Ministry for Primary Industries
Manatū Ahu Matua

Import Health Standard

Soil, Rock, Sand, Clay, and Water

SOWTR.IHS

7 March 2024

Issued under the Biosecurity Act 1993

Te Kāwanatanga o Aotearoa
New Zealand Government

TITLE

Import Health Standard: Soil, Rock, Sand, Clay, and Water

COMMENCEMENT

This Import Health Standard comes into force on 7 March 2024.

REVOCATION

This import health standard revokes and replaces the Import Health Standard: Soil, Rock, Sand, Clay, and Water, 13 September 2023.

The amendment history for this import health standard is in Appendix 2.

ISSUING AUTHORITY

This Import Health Standard is issued under section 24A of the Biosecurity Act 1993 to incorporate amendments made pursuant to sections 24B and 166A of that Act.

Dated at Wellington, 7 March 2024

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Contents

Page

Introduction **3**

Part 1: General Requirements **5**
1.1 Application 5
1.2 Incorporation of material by reference 5
1.3 Definitions 5
1.4 Requirements for biosecurity clearance 5
1.5 Packaging 5
1.6 Treatment 6
1.7 Transitional facility 7
1.8 Documentation 7

Part 2: Specific Requirements **9**
2.1 All consignments 9
2.2 Water 9
2.3 Soil 10
2.4 Rock, sand and clay 11
2.5 Goods sourced from the continental shelf (including New Zealand's exclusive economic zone (EEZ)) 12
2.6 Core samples 12
2.7 Samples for re-import 13

Appendix 1: Definitions **14**

Appendix 2: Amendment Record **16**

Introduction

This introduction is not part of the import health standard (IHS), but is intended to indicate its general effect.

Purpose

This IHS specifies the requirements that must be met when importing soil, rock, sand, clay, and water into New Zealand from all countries, to manage the biosecurity risks which may be associated with these goods.

Background

An import health standard issued under the Biosecurity Act 1993 (the Act) specifies the requirements for effectively managing the biosecurity risks associated with importing risk goods. An import health standard may include requirements that must be met in the exporting country before the risk goods are exported, during transit and importation and after clearance. Post-clearance requirements are enforceable under section 24D(1) of the Act.

Who should read this?

This IHS should be read and understood by anyone involved in importing soil, rock, sand, clay, and water into New Zealand.

Why is this important?

It is the responsibility of the importer to ensure that risk goods comply with the requirements of the relevant import health standard. Risk goods that do not comply with the requirements of an import health standard may not be cleared for entry into New Zealand and may be directed for treatment, re-export, destruction, or further action deemed appropriate by a chief technical officer (CTO).

Importers should take all responsible steps to ensure that the goods comply with this IHS (section 16B of the Act). Importers are liable for all associated expenses.

Equivalence

A chief technical officer may consider an application for an equivalent phytosanitary measure to be approved, different from that provided for in this IHS, to maintain at least the same level of protection assured by the current measures.

Document history

See Appendix 2 for the amendment record for this IHS.

Other information

This is not an exhaustive list of compliance requirements, and it is the importer's responsibility to be familiar and comply with all New Zealand laws, particularly the following:

Hazardous Substances and New Organisms (HSNO) Act (1996)

Imported goods that may be, or may contain, a substance defined as a hazardous substance under the Hazardous Substances and New Organisms (HSNO) Act 1996, may require an approval from the Environmental Protection Authority (EPA).

Imported goods that are, or contain, a new organism (e.g., plants and microorganisms, including seeds, spores, pollen, cells, or other propagules) where those new organisms are essential and integral to that importation (i.e., intentionally imported) may require a HSNO approval from the EPA.

Domestic and international transport requirements

It is the importer's responsibility to ensure that the exporter is informed of the international and domestic requirements concerning the safe handling, transport and labelling of risk goods.

Part 1: General Requirements

1.1 Application

(1) This Import Health Standard (IHS) applies to the import of soil, rock, sand, clay, and water and their derivatives from all countries into New Zealand.

(2) Soil or water contamination on other goods is not eligible for import under this IHS.

(3) The following risk goods are not eligible for import under this IHS, but may be eligible under other IHS:

- Ballast water intended for discharge in New Zealand waters;
- Raw peat which has been excavated from peat bogs or at depth;
- Inorganic fertilisers;
- Research samples not permitted by this IHS

1.2 Incorporation of material by reference

(1) The following documents are incorporated by reference under section 142M of the Act:

  – ISPM 5. 2017. *Glossary of phytosanitary terms.* Rome, IPPC, FAO;
  – MPI Plants Biosecurity Index
  – Official New Zealand Pest Register (ONZPR)

(2) Under section 142O(3) of the Act, it is declared that section 142O(1) does not apply, that is, a notice under section 142O(2) of the Act is not required to be published before material that amends or replaces the above list has legal effect as part of those documents.

1.3 Definitions

(1) Definitions are listed in Appendix 1.

1.4 Requirements for biosecurity clearance

(1) Soil, rock, sand, clay, and water are eligible for biosecurity clearance if they meet the requirements in this IHS.

(2) Contaminant plant or animal material is not eligible for biosecurity clearance unless it meets the requirements of the relevant import health standard.

