Reprint
as at 1 December 2017

Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001

(SR 2001/117)

Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001: revoked, on 1 December 2017, by regulation 4(1) of the Hazardous Substances (Health and Safety Reform Revocations) Regulations 2017 (LI 2017/233).

Silvia Cartwright, Governor-General

Order in Council

At Wellington this 28th day of May 2001

Present:
Her Excellency the Governor-General in Council

Pursuant to section 75(1)(d), (e), and (f) of the Hazardous Substances and New Organisms Act 1996, Her Excellency the Governor-General, acting on the advice and with the consent of the Executive Council (given on the recommendation of the Minister for the Environment made in compliance with section 141(1) of that Act), makes the following regulations.

Contents

Note

Changes authorised by subpart 2 of Part 2 of the Legislation Act 2012 have been made in this official reprint.

Note 4 at the end of this reprint provides a list of the amendments incorporated.

These regulations are administered by the Ministry for the Environment.

Schedule 2 27
Maximum quantities per package of certain class 6, 8, and 9 substances permitted on passenger service vehicles

Regulations

1 Title

These regulations are the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001.

2 Commencement

These regulations come into force on 2 July 2001.

3 Interpretation

In these regulations, unless the context otherwise requires,—

acceptable daily exposure means exposure to an amount of a substance for each unit of body weight per day that—

(a) would not result in an appreciable toxic effect on a person over a lifetime of daily exposure to the substance; and

(b) is calculated in accordance with regulation 13

Act means the Hazardous Substances and New Organisms Act 1996

aggregate water capacity has the same meaning as in regulation 3 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001

approved handler has the same meaning as in regulation 3 of the Hazardous Substances (Personnel Qualifications) Regulations 2001

bioaccumulative has the same meaning as in Schedule 6 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

biocidal action has the same meaning as in Schedule 6 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

data has the same meaning as in regulation 3 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

ecotoxicity value means a value set under regulation 36

environmental exposure limit means a concentration of a substance in an environmental medium as set in accordance with Part 3

environmental medium,—

(a) in relation to class 6 substances, means—

(i) air, water, and soil; or

(ii) a surface that a hazardous substance may be deposited onto:

(b) in relation to class 9 substances, means water, soil, or sediment where these are in the natural environment, or a surface that a hazardous substance may be deposited onto

exposure route—

(a) means a route by which a person or other living organism can absorb a substance; and

(b) includes ingestion, inhalation, dermal contact, or contact with the eye or mucous membranes

food has the same meaning as in section 9 of the Food Act 2014

LOAEL means the lowest observable adverse effect level, being the lowest dose or concentration of a substance at which a significant adverse biological effect or toxic effect is observed

NOAEL means no observable adverse effect level, being the highest dose or concentration of a substance at which no significant adverse biological effect or toxic effect is observed

person in charge, in relation to a place of work, has the same meaning as in regulation 3 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001

place of work includes 1 or more parts of a place of work

potential daily exposure means an amount of substance for each unit of body weight for each exposure route for each day calculated in accordance with regulation 23

rapidly degradable has the same meaning as in Schedule 6 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

RfD or **reference dose**, in relation to a specific toxic effect on a person in a particular subpopulation, means an amount of substance for each unit of body weight per day that—

(a) would not result in an appreciable toxic effect over a lifetime of daily exposure to the substance; and

(b) is calculated in accordance with regulation 13

significant adverse biological effect has the same meaning as in Schedule 4 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

tolerable exposure limit means a concentration of a substance in an environmental medium as set in accordance with regulation 24

valid has the same meaning as in Schedule 4 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

workplace exposure standard means a concentration of a substance in air set in accordance with regulations 29 and 30.

Regulation 3 **food**: amended, on 1 March 2016, by section 447 of the Food Act 2014 (2014 No 32).

4 Regulations not to apply to certain substances

These regulations do not apply to a substance that is—

(a) used as the motive power for, or to control, a vehicle, aircraft, or ship; and

(b) contained in the fuel system, electrical system, or control system of the vehicle, aircraft, or ship.

4A Regulations not to apply to substances used in combat or training for combat

These regulations do not apply to a substance when the substance—

(a) is used in combat or training for combat; or

(b) is on a vehicle, ship, or aircraft that is authorised to carry the substance in combat or training for combat.

Regulation 4A: inserted, on 28 August 2003, by regulation 3 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2003 (SR 2003/178).

Part 1
General requirements

5 Requirement to keep record of application

(1) A person in charge of a class 6.1A, 6.1B, 6.1C, 6.6A, 6.7A, 6.8A, 6.9A, 8.2A, or 8.2B substance applied for the purpose of causing biocidal action must ensure that a written record of each application of the substance is kept if the application is in a place where—

(a) members of the public may lawfully be present; or

(b) the substance is likely to enter air or water and leave the place.

(2) A person in charge of a class 9.1A, 9.2A, 9.3A, or 9.4A substance applied for the purpose of causing biocidal action must ensure that a written record is kept of each application of the substance if 3 kg or more of the substance is applied within 24 hours in a place where the substance is likely to enter air or water and leave the place.

