantity;

(c) a change in the authorized quality of the discharge such that, in the opinion of the district director, the change has or will have less impact on the environment;

(d) a change in a monitoring program; or

(e) a change to the works, method of treatment or any other condition of a permit or approval such that, in the opinion of the district director, the change has or will have less impact on the environment;

Replaced by Bylaw 1373, 2023

"**non-photoreactive volatile organic compounds**" means any volatile organic compounds:

(a) listed as exclusions under "Volatile organic compounds that participate in atmospheric photochemical reactions" in Schedule 1 (List of Toxic Substances) of the *Canadian Environmental Protection Act, 1999*, S.C. 1999, c. 33, as amended from time to time, except methane; or

(b) as determined by the district director;

"odorous air contaminants" means substances that individually or collectively are air contaminants due to their odorous properties;

"odorous air contaminant sensitive receptor location" means a residential location, public space or commercial business location such as restaurants and retail operations where owners, operators, or occupants may suffer the impairment of enjoyment of private or public space or business loss due to the presence of odorous air contaminants;

"odour detection threshold" means the concentration at which an odour panel in accordance with European Standard EN 13725:2003 ("Air quality – determination of odour concentration by dynamic olfactometry"), as amended from time to time, or by a method approved by the district director, can just detect the presence of a substance;

"odour unit" means an amount of odorous air contaminants as determined in accordance with European Standard EN 13725:2003 ("Air quality – determination of odour concentration by dynamic olfactometry"), as amended from time to time, or as otherwise approved by the district director;

"**other greenhouse gases**" means greenhouse gases including nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride, but does not include carbon dioxide and methane;

"photoreactive volatile organic compounds" means any organic compounds:

(a) not defined in this Regulation as either hazardous air pollutants or non-photoreactive volatile organic compounds; or
(b) as determined by the district director;

"significant amendment" means an amendment to a permit or approval which is not an administrative amendment or a minor amendment; and

"total reduced sulphur (TRS)" means total reduced sulphur compounds, including but not limited to hydrogen sulphide, methyl mercaptan, dimethyl sulphide, and dimethyl disulphide.

Payment of Fees

6. Every person who applies for a permit or an approval, or any amendment of a permit or approval, must pay the application fees set out in this Regulation.

7. Every person who discharges air contaminants under an emission regulation, a permit, or an approval must pay the applicable annual or duration fees set out in this Regulation.

8. Emission fees are payable under this Regulation for emission fees related to the discharge of a greenhouse gas, unless the provincial carbon tax applies to the discharge of that greenhouse gas.

Calculation of Air Contaminant Emission Fees

9. **"Air contaminant emission fees"** (Z) are the emission fees calculated as per Schedules A-1 to A-8 [*Calculation of Air Contaminant Emission Fees*] and Schedule B [*Calculation of Odorous Air Contaminant Fees*] for the applicable year.

10. **"Total emission fees**" are calculated as the sum of all air contaminant emission fees applicable for:

(a) annual emissions authorized by a permit or emission regulation; or
(b) the duration of the approval.

Permit and Approval Application Fees

11. The application fee payable to the District for an application:

(a) for a new permit or new approval is $1,000 plus twice the total emission fees payable for the emissions specified in the application; and

(b) for an expiring permit or expiring approval is $1,000 plus the total emission fees payable for the emissions specified in the application.

12. Despite section 11, the application fee payable to the District for an application:

(a) for an open air burning approval associated with a farm operation and conducted on a farm as part of a farm business is $100; and

(b) for all other open air burning approvals is $1,000.

Permit and Approval Amendment Application Fees

13. The application fee payable to the District for an application:

(a) for an administrative amendment is $240;

(b) for a minor amendment is $500 plus twice the increase, if any, in the total emission fees payable for the emissions specified in the application; and

(c) for a significant amendment is $1,000 plus twice the increase in the total emission fees payable for the emissions specified in the application.

Application Fee Payment

14. An application fee must be paid at the time the application is submitted and is not refundable by reason only that the permit, approval, or amendment application is refused.

Annual Fees

15. A holder of a permit must pay annually the total emission fees plus $200 within 30 days of receipt of an invoice.

Approval Duration Fees

16. A holder of an approval, other than an open air burning approval, must pay the total emission fees for the period authorized by the approval plus $200 within 30 days of receipt of an invoice.

Cancellations and Amendments

17. If a permit or approval is cancelled at the request of the holder of the permit or approval, the holder is required to pay to the District any prorated amount as determined by the District. The District will issue an invoice for any prorated amount due or will refund the amount of any overpayment of the applicable fees. Refunds for less than $100 will not be issued.

18. If a permit or approval is amended, the District will:

(a) issue an invoice for any prorated amount due;

(b) credit the amount of any overpayment against any fees payable in the subsequent year; or

(c) if no fees are payable in the subsequent year, will refund any overpayment to the holder of the permit or approval.

19. If a permit or approval is amended, the permit or approval holder will pay any amount owing to the District within 30 days of receipt of an invoice issued under section 18(a).

Repeal of Bylaw

20. "*Greater Vancouver Regional District Air Quality Management Fees Regulation Bylaw No. 1083, 2008*" as amended, is hereby repealed.

Severability

21. If any portion of this Regulation is deemed *ultra vires*, illegal, invalid, or unenforceable in any way in whole or in part by any court of competent jurisdiction, such decision will not be deemed to invalidate or void the remainder of the Bylaw. The parts so held to be *ultra vires*, illegal, invalid, or unenforceable must be deemed not to have been part of this Regulation from its adoption. The remainder of the Regulation will have the same force and effect as if the parts that have been deemed *ultra vires*, illegal, invalid, or unenforceable had not been included in this Regulation when it was adopted.

Schedule A-1: Calculation of Air Contaminant Emission Fees until December 31, 2021

1. **Air contaminant emission fees** (Z) until December 31, 2021 for air contaminants listed in Table 1 are calculated as follows:

$$Z = A \times B$$

where,

A is the authorized discharge in tonnes of an air contaminant listed in column 1 of Table 1, and
B is the corresponding emission fee rate for that air contaminant listed in column 2 of Table 1.

Table 1 – Air Contaminant Emission Fee Rates for Authorized Discharges in 2021

Column 1 (A) **Air Contaminant**	Column 2 (B) **Emission fee rate ($/tonne)**
Particulate Matter (filterable and condensable from solely combustion sources)	$300
Particulate Matter (filterable and condensable from solely non-combustion sources)	$30
Fine Particulate Matter (filterable and condensable from combined combustion and non-combustion sources, not fuelled solely by natural gas and/or propane)	$300
Particulate Matter (all other filterable from combined combustion and non-combustion sources, not fuelled solely by natural gas and/or propane)	$30
Nitrogen Oxides (NOx)	$50
Photoreactive volatile organic compounds	$100
Non-photoreactive volatile organic compounds	$30
Sulphur Oxides (SOx)	$100
Total Reduced Sulphur (TRS)	$150
Hazardous Air Pollutants	$1,000
Other (not otherwise specified)	$30

Schedule A-2: Calculation of Air Contaminant Emission Fees from January 1, 2022 to December 31, 2022

1. Air contaminant emission fees (Z) from January 1, 2022 to December 31, 2022 for air contaminants listed in Table 2 are calculated as follows:

$$Z = A \times B$$

where,

A is the authorized discharge in tonnes of an air contaminant listed in column 1 of Table 2, and
B is the corresponding emission fee rate for that air contaminant listed in column 2 of Table 2.

Table 2 – Air Contaminant Emission Fee Rates for Authorized Discharges in 2022

Column 1 **Air Contaminant (A)**	Column 2 **Emission fee rate ($/tonne) (B)**
Ammonia	$39
Coarse Particulate Matter	$31
Coarse Particulate Matter containing soy dust	$51
Diesel Particulate Matter	$964
Fine Particulate Matter	$514
Hazardous Air Pollutants	$1,143
Metals	$183
Methane	$180
Nitrogen Oxides (NOx)	$64
Non-photoreactive volatile organic compounds	$31
Ozone	$63
Photoreactive volatile organic compounds	$123
Sulphur Oxides (SOx)	$100
Total Reduced Sulphur (TRS)	$367
Other (not otherwise specified)	$31
Other greenhouse gases	Fee per tonne ($) = provincial carbon tax value of carbon dioxide ($ / tonne) multiplied by the global warming potential of the other greenhouse gas, divided by the global warming potential of carbon dioxide

Schedule A-3: Calculation of Air Contaminant Emission Fees from January 1, 2023 to December 31, 2023

1. **Air contaminant emission fees** (Z) from January 1, 2023 to December 31, 2023 for air contaminants listed in Table 3 are calculated as follows:

$$Z = A \times B$$

where,

A is the authorized discharge in tonnes of an air contaminant listed in column 1 of Table 3, and
B is the corresponding emission fee rate for that air contaminant listed in column 2 of Table 3.