Regulation 5 heading: amended, on 23 September 2004, by regulation 3(1) of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Regulation 5(1): amended, on 23 September 2004, by regulation 3(2) of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Regulation 5(1): amended, on 23 September 2004, by regulation 3(3) of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Regulation 5(2): amended, on 23 September 2004, by regulation 3(4) of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Regulation 5(2): amended, on 23 September 2004, by regulation 3(5) of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Regulation 5(2): amended, on 23 September 2004, by regulation 3(6) of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

6 Matters to be included in record

(1) A record kept under regulation 5 must include the following information:

(a) the name of the substance:

(b) the date and time of each application or discharge of the substance:

(c) the classification or classifications of the substance:

(d) the amount of the substance applied or discharged:

(e) the location where the substance was applied or discharged:

(f) if the substance is applied to or discharged in the air, a description of the wind speed and direction when the substance was applied or discharged:

(g) the name of the user of the substance and the user's address.

(2) A record must be kept for not less than 3 years after the date on which the substance that the record relates to is applied or discharged.

7 Equipment used to handle substances

(1) A person in charge of a class 6, 8.2, 8.3, or 9 substance must ensure that equipment used to handle the substance—

(a) retains the substance, without leakage, at all of the temperatures and pressures that it is used in; and

(b) dispenses or applies the substance, without leakage, at a rate and in a manner that the equipment is designed for.

(2) The equipment must be accompanied by documentation containing information about the use and maintenance of the equipment to enable the equipment to be used and maintained in a manner that complies with subclause (1).

(3) The documentation provided under subclause (2) must comply with regulation 48 of the Hazardous Substances (Identification) Regulations 2001.

(4) This regulation does not apply to a package that the Hazardous Substances (Packaging) Regulations 2001 apply to.

8 Protective clothing and equipment

(1) A person who handles a class 6.1A, 6.1B, 6.1C, 6.1D, 6.3A, 6.5A, 6.5B, 6.6A, 6.6B, 6.7A, 6.7B, 6.8A, 6.8B, 6.8C, 6.9A, 6.9B, 8.2A, 8.2B, 8.2C, or 8.3A substance must use protective clothing or equipment that is designed, constructed, and operated to ensure that the person—

(a) does not come into contact with the substance; and

(b) is not exposed to a concentration of the substance that is greater than the workplace exposure standard for the substance.

(2) However, subclause (1) does not apply in relation to hazardous substances in a closed package that complies with the Hazardous Substances (Packaging) Regulations 2001.

(3) A person in charge of a substance specified in subclause (1) must ensure that protective clothing or equipment used to handle the substance is accompanied by documentation containing information specifying—

(a) the circumstances in which the clothing or equipment may be used; and

(b) the requirements for maintaining the clothing or equipment.

(4) In subclause (3)(a), **circumstances** include, if relevant, the presence of other substances, and the temperatures and pressures in or at which the clothing or equipment may be used.

(5) The documentation provided under subclause (3) must comply with regulation 48 of the Hazardous Substances (Identification) Regulations 2001.

Regulation 8(1): substituted, on 23 September 2004, by regulation 4 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

9 Quantities of class 6, 8, and 9 substances that must be under personal control of approved handler or secured

(1) The quantities of class 6, 8, and 9 substances specified in Schedule 1 must be—

(a) under the personal control of an approved handler; or

(b) secured so that a person cannot gain access to the substance unless the person has a key or other device used for operating locks.

(2) However, a class 6, 8 or 9 substance may be handled by a person who is not an approved handler if—

(a) an approved handler is present at the place where the substance is being handled; and

(b) the approved handler has provided guidance to the person in respect of the handling; and

(c) the approved handler is available at all times to provide assistance, if necessary, to the person while the substance is being handled by the person.

(3) Despite subclauses (1) and (2), a class 9 substance may be handled by a person who is not an approved handler if the substance is contained in sealed packaging.

(4) Subclause (3) does not apply during the following stages of the life cycle of the substance:

(a) formulation; and

(b) manufacture; and

(c) application.

Regulation 9(3): added, on 23 September 2004, by regulation 5 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Regulation 9(4): added, on 23 September 2004, by regulation 5 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

10 Carriage on passenger service vehicles

(1) A person must not carry on a passenger service vehicle a class 6.1, 6.3, 6.4, or 6.5 substance, or any class 8 substance, unless—

(a) the substance is in sealed packaging; and

(b) the quantity of the substance in the package is not more than the maximum quantity for the class of substance specified in Schedule 2.

(2) However, a person must not carry on a passenger service vehicle any quantity of a class 6.1A or 8.2A substance.

(3) In this regulation, **passenger service vehicle** has the same meaning as in the Transport Services Licensing Act 1989.

Regulation 10(1): substituted, on 23 September 2004, by regulation 6 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Part 2
Requirements for class 6 substances

Acceptable daily exposure value or RfD value

11 Acceptable daily exposure value or RfD value to be set

(1) This regulation applies to a class 6 substance if—

(a) it is likely to be present in—

(i) 1 or more environmental media; or

(ii) food; or

(iii) other matter that might be ingested; and

(b) it is a substance to which a person is likely to be exposed on 1 or more occasions during the lifetime of the person; and

(c) exposure to the substance is likely to result in an appreciable toxic effect.

(2) An acceptable daily exposure value or 1 or more RfD values must be set for a substance by the Authority in accordance with regulations 12 to 21.

(3) An acceptable daily exposure value or RfD value for a substance must be derived from an assessment of the toxicological data available for the substance.