Table 3 – Air Contaminant Emission Fee Rates for Authorized Discharges in 2023

Column 1 **Air Contaminant (A)**	Column 2 **Emission fee rate ($/ tonne)(B)**
Ammonia	$47
Coarse Particulate Matter	$33
Coarse Particulate Matter containing soy dust	$73
Diesel Particulate Matter	$1,629
Fine Particulate Matter	$729
Hazardous Air Pollutants	$1,286
Metals	$336
Methane	$341
Nitrogen Oxides (NOx)	$79
Non-photoreactive volatile organic compounds	$33
Ozone	$96
Photoreactive volatile organic compounds	$146
Sulphur Oxides (SOx)	$100
Total Reduced Sulphur (TRS)	$583
Other (not otherwise specified)	$33
Other greenhouse gases	Fee per tonne ($) = provincial carbon tax value of carbon dioxide ($ / tonne) multiplied by the global warming potential of the other greenhouse gas, divided by the global warming potential of carbon dioxide

Schedule A-4: Calculation of Air Contaminant Emission Fees from January 1, 2024 to December 31, 2024

1. **Air contaminant emission fees** (Z) from January 1, 2024 to December 31, 2024 for air contaminants listed in Table 4 are calculated as follows:

$$Z = A \times B$$

where,

A is the authorized discharge in tonnes of an air contaminant listed in column 1 of Table 4, and
B is the corresponding emission fee rate for that air contaminant listed in column 2 of Table 4.

Table 4 – Air Contaminant Emission Fee Rates for Authorized Discharges in 2024

Column 1 **Air Contaminant (A)**	Column 2 **Emission fee rate ($/tonne) (B)**
Ammonia	$56
Coarse Particulate Matter	$34
Coarse Particulate Matter containing soy dust	$94
Diesel Particulate Matter	$2,293
Fine Particulate Matter	$943
Hazardous Air Pollutants	$1,429
Metals	$489
Methane	$497
Nitrogen Oxides (NOx)	$93
Non-photoreactive volatile organic compounds	$34
Ozone	$129
Photoreactive volatile organic compounds	$169
Sulphur Oxides (SOx)	$100
Total Reduced Sulphur (TRS)	$800
Other (not otherwise specified)	$34
Other greenhouse gases	Fee per tonne ($) = provincial carbon tax value of carbon dioxide ($ / tonne) multiplied by the global warming potential of the other greenhouse gas, divided by the global warming potential of carbon dioxide

Schedule A-5: Calculation of Air Contaminant Emission Fees from January 1, 2025 to December 31, 2025

1. **Air contaminant emission fees** (Z) from January 1, 2025 to December 31, 2025 for air contaminants listed in Table 5 are calculated as follows:

$$Z = A \times B$$

where,

A is the authorized discharge in tonnes of an air contaminant listed in column 1 of Table 5, and
B is the corresponding emission fee for that air contaminant listed in column 2 of Table 5.

Table 5 – Air Contaminant Emission Fee Rates for Authorized Discharges in 2025

Column 1 **Air Contaminant (A)**	Column 2 **Emission fee rate ($/tonne) (B)**
Ammonia	$64
Coarse Particulate Matter	$36
Coarse Particulate Matter containing soy dust	$116
Diesel Particulate Matter	$2,957
Fine Particulate Matter	$1,157
Hazardous Air Pollutants	$1,571
Metals	$641
Methane	$653
Nitrogen Oxides (NOx)	$107
Non-photoreactive volatile organic compounds	$36
Ozone	$161
Photoreactive volatile organic compounds	$191
Sulphur Oxides (SOx)	$100
Other (not otherwise specified)	$36
Other greenhouse gases	Fee per tonne ($) = provincial carbon tax value of carbon dioxide ($ / tonne) multiplied by the global warming potential of the other greenhouse gas, divided by the global warming potential of carbon dioxide

Schedule A-6: Calculation of Air Contaminant Emission Fees from January 1, 2026 to December 31, 2026

1. **Air contaminant emission fees** (Z) from January 1, 2026 to December 31, 2026 for air contaminants listed in Table 6 are calculated as follows:

$$Z = A \times B$$

where,

A is the authorized discharge in tonnes of an air contaminant listed in column 1 of Table 6, and
B is the corresponding emission fee rate for that air contaminant listed in column 2 of Table 6.

Table 6 – Air Contaminant Emission Fee Rates for Authorized Discharges in 2026

Column 1 **Air Contaminant (A)**	Column 2 **Emission fee rate ($/tonne) (B)**
Ammonia	$73
Coarse Particulate Matter	$37
Coarse Particulate Matter containing soy dust	$137
Diesel Particulate Matter	$3,621
Fine Particulate Matter	$1,371
Hazardous Air Pollutants	$1,714
Metals	$794
Methane	$809
Nitrogen Oxides (NOx)	$121
Non-photoreactive volatile organic compounds	$37
Ozone	$194
Photoreactive volatile organic compounds	$214
Sulphur Oxides (SOx)	$100
Other (not otherwise specified)	$37
Other greenhouse gases	Fee per tonne ($) = provincial carbon tax value of carbon dioxide ($ / tonne) multiplied by the global warming potential of the other greenhouse gas, divided by the global warming potential of carbon dioxide

Schedule A-7: Calculation of Air Contaminant Emission Fees from January 1, 2027 to December 31, 2027

1. **Air contaminant emission fees** (Z) from January 1, 2027 to December 31, 2027 for air contaminants listed in Table 7 are calculated as follows:

$$Z = A \times B$$

where,

A is the authorized discharge in tonnes of an air contaminant listed in column 1 of Table 7, and
B is the corresponding emission fee rate for that air contaminant listed in column 2 of Table 7.

Table 7 – Air Contaminant Emission Fee Rates for Authorized Discharges in 2027

Column 1 **Air Contaminant (A)**	Column 2 **Emission fee ($/tonne) (B)**
Ammonia	$81
Coarse Particulate Matter	$39
Coarse Particulate Matter containing soy dust	$159
Diesel Particulate Matter	$4,286
Fine Particulate Matter	$1,586
Hazardous Air Pollutants	$1,857
Metals	$947
Methane	$964
Nitrogen Oxides (NOx)	$136
Non-photoreactive volatile organic compounds	$39
Ozone	$227
Photoreactive volatile organic compounds	$237
Sulphur Oxides (SOx)	$100
Other (not otherwise specified)	$39
Other greenhouse gases	Fee per tonne ($) = provincial carbon tax value of carbon dioxide ($ / tonne) multiplied by the global warming potential of the other greenhouse gas, divided by the global warming potential of carbon dioxide

Schedule A-8: Calculation of Air Contaminant Emission Fees for January 1, 2028 and later

1. **Air contaminant emission fees** (Z) for January 1, 2028 and later for air contaminants listed in Table 8 are calculated as follows:

$$Z = A \times B$$

where,

A is the authorized discharge in tonnes of an air contaminant listed in column 1 of Table 8, and
B is the corresponding emission fee rate for that air contaminant listed in column 2 of Table 8.

Table 8 – Air Contaminant Emission Fee Rates for Authorized Discharges in 2028 and later

Column 1 **Air Contaminant (A)**	Column 2 **Emission fee rate ($/tonne) (B)**
Ammonia	$90
Coarse Particulate Matter	$40
Coarse Particulate Matter containing soy dust	$180
Diesel Particulate Matter	$4,950
Fine Particulate Matter	$1,800
Hazardous Air Pollutants	$2,000
Metals	$1,100
Methane	$1,120
Nitrogen Oxides (NOx)	$150
Non-photoreactive volatile organic compounds	$40
Ozone	$260
Photoreactive volatile organic compounds	$260
Sulphur Oxides (SOx)	$100
Other (not otherwise specified)	$40
Other greenhouse gases	Fee per tonne ($) = provincial carbon tax value of carbon dioxide ($ / tonne) multiplied by the global warming potential of the other greenhouse gas, divided by the global warming potential of carbon dioxide

Schedule B: Calculation of Odorous Air Contaminant Emission Fees

1. The emission fee for odorous air contaminants is either a fee for:
   (a) The whole emission discharge of odorous air contaminants, as described in section 2 of this Schedule; or
   (b) The sum of all emission fees for specified odorous air contaminants, as described in section 3 of this Schedule.