(4) If a substance is a mixture, an acceptable daily exposure value or 1 or more RfD values must be set for the substance or for 1 or more components of the substance, and if the values are derived from an assessment of the available toxicological data, the data must be for the mixture or for 1 or more components of the mixture.

12 Methods for setting acceptable daily exposure or RfD values

(1) An acceptable daily exposure value or 1 or more RfD values must be set for a substance—

(a) by adopting, as the acceptable daily exposure value or an RfD value, a value that has been set for the substance—

(i) by an international scientific or regulatory body recognised by New Zealand; or

(ii) in a convention that New Zealand has signed or ratified; or

(iii) under any other Act; or

(b) by calculating an acceptable daily exposure value or 1 or more RfD values in accordance with regulations 13 to 21.

(2) However, an acceptable daily exposure value or an RfD value must not be adopted unless—

(a) the value is a value for the amount of substance for each unit of body weight per day; and

(b) the amount of substance is not likely to result in appreciable adverse effects on the health of a person over a lifetime of exposure to the substance.

(3) An acceptable daily exposure value or RfD value—

(a) must be expressed in milligrams of substance per kilogram of body weight per day; and

(b) must not exceed 2 milligrams of substance per kilogram of body weight per day.

13 Formula for calculating acceptable daily exposure value or RfD value

(1) An acceptable daily exposure value or RfD value must be calculated in accordance with the following formula—

$$\frac{\text{NOAEL (or LOAEL)}}{\Pi\ \text{(uncertainty factors)}}$$

where—

Π is the symbol for the multiplication of a series of factors

uncertainty factors are the factors specified in regulations 14 to 21.

(2) If a LOAEL for a substance is available and it is less than a NOAEL for the substance, the LOAEL may be used, and regulations 14 to 21 apply accordingly.

(3) When calculating an RfD, the NOAEL or LOAEL must be obtained from data for the specific toxic effect for which the RfD is to be calculated.

(4) The product of the uncertainty factors must be not less than 1 and not more than 10 000.

14 Uncertainties in variation in response of human subpopulations

(1) A value of not less than 1 and not more than 10 must be set to allow for uncertainties due to variations in the response of human subpopulations when exposed to the substance.

(2) A value of not less than 2 and not more than 10 must be set if—

(a) the data indicates that the response of the test population is not likely to represent the response of a highly sensitive human subpopulation; or

(b) no data is available on the effects on human beings.

(3) A value of 1 must be set if the data indicates that the response of the test population is likely to represent the response of a highly sensitive human subpopulation.

15 Uncertainties in extrapolation of data from organisms to humans

(1) A value of not less than 1 and not more than 10 must be set to allow for uncertainty in extrapolating from data on the significant adverse biological effect of the substance on a species of organism to human beings.

(2) A value of not less than 2 and not more than 10 must be set if a NOAEL is obtained from a study of the effects of the substance on a population that is not a human population.

(3) A value of 1 must be set if a NOAEL is obtained from a study of the effects of the substance on a human population.

16 Uncertainties resulting from variations in data

(1) A value of not less than 1 and not more than 100 must be set to allow for uncertainties caused by the type and quality of the data specified in regulation 11.

(2) The value in subclause (1) must be the product of the uncertainty factors set in accordance with regulations 17 to 21.

17 Uncertainties from lack of chronic exposure data

(1) A value of not less than 1 and not more than 10 must be set to allow for uncertainty caused by extrapolating from the data available on the significant adverse biological effects or toxic effects of acute, sub-acute, or sub-chronic exposure to the substance to the likely effects of chronic exposure to the substance.

(2) A value of not less than 2 and not more than 10 must be set if data on the significant adverse biological effects or toxic effects after chronic exposure is not available.

(3) A value of 1 must be set if data on the significant adverse biological effects or toxic effects of chronic exposure to the substance is available.

18 Uncertainties in toxicological information relating to availability of NOAEL

(1) If a NOAEL is available, a value of 1 must be set.

(2) If a NOAEL is not available and the NOAEL is derived from a LOAEL, a value of not less than 2 and not more than 10 must be set to allow for uncertainty.

(3) The value must be based on—

(a) the shape and slope of the dose response curve for the substance based on the dose of the substance and the significant adverse biological effects or toxic effects of the substance; and

(b) the nature of the significant adverse biological effects or toxic effects.

19 Uncertainties in validity, reliability, and measurement of data

(1) A value of not less than 1 and not more than 10 must be set to allow for uncertainties in the study that the NOAEL is obtained from relating to—

(a) the extent to which data is derived from methods that are valid; or

(b) the reliability of data; or

(c) the accuracy of data measurement.

(2) A value of not less than 2 and not more than 10 must be set if the study that a NOAEL is obtained from—

(a) uses methods that are statistically invalid in 1 or more aspects; or

(b) is unreliable; or

(c) does not measure accurately the specific significant adverse biological effect or specific toxic effect in the study.

(3) A value of 1 must be set if the study that the NOAEL is obtained from—

(a) uses methods that are statistically valid in every aspect; and

(b) is reliable; and

(c) measures accurately the specific significant adverse biological effect or specific toxic effect in the study.