Whole emission discharge

2. The emission fee for a whole emission discharge of odorous air contaminants is the concentration of total odorous air contaminants in the emission, as measured through dynamic olfactometry, expressed in odour units, multiplied by the total volume of authorized air contaminant emissions, expressed in cubic metres, and:
   (a) From January 1, 2022 to December 31, 2024:
      (i) Where there is an odour unit emission limit in a permit or approval, the fee is calculated at $50 per billion cubic metre odour unit, as follows:
         Fee ($) = [$50 x (total annual authorized volume in m^3) x (odour unit emission limit)] / billion cubic metre odour units;
      or

      (ii) Where there is no odour unit emission limit in a permit or approval, the fee is calculated at $200 per billion cubic metre odour unit, as follows;
         Fee ($) = [$200 x (total annual authorized volume in m^3) x (odour units measured)] / billion cubic metre odour units;
      and

   (b) From January 1, 2025 and later:
      (i) Where there is an odour unit emission limit in a permit or approval, the fee is calculated at $60 per billion cubic metre odour unit, as follows:
         Fee ($) = [$60 x (total annual authorized volume in m^3) x (odour unit emission limit)] / billion cubic metre odour units;
      or

      (ii) Where there is no odour unit emission limit in a permit or approval, the fee is calculated at $240 per billion cubic metre odour unit, as follows:
         Fee ($) = [$240 x (total annual authorized volume in m^3) x (odour units measured)] / billion cubic metre odour units.

Specified odorous air contaminants

3. The emission fee for specified odorous air contaminants is the sum of the fees for those specified odorous air contaminants, as set out in sections 4 and 5 of this Schedule. The emission fee for a specified odorous air contaminant is based on the odour detection threshold of the specified odorous air contaminant.

4. Where an odorous air contaminant is set out in Column 1 of Table 9:
   (a) From January 1, 2022 to December 31, 2024, the fee for that odorous air contaminant (Z) is either:
      (i) The fee for the permitted level of that odorous air contaminant as set out in a permit or approval, calculated as:

$$Z = A \times B$$

where,

A is the permitted level in kilograms of that air contaminant listed in column 1 of Table 9, and

B is the corresponding fee rate per kilogram of that air contaminant listed in column 2 of Table 9;

or

(ii) The fee for the measured level of that odorous air contaminant, calculated as:

$$Z = C \times D$$

where,

C is the measured level in kilograms of that air contaminant listed in column 1 of Table 9, and

D is the corresponding fee rate per kilogram of that air contaminant listed in column 3 of Table 9;

and

(b) From January 1, 2025 and later, the fee for that odorous air contaminant is either:

(i) The fee for the permitted level of that odorous air contaminant as set out in a permit or approval, calculated as:

$$Z = A \times B$$

where,

A is the permitted level in kilograms of that air contaminant listed in column 1 of Table 9, and

B is the corresponding fee rate per kilogram of that air contaminant listed in column 4 of Table 9;

or

(ii) The fee for the measured level of that odorous air contaminant, calculated as:

$$Z = C \times D$$

where,

C is the measured level in kilograms of that air contaminant listed in column 1 of Table 9, and

D is the corresponding fee rate per kilogram of that air contaminant listed in column 5 of Table 9.