20 Differences in biological or toxic effect

(1) A value of not less than 1 and not more than 10 must be set to allow for differences in the nature and severity of significant adverse biological effects or toxic effects.

(2) A value of not less than 2 and not more than 10 must be set if the NOAEL is obtained from a study showing a significant adverse biological effect or toxic effect from exposure to the substance that is more severe or less readily reversible than that described in subclause (3).

(3) A value of 1 must be set if the NOAEL is obtained from a study showing a mild and reversible effect from exposure to the substance.

21 Uncertainties relating to completeness of biological or toxicological data

(1) A value of not less than 1 and not more than 10 must be set to allow for uncertainties in the completeness of the data describing the significant adverse biological effects or toxic effects of the substance.

(2) A value of not less than 2 and not more than 10 must be set if deficiencies exist in the data describing the significant adverse biological effects or toxic effects of the substance.

(3) A value of 1 must be set if the data describing the significant adverse biological effects or toxic effects of the substance is considered complete for the evaluation of the substance concerned.

Potential daily exposure value

22 Potential daily exposure value to be established

If an acceptable daily exposure value or 1 or more RfD values are set for a substance, a potential daily exposure value for each exposure route must also be set for the substance by the Authority in accordance with regulation 23.

23 Formula for calculating potential daily exposure values

(1) A potential daily exposure value must be calculated in accordance with the following formula:

$$\text{acceptable daily exposure or RfD} \times n$$

where n is a value of more than 0, but not more than 1 and represents a fraction of likely exposure through a particular exposure route.

(2) The sum of all potential daily exposure values set for a substance must be equal to or less than the acceptable daily exposure value or RfD used to calculate the potential daily exposure values.

(3) A potential daily exposure value must be expressed in milligrams of the substance per kilogram of body weight per day.

(4) If a substance is a mixture, a potential daily exposure value may be set for the mixture or 1 or more substances within the mixture.

Tolerable exposure limit

24 Establishment of tolerable exposure limit

(1) A tolerable exposure limit must be set for a substance by the Authority for 1 or more environmental media if the environmental media relate to an exposure route for the substance that a potential daily exposure has been set for.

(2) A tolerable exposure limit must be set by calculating, for each environmental medium, the concentration of the substance that would result in a person exposed to each medium receiving a dose of the substance equal to or less than the potential daily exposure set for the relevant exposure route.

(3) A tolerable exposure limit must be expressed as a concentration of the substance for each environmental medium.

(4) If a substance is a mixture, the Authority may set tolerable exposure limits for the substance or 1 or more components of the substance based on the assessment of the available toxicological data for the substance or 1 or more components of the substance.

25 Relevant matters for setting tolerable exposure limit

(1) The tolerable exposure limit must be based on values set in accordance with subclause (2) for the following matters:

(a) the extent to which exposure to a substance from an environmental medium would be acute exposure or chronic exposure:

(b) the frequency and duration of exposure to a substance from an environmental medium:

(c) the average body weight of people in the population likely to be exposed to a substance from an environmental medium:

(d) the extent of absorption of the substance, the binding affinity of the substance with plasma lipoproteins or cellular receptors, or the elimination of the substance from the body.

(2) A value set for a matter described in subclause (1) must be set by adopting as the value for the relevant matter a value that has been set—

(a) by an international scientific or regulatory body recognised by New Zealand; or

(b) in a convention that New Zealand has signed or ratified; or

(c) under any other Act.

26 Adjustment of value for setting tolerable exposure limit

(1) A value set for a matter described in regulation 25(1) may be adjusted to obtain a higher tolerable exposure limit for the following reasons:

(a) exposure to the substance is likely to be of a shorter duration than the exposure used to set the value for the matter described in regulation 25(1)(a):

(b) exposure to the substance is likely to be less frequent than the exposure used to set the value for the matter described in regulation 25(1)(b):

(c) the average body weight of people likely to be exposed to the substance is likely to be greater than the body weight used to set the value for the matter described in regulation 25(1)(c):

(d) data from human beings indicates that the substance is less readily absorbed, displays a low binding affinity to plasma lipoproteins or cellular receptors, or is eliminated more rapidly from the body than the toxicokinetic and toxicodynamic data used to set the value for the matter described in regulation 25(1)(d) indicates:

(e) data from human beings indicates that the substance does not accumulate in human tissue.

(2) A value may be adjusted to obtain a lower tolerable exposure limit for the following reasons:

(a) exposure to the substance is likely to be of a longer duration than the exposure used to set the value for the matter described in regulation 25(1)(a):

(b) exposure to the substance is likely to be more frequent than the exposure used to set the value for the matter described in regulation 25(1)(b):

(c) the average body weight of people likely to be exposed to the substance is likely to be less than the body weight used to set the value for the matter described in regulation 25(1)(c):

(d) data from human beings indicates that the substance is more readily absorbed, displays a binding affinity to plasma lipoprotein or cellular receptors, or is eliminated less rapidly from the body than the toxicokinetic and toxicodynamic data used to set the value for the matter described in regulation 25(1)(d) indicates:

(e) data from human beings indicates that the substance accumulates in human tissue:

(f) reliable medical data, accident related data, or epidemiological data shows that the substance has a greater toxic effect in 1 or more human subpopulations than in other human subpopulations.

27 Prohibition on use of substance in excess of tolerable exposure limit

(1) A person must not use a class 6 substance in a manner that would result in a concentration of the substance in an environmental medium that exceeds the tolerable exposure limit set for the medium.

(2) *[Revoked]*

Regulation 27(2): revoked, on 23 September 2004, by regulation 7 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

28 Vertebrate poisons

(1) This regulation applies to a class 6.1 substance that is laid outdoors by a person lawfully allowed to do so as part of bait to inhibit reproduction, inhibit growth, or cause death in terrestrial vertebrates.

(2) A person in charge of the substance must ensure that, at least 3 days before the substance is applied or laid, signs are erected at every normal point of entry to the place where the substance is to be applied or laid.

(3) The signs must—

(a) identify the person who is applying or laying the substance, and provide sufficient information to enable the person to be contacted during normal business hours; and

(b) identify the substance and state that it is toxic to human beings and eco-toxic to other vertebrates; and

(c) state the date on which the substance is to be applied or laid; and

(d) comply with Part 3 of the Hazardous Substances (Identification) Regulations 2001.

(4) The signs must remain until—

(a) a period of time specified by the Authority has elapsed; or

(b) the substance has been retrieved from the place concerned.

(5) The period of time referred to in subclause (4)(a) must—

(a) be specified by the Authority at the time the substance is approved; and

(b) allow sufficient time for the substance contained in the bait to degrade so that the substance is no longer a hazardous substance.

(6) Regulation 9 does not apply to a substance after it has been applied or laid in accordance with this regulation.

Regulation 28(6): substituted, on 23 September 2004, by regulation 8 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Workplace exposure standard

29 Workplace exposure standard

(1) This regulation and regulation 30 apply to a class 6 substance if,—

(a) under the temperature and pressure the substance is to be used in, it can become airborne and disperse in air in the form of inspirable or respirable dusts, mists, fumes, gases, or vapours; and

(b) human exposure to the substance is primarily through the inhalation or dermal exposure routes; and

(c) the toxicological and industrial hygiene data available for the substance is sufficient to enable a standard to be set.

(2) One or more workplace exposure standards may be set for a substance by the Authority to protect persons from the adverse effect of toxic substances.

(3) A workplace exposure standard applies to every place of work.

(4) The person in charge of a place of work must ensure that a person is not exposed to a concentration of the substance that exceeds the workplace exposure standard for that substance.

(5) A workplace exposure standard must be expressed as a concentration in air not exceeding—

(a) 10 000 milligrams of the substance for each cubic metre of air; or

(b) 1 500 parts of the substance for each million parts of air.

(6) If the substance is a mixture, a workplace exposure standard—

(a) must be set for the substance or 1 or more components of the substance; and

(b) must be derived from an assessment of the available toxicological and industrial hygiene data for that mixture or 1 or more components of the mixture.

Regulation 29(3): substituted, on 23 September 2004, by regulation 9(1) of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Regulation 29(4): amended, on 23 September 2004, by regulation 9(2) of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

30 Setting of workplace exposure standard

(1) When setting a workplace exposure standard, the Authority must—

(a) adopt a value proposed for the substance concerned by WorkSafe New Zealand; or

(b) arrive at a value by taking into account the matters described in subclause (2).

(2) The following matters must be taken into account when setting a workplace exposure standard:

(a) the exposure routes in a place of work, other than inhalation, by which a person may be exposed to the substance:

(b) the duration of the exposure of a person to the substance in a place of work:

(c) the extent to which the substance accumulates in the body or is eliminated from the body:

(d) the hazard classification of the substance:

(e) the extent to which a toxic effect of the substance on a person is compounded by the exposure of the person to the substance in other places.

Regulation 30(1)(a): amended, on 16 December 2013, by section 22 of the WorkSafe New Zealand Act 2013 (2013 No 94).

Part 3
Requirements for class 9 substances

31 Species not to include human beings

In this Part, **species** does not include human beings.

Setting environmental exposure limits

32 Environmental exposure limits for substances

(1) The environmental exposure limits for classes 9.1 and 9.2 substances are,—

(a) in the case of a class 9.1 substance, 0.1 micrograms of substance per litre of water:

(b) in the case of a class 9.2 substance, 1 microgram of substance per kilogram of dry weight of soil.

(2) Subclause (1) applies subject to an environmental exposure limit set under regulation 35.

(3) Only 1 environmental exposure limit for a class 9 substance may apply to an environmental medium at any given time or in any given circumstance.

Regulation 32(1): substituted, on 23 September 2004, by regulation 10 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

33 Ability to set environmental exposure limit

(1) An environmental exposure limit may be set for a class 9 substance by the Authority for 1 or more environmental media if the environmental medium relates to an exposure route through which organisms that live in an aquatic environment, terrestrial vertebrates, terrestrial invertebrates, or organisms that live in the soil may be exposed to the substance.

(2) An environmental exposure limit set for a class 9 substance must be derived from an assessment of the ecotoxicological data available for the substance.

(3) An environmental exposure limit must be expressed as a concentration of the substance in an environmental medium.

(4) If a substance is a mixture, an environmental exposure limit may be set for the substance or 1 or more components of the substance, and the environmental exposure limit must be derived from an assessment of the ecotoxicological data available for the mixture or 1 or more components of the mixture.