5. Subject to section 6 of this Schedule, where an odorous air contaminant is not set out in Column 1 of Table 9:

(a) From January 1, 2022 to December 31, 2024, the fee for that odorous air contaminant is either:

(i) The fee for the described limit of that odorous air contaminant as set out in a permit or approval, calculated as:

Fee ($) = $50 / billion cubic metres x [permit or approval concentration limit in mg/m^3 / odour detection threshold in mg/m^3] x permitted flow rate (billion m^3/year or authorized period);

or

(ii) For an odorous air contaminant without a described limit in a permit or approval for which monitoring is required, the fee for that odorous air contaminant is calculated as:

Fee ($) = $200 / billion cubic metres x [measured concentration in mg/m^3 / odour detection threshold in mg/m^3] x permitted flow rate (billion m^3/authorized period); and

(b) From January 1, 2025 and later, the fee for that odorous air contaminant is either:

(i) The fee for the described limit of that odorous air contaminant as set out in a permit or approval, calculated as:

Fee ($) = $60 / billion cubic metres x [permit or approval concentration limit in mg/m^3 / odour detection threshold in mg/m^3] x permitted flow rate (billion m^3/year or authorized period);

or

(ii) For an odorous air contaminant without a described limit in a permit or approval for which monitoring is required, the fee for that odorous air contaminant is calculated as:

Fee ($) = $240 / billion cubic metres x [measured concentration in mg/m^3 / odour detection threshold in mg/m^3] x permitted flow rate (billion m^3/authorized period); and

in cases of odorous air contaminants where there is a concentration of an odorous air contaminant below the analytical method detection limit, the fee shall be based on 25% of the analytical method detection limit.

6. The fee rate for an odorous air contaminant not set out in Column 1 of Table 9 is not to exceed $1,000 per kilogram.

Fee Reduction

7. If the permittee or approval holder is able to demonstrate to the satisfaction of the district director that substantial dilution of the emission occurs before contact with an odorous air contaminant sensitive receptor location, the permittee or approval holder may apply for a reduction in odorous air contaminant emission fees based on the following:

(a) Fees may be reduced by 75% if it can be demonstrated through approved dispersion modelling that one odour unit can be achieved at the nearest odorous air contaminant sensitive receptor location 99.5% of the time based on a ten-minute average of authorized maximum (permitted) emissions, or 99.8% of the time based on measured emissions; and

(b) Fees may be reduced by 50% if it can be demonstrated through approved dispersion modelling that three odour units can be achieved at the nearest odorous air contaminant sensitive receptor location 99.5% of the time based on a ten-minute average of authorized maximum (permitted) emissions, or 99.8% of the time for measured emissions.

Table 9 – Fee Rates for Specified Odorous Air Contaminants, with Permitted or Measured Levels

Column 1 **Odorous Air Contaminant**	Column 2 **Fee rate ($/kg), for permitted levels, from January 1, 2022 to December 31, 2024**	Column 3 **Fee rate ($/kg), for measured levels, from January 1, 2022 to December 31, 2024**	Column 4 **Fee rate ($/kg), for permitted levels, from January 1, 2025 and later**	Column 5 **Fee rate ($/kg), for measured levels, from January 1, 2025 and later**
1-nonene	18	72	22	86
1-octene	11	44	13	52
2,3-pentanedione	2.3	9.5	2.8	11.4
2,6-nonadienal	675	1,000	810	1,000
2-chlorophenol	12	51	15	61
2-heptanone (methyl n-amyl ketone)	1.5	6.2	1.8	7.5
2-methyl butanoic acid	6.3	25.3	7.5	30.3
2-methyl-1-propanol (isobutanol)	1.5	6.0	1.8	7.2
2-methylpropionoic acid (isobutyric acid)	9.2	37.0	11.1	44.4
3-methyl butanoic acid (isovaleric acid)	151	606	181	727
3-methylbutanal (isovaleraldehyde)	142	571	171	685
Acetic acid (ethanoic acid)	3.4	13.6	4.0	16.3
Allyl sulphide	49	195	58	234
Butanal	25	100	30	120
Butanoic acid (butyric acid)	73	294	88	352
Butanoic acid, butyl ester (butyl butanoate/butyrate)	1.7	7.1	2.1	8.5
Butyl mercaptan	1,000	1,000	1,000	1,000
Decanal (decaldehyde, capradehyde)	19	76	23	92
Diacetyl	284	1,000	341	1,000
Diallyl disulphide	49	195	58	234
Diethyl disulphide	5.0	20.0	6.0	24.0
Diethyl sulphide	411	1,000	493	1,000
Dimethyl disulphide	5.8	23.5	7.0	28.2
Dimethyl sulphide	6.5	26.3	7.8	31.5
Dimethyl trisulphide	5.7	22.9	6.8	27.5
Ethyl isobutyrate	479	1,000	575	1,000
Ethyl isovalerate	723	1,000	868	1,000
Ethyl mercaptan (ethanethiol)	1,000	1,000	1,000	1,000
Ethyl n-butyrate	263	1,000	316	1,000
Ethyl n-valerate	85	342	103	410
Ethyl propionate	1.7	6.8	2.1	8.2
Hexanal (hexaldehyde)	45	181	54	218