34 Environmental exposure limit may be exceeded for rapidly degradable substance

(1) If an environmental exposure limit is set in accordance with regulation 33 for a rapidly degradable substance, the Authority may adjust the environmental exposure limit in the circumstances specified by the Authority.

(2) The adjusted environmental exposure limit—

(a) must not be more than 10 times the value of the environmental exposure limit; and

(b) is to be treated as the environmental exposure limit in the circumstances specified by the Authority.

35 Methods for setting environmental exposure limit

An environmental exposure limit must be set—

(a) by adopting a value that represents a concentration of the substance established for control of the ecotoxic effects of the substance in an environmental medium if the value is set—

(i) by an international scientific or regulatory body recognised by New Zealand; or

(ii) in a convention that New Zealand has signed or ratified; or

(b) by calculating 1 or more environmental exposure limits in accordance with this Part.

36 Ecotoxicity value

(1) An ecotoxicity value may be set for a class 9 substance by selecting a value from the ecotoxological data available for the substance and relevant to a species that is likely to be exposed to the substance in an environmental medium that the environmental exposure limit is to be set for.

(2) An ecotoxicity value relating to a substance deposited on an exposed surface must be modified, before being used in the formula in regulation 37, to take into account—

(a) the frequency and duration of exposure to the substance from the particular environmental medium; and

(b) the potential exposure routes to the substance; and

(c) the rates of uptake of the substance through the exposure routes.

(3) An ecotoxicity value must be expressed in the units prescribed in regulation 37(2)(a), (b), or (c).

(4) If the available data is not expressed in the units required by subclause (3), the data must be converted to the equivalent concentration of the substance in those units.

37 Formula for calculating environmental exposure limits

(1) An environmental exposure limit must be calculated in accordance with the following formula:

$$\frac{\text{ecotoxicity value for a substance}}{\Pi\ (\text{uncertainty factors})}$$

where—

Π is the symbol for the multiplication of a series of factors

uncertainty factors are the factors specified in regulations 39 to 42.

(2) An environmental exposure limit must be expressed as follows:

(a) for water, in milligrams of the substance per litre of water:

(b) for soil or sediment, in milligrams of the substance per kilogram of dry weight of soil or sediment:

(c) for a surface on which a substance may be deposited, in milligrams of the substance per square metre of surface area.

(3) A different environmental exposure limit may be set for marine surface water and fresh surface water, and the corresponding sediments.

38 Maximum environmental exposure limits

An environmental exposure limit for a substance must not exceed—

(a) 100 milligrams of the substance per litre of water:

(b) 100 milligrams of the substance per kilogram of dry weight of soil or sediment:

(c) 1 000 milligrams of the substance per square metre of surface on which the substance is deposited.

39 Uncertainties in extrapolation of ecotoxic information from other species

(1) A value of not less than 1 and not more than 10 must be set to allow for uncertainties due to extrapolating from data on the ecotoxic effects of the substance to another species likely to be exposed to the substance in environmental media.

(2) A value of not less than 2 and not more than 10 must be set if the data is obtained from a study of the effects of the substance on a species that is not likely to be exposed to the substance in environmental media.

(3) A value of 1 must be set if the data is obtained from a study of the effects of the substance on a species that is likely to be exposed to the substance in environmental media.

40 Uncertainties due to extrapolation

(1) A value of not less than 1 and not more than 10 must be set to allow for uncertainties due to extrapolating from the data available on the ecotoxic effects of the substance to the effects on a species likely to have chronic exposure to the substance in environmental media.

(2) A value of not less than 2 and not more than 10 must be set if the data on the ecotoxic effects after chronic exposure to the substance is not available or the data available does not adequately disclose chronic effects on the species likely to have chronic exposure to the substance in environmental media.

(3) A value of 1 must be set if the data for ecotoxic effects after chronic exposure to the substance is available and the data adequately discloses chronic ecotoxic effects on a species likely to have chronic exposure to the substance in environmental media.

41 Uncertainties due to extrapolation of ecotoxic data to natural environment

(1) A value of not less than 1 and not more than 10 must be set to allow for uncertainty in extrapolating from data on ecotoxic effects obtained from controlled experiments, to ecotoxic effects in environmental media.

(2) A value of not less than 2 and not more than 10 must be set if data is unavailable to demonstrate levels at which ecotoxic effects would occur in environmental media.

(3) A value of 1 must be set if data is available that demonstrates levels at which ecotoxic effects would occur in environmental media.

42 Uncertainties in information on biodegradation and bioaccumulation

(1) A value of not less than 1 and not more than 10 must be set if there are uncertainties as to whether the values set under regulations 39 to 41 provide adequate protection from ecotoxic effects because the substance or an ecotoxicologically significant degradation product of the substance is likely to bioaccumulate.

(2) A value of not less than 2 and not more than 10 must be set if the values set under regulations 39 to 41 are not likely to provide adequate protection from ecotoxic effects because the substance or degradation product of the substance is likely to bioaccumulate.

(3) A value of 1 must be set if the values set under regulations 39 to 41 are likely to provide adequate protection from ecotoxic effects whether or not the substance or degradation product of the substance is likely to bioaccumulate.

(4) In this regulation, **degradation product** means a substance created as a substance breaks down or decays in the environment.

43 Additional environmental exposure limit based on secondary poisoning

(1) An environmental exposure limit based on secondary poisoning may be set as follows:

(a) an ecotoxicity value in units of milligrams of the substance per kilogram of body weight per day for a species of organism that is likely to be affected by secondary poisoning must be selected:

(b) the uncertainty factors described in regulations 39 to 42 must be applied to the ecotoxicity value selected in paragraph (a) using the formula in regulation 37 to arrive at 1 or more environmental exposure limits for secondary poisoning expressed as required by regulation 37(2):

(c) the value arrived at under paragraph (b) must be adjusted to arrive at an environmental exposure limit for secondary poisoning, considering the circumstances of exposure, including the extent of feeding on other organisms and the amount of residue of the substance in those organisms.

(2) If an environmental exposure limit has been set for a substance for an environmental medium based on secondary poisoning and another environmental exposure limit has been set for the same substance for the same medium based on other ecotoxicological data, the lowest environmental exposure limit is the environmental exposure limit for the substance for the medium.

(3) In this regulation, **secondary poisoning** means poisoning as a result of the exposure of an organism to the substance through feeding on other organisms containing residue of the substance.

44 Application of environmental exposure limit to water

An environmental exposure limit set for a substance in surface water may not be exceeded within receiving waters after reasonable mixing.

45 Prohibition on use of ecotoxic substance in excess of environmental exposure limit

A person must not use a class 9 substance in a manner that allows the substance to exceed the environmental exposure limit set for the substance in the environmental medium concerned.

Restrictions on use of substances in application areas

46 Application area

In regulations 47 to 51, **application area**, in relation to a substance designed for biodical action, means—

(a) an area of land owned or occupied by the person applying the substance; or

(b) air or water above the ground within the boundaries of land owned or occupied by the person applying the substance for the period of time that the air or water remains within the boundaries of the land; or

(c) any land, air, or water within an area that a person is authorised, under any enactment, to apply the substance to.

Regulation 46: amended, on 23 September 2004, by regulation 11 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

47 Certain restrictions not to apply in application area

If a substance is applied within an application area at a rate that does not exceed the application rate of the substance,—

(a) an environmental exposure limit for the substance does not apply to an environmental medium in the area; and

(b) regulation 9 does not apply to the substance after it has been applied or laid in the area.

Regulation 47(b): substituted, on 23 September 2004, by regulation 12 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

48 Application rate for substance within application area

(1) If an environmental exposure limit is set for a substance that is designed for biocidal action, an application rate must be set for the substance.

(2) The application rate for a substance must be set by the Authority at a rate that is equal to or less than—

(a) the application rate specified by the applicant in the application for approval of the substance; or

(b) a rate calculated in accordance with the formula in regulation 37 for calculating environmental exposure limits, except that the product of the uncertainty factors for the formula must be set at the product or 100, whichever is the lesser amount.

(3) A person must not apply a substance at a rate greater than the application rate set for the substance.

Regulation 48(2): amended, on 23 September 2004, by regulation 13 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

49 Use of substances ecotoxic to terrestrial invertebrates

(1) A person must not apply a class 9.4 substance in an application area—

(a) if bees are foraging in the area and the substance is in a form in which bees are likely to be exposed to it; or

(b) to any plant or tree that is likely to be visited by bees if—

(i) the plant or tree is in open flower or part bloom; or

(ii) the plant or tree is likely to flower after application of the substance within a period specified by the Authority.

(2) The period specified by the Authority must not be longer than 10 days.

50 Use of substance ecotoxic to terrestrial vertebrates

(1) A person must not lay a class 9.3 substance in a granular form or coated on seed in an application area if the concentration of the substance on any exposed surface exceeds the environmental exposure limit, set in accordance with this regulation, 6 or more hours after application of the substance.

(2) An environmental exposure limit must be set for exposure in an application area to a class 9.3 substance in a granular form or coated on seed as follows:

(a) an ecotoxicity value must be selected for a species of terrestrial vertebrate likely to ingest the granular or seed formulation; and

(b) the uncertainty factors described in regulations 39 and 41 must be applied to the ecotoxicity value, to arrive at a value representing a concentration of substance that, as a result of ingestion, would be unlikely to result in adverse effects to the species of terrestrial vertebrate; and

(c) the value arrived at under paragraph (b) must be adjusted to arrive at an environmental exposure limit for the substance deposited on surfaces, considering the circumstances of exposure, including the colour of the seed or granular formulations and the presence of a vertebrate repellant.

51 Use of ecotoxic substances as bait

If a class 9.3 substance inhibits growth or reproduction, or causes death in 1 or more vertebrate species and is likely to be used outdoors in an application area as bait or part of a bait for vertebrate species, the Authority must specify 1 or more of the following matters for the substance:

(a) a colour:

(b) methods of release:

(c) repellants or attractants to be used with the substance:

(d) bait size:

(e) degree of palatability.

Regulation 51(d): added, on 23 September 2004, by regulation 14 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Regulation 51(e): added, on 23 September 2004, by regulation 14 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Part 4
Additional requirements relating to sodium fluoroacetate

Part 4: inserted, on 12 March 2015, by regulation 4 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2015 (LI 2015/46).

52 Interpretation

In this Part, **sodium fluoroacetate**—

(a) means any quantity of sodium fluoroacetate (Chemical Abstracts Service (CAS) registry number 62-74-8); but

(b) excludes any formulated substances containing sodium fluoroacetate.