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Hexanoic acid (caproic acid)	17	71	21	85
Hydrogen sulphide	87	350	105	421
Isoamyl mercaptan	1,000	1,000	1,000	1,000
Isobutyl acetate	1.3	5.3	1.6	6.3
Isobutyl acrylate	11	42	13	51
Isobutyl amine	113	454	136	545
Isobutyl isovalerate	1.5	6.0	1.8	7.1
Isobutyl mercaptan	1,000	1,000	1,000	1,000
Isobutyl n-butyrate	5.3	21.2	6.4	25.5
Isohexanoic acid	26	105	32	126
Isooctanol	1.0	4.0	1.2	4.9
Isopentanol	8.2	32.7	9.8	39.2
Isopropyl mercaptan	1,000	1,000	1,000	1,000
Isopropyl n-butyrate	2.2	9.0	2.7	10.8
Isopropyl propionate	2.6	10.3	3.1	12.3
Isopropylbenzene	1.2	4.9	1.5	5.8
Isobutylaldehyde	49	194	58	233
Methacrolein	2.1	8.2	2.5	9.9
Methyl acrylate	4.1	16.2	4.9	19.5
Methyl allyl sulphide	99	397	119	476
Methyl isoamyl ketone	5.1	20.4	6.1	24.5
Methyl isobutyrate	6.3	25.2	7.6	30.2
Methyl isovalerate	4.8	19.1	5.7	23.0
Methyl mercaptan (methanethiol)	364	1,000	437	1,000
Methyl n-butyrate	17	67	20	81
Methyl n-valerate	4.8	19.1	5.7	23.0
Methylamine	1.8	7.4	2.2	8.8
n-Amyl mercaptan	1,000	1,000	1,000	1,000
n-Butyl acrylate	17	69	21	83
n-Butyl n-butyrate	1.8	7.1	2.1	8.5
n-Butylaldehyde	25	101	30	122
n-Butylbenzene	1.1	4.3	1.3	5.2
n-Decanol	10	40	12	48

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n-Decylaldehyde	20	78	23	94
n-Heptanol	2.2	8.7	2.6	10.5
n-Heptylaldehyde	59	238	71	285
n-Hexanol	2.0	8.0	2.4	9.6
n-Hexyl acetate	4.7	18.8	5.7	22.6
n-Hexyl mercaptan	690	1,000	827	1,000
n-Hexylaldehyde	44	174	52	209
n-Nonanol	9.4	37.7	11.3	45.2
n-Nonylaldehyde	25	101	30	121
n-Octylaldehyde	954	1,000	1,000	1,000
Nonanoic acid	3.8	15.3	4.6	18.4
n-propyl isobutyrate	5.3	21.0	6.3	25.2
n-propyl isovalerate	151	606	182	727
n-propyl n-valerate	2.6	10.3	3.1	12.3
Octanal	1,000	1,000	1,000	1,000
p-Diethylbenzene	23	93	28	112
Pentanal (valeraldehyde)	35	142	42	171
Pentanoic acid (valeric acid)	333	1,000	400	1,000
p-Ethyltoluene	1.2	4.9	1.5	5.9
Propanal (propionaldehyde)	20	83	25	100
Propionic acid	2.9	11.6	3.5	13.9
Propyl mercaptan (propanethiol)	1,000	1,000	1,000	1,000
Propylbenzene	2.6	10.5	3.1	12.6
Pyridine	119	476	143	571
Sec-butyl mercaptan	452	1,000	542	1,000
Sec-butyl acetate	4.4	17.5	5.3	21.0
Tert-butyl mercaptan	467	1,000	561	1,000
Tetrahydrothiophene	22	90	27	107
Thiophene	26	105	31	126
Trimethylamine	89	357	107	428
Undecanal	2.7	11.1	3.3	13.3