Regulation 52: inserted, on 12 March 2015, by regulation 4 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2015 (LI 2015/46).

53 Additional recording and notification requirements

(1) Subclause (2) applies if, on the day on which this regulation comes into force, sodium fluoroacetate is present in a place of work.

(2) The person in charge of the place of work must provide the Authority with the following information:

(a) the name and address of the place of work; and

(b) the person's name; and

(c) the quantity of sodium fluoroacetate present in the place; and

(d) for any quantity not manufactured at the place, the supplier's name.

(3) The information must be provided in writing no later than 20 working days after the day on which this regulation comes into force.

(4) If, at any time in a calendar year, sodium fluoroacetate is present in a place of work, the person in charge of the place must provide the Authority with the following information in respect of that year:

(a) the name and address of the place of work; and

(b) the person's name; and

(c) the quantity or quantities of sodium fluoroacetate present in the place; and

(d) for any quantity not manufactured at the place, the supplier's name; and

(e) the purpose or purposes for which it was obtained or manufactured; and

(f) if any quantity was transferred to another place,—

(i) how much was transferred; and

(ii) the address of the place; and

(iii) the identity of and position held by the person assuming responsibility for it at that place; and

(iv) the date on which the transfer occurred; and

(g) if any quantity was disposed of,—

(i) the quantity disposed of; and

(ii) how and where it was disposed of; and

(iii) the date on which it was disposed of.

(5) The information must be provided in writing no later than 31 March of the following calendar year.

(6) The first year in which the requirement in subclause (4) must be satisfied is the 2015 calendar year. However, the information is required only in relation to the period starting on the day on which this regulation comes into force and ending on 31 December.

(7) To avoid doubt, subclause (4) applies even if the sodium fluoroacetate present in the place of work was obtained or manufactured in a previous calendar year.

Regulation 53: inserted, on 12 March 2015, by regulation 4 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2015 (LI 2015/46).

54 Additional importation requirements

(1) This regulation applies if a person imports sodium fluoroacetate into New Zealand.

(2) Before the sodium fluoroacetate is collected, the person must—

(a) give the Authority written notice of—

(i) the supplier's name; and

(ii) the quantity to be collected; and

(iii) the name of the person collecting it; and

(b) obtain a signed certificate from the Authority confirming that the person has complied with paragraph (a); and

(c) give the certificate to the New Zealand Customs Service together with written notice of the date on which and place from where the sodium fluoroacetate will be collected (or, alternatively, provide the documents electronically).

Regulation 54: inserted, on 12 March 2015, by regulation 4 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2015 (LI 2015/46).

Schedule 1
Quantities of certain class 6, 8, and 9 substances that must be under control of approved handler or secured

r 9

Schedule 1: substituted, on 28 August 2003, by regulation 4 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2003 (SR 2003/178).

Class of substance	Quantity
6.1A, 6.1B, 6.1C (except for propellant powders of classes 1.1C (UN 0160) and 1.3C (UN 0161)	Any quantity
6.7A	10 kg or more, if solid 10 L or more, if liquid
8.2A	Any quantity
9.1A, 9.2A, 9.3A, and 9.4A	Any quantity
Propellant powders of classes 1.1C (UN 0160) and 1.3C (UN 0161)	50 kg or more before sale to the public 15 kg or more after sale to the public

Schedule 2
Maximum quantities per package of certain class 6, 8, and 9 substances permitted on passenger service vehicles

r 10

Schedule 2: substituted, on 23 September 2004, by regulation 15 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250).

Hazard classification	Gas (aggregate water capacity in mL)	Liquid (L)	Solid (kg)
6.1B	120	0.1	0.5
6.1C	120	1.0	3.0
6.1D or 6.1E	120	10.0	10.0
6.3A	120	1.0	3.0
6.3B	120	10.0	10.0
6.4A	120	1.0	3.0
6.5A or 6.5B	120	0.1	0.5
8.2B	120	0.5	1.0
8.2C	120	1.0	2.0
8.3A	120	1.0	2.0

Martin Bell,
for Clerk of the Executive Council.

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Reprints notes

1 General

This is a reprint of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001 that incorporates all the amendments to those regulations as at the date of the last amendment to them.

2 Legal status

Reprints are presumed to correctly state, as at the date of the reprint, the law enacted by the principal enactment and by any amendments to that enactment. Section 18 of the Legislation Act 2012 provides that this reprint, published in electronic form, has the status of an official version under section 17 of that Act. A printed version of the reprint produced directly from this official electronic version also has official status.

3 Editorial and format changes

Editorial and format changes to reprints are made using the powers under sections 24 to 26 of the Legislation Act 2012. See also http://www.pco.parliament.govt.nz/editorial-conventions/.

4 Amendments incorporated in this reprint

Hazardous Substances (Health and Safety Reform Revocations) Regulations 2017 (LI 2017/233): regulation 4(1)

Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2015 (LI 2015/46)

Food Act 2014 (2014 No 32): section 447

WorkSafe New Zealand Act 2013 (2013 No 94): section 22

Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2004 (SR 2004/250)

Hazardous Substances (Classes 6, 8, and 9 Controls) Amendment Regulations 2003 (SR 2003/178)

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