Guidance
- Depending on the circumstances of import, consignments may be directed for inspection at the importer's cost, even if inspection is not a requirement of this IHS.
- Some goods have post-clearance requirements that specify restrictions on the use of the goods. See "Part 2: Specific Requirements" for more detail.

1.5 Packaging

(1) Consignments must be securely packaged to prevent loss of contents and cross-contamination during transportation.

(2) Packaging materials must be inert, clean, and appropriate for the goods.

(3) Unaccompanied consignments must be clearly labelled to identify the contents, along with the names and contact details of the recipient and sender.

1.6 Treatment

(1) Treatment is only required if specified in "Part 2: Specific Requirements".

(2) Goods requiring treatment must meet one of the following options:

a) **Option 1**: Treatment before import

i) Consignments must be accompanied by a treatment certificate (see Part 1.8); and
ii) Following treatment, goods must be packaged and held in a manner that prevents contamination.

b) **Option 2**: Treatment in New Zealand

i) Consignments being treated in New Zealand must be directed to an MPI-approved treatment supplier in a transitional facility or biosecurity control area.

Guidance
- If you are an importer, it is a good idea to arrange treatment before your consignment is shipped.
- The MPI website has a list of MPI-approved treatment suppliers and the types of goods they can treat.
- The importer is responsible for all costs of treatment.

1.6.1 Accepted treatments

(1) "Part 2: Specific Requirements" specifies which treatment types are accepted for each type of goods. Details of the treatment types are listed in Table 1.

Table 1

Treatment type	Requirements
Boiling	Heat to 100°C for a minimum of 1 minute.
Filtration	• Filtration down to 0.1 µm • Avoid filter overload by using progressive filtration where appropriate. • The residue must then be securely destroyed, re-exported or treated with one of the following options: – Chemical treatment in accordance with this Table 1; or – Irradiation treatment in accordance with this Table 1
Chemical	• Add calcium hypochlorite at 20 mg/L. • The water must be agitated for 1 minute and then left to sit for 30 minutes. OR
	• Add mercuric chloride at 7 mg/L (100uL of saturated mercuric chloride per 1L of water sample). OR
	• Preserve in Lugol's iodine, minimum 1% concentration for at least 48 hours
Irradiation	• When used for soil, the soil must be loosely packed and spread no thicker than 10 cm. • Irradiation at 50 kGy

Treatment type	Requirements
Moist heat	• When used for soil, the soil must be loosely packed and spread no thicker than 10 cm. • Heat treat at a minimum of 40% humidity, to – 100°C for 25 minutes; or – 85°C for 15 hours.
Dry heat	• When used for soil, the soil must be loosely packed and spread no thicker than 10 cm. • Dry heat treat to minimum of – 110°C for 16 hours; or – 121°C for 2 hours; or – 154°C for 30 minutes; or – 193°C for 4 minutes; or – 221°C for 2 minutes
Autoclave	• When used for soil, the soil must be loosely packed and spread no thicker than 10 cm. • Autoclave at 100 kPa 121°C for 30 minutes
Cleaning	• Manually remove all visible plant material, animal material and soil. • It may be necessary to use clean tools and/or water. • Any removed organic material must then be disposed of as quarantine waste or re-exported.

1.7 Transitional facility

(1) If specified in this IHS, goods must be directed to a transitional facility (TF).

(2) Facilities approved to any of the following standards are suitable to manage biosecurity risk:

a) *Transitional Facilities for Biological Products* (154.02.17)
b) *Facilities for Microorganisms and Cell Cultures: 2007a* (154.03.02)
c) *Transitional Facilities for General Uncleared Risk Goods* (TFGEN) approved to hold, process and/or treat the specific risk goods being directed.

1.8 Documentation

(1) All documentation must be either:

a) in English; or
b) accompanied by an English translation.

1.8.1 Declaration

(1) If specified in "Part 2: Specific Requirements", the goods must be accompanied by a declaration.

(2) For unaccompanied consignments, a written declaration must be provided, containing the following information:

a) name and signature of person authorised to act on behalf of the supplier or exporter
b) date of issue;
c) a full description of the consignment;
d) (commercial only) name and address of the supplier;
e) (commercial only) at least one of the following identifiers linked to the specific consignment:

i) air waybill number;
ii) bill of lading number;
iii) container number;
iv) batch/lot number; or
v) invoice number; and

f) any statements as required in "Part 2: Specific Requirements".

(3) For accompanied consignments, a written or verbal declaration must be provided by the supplier or the person accompanying the consignment, containing the following information:

a) a full description of the consignment;
b) (commercial only) name and address of the supplier; and
c) any statements as required in "Part 2: Specific Requirements".

1.8.2 Treatment certificate

(1) A treatment certificate is only required as specified in Part 1.6 "Treatment".

(2) Treatment certificates must be issued on company letterhead by a person authorised to act on behalf of the treatment company.

(3) A treatment certificate must contain the following information:

a) a unique product identification number;
b) a full description of the consignment;
c) details of treatment including treatment parameters (e.g. dose rate);
d) date that treatment was completed;
e) the number and/or volume of items treated; and
f) name of the person who carried out the treatment (including signature), if applicable.

1.8.3 Permit

(1) A permit is not required unless specified in "Part 2: Specific Requirements".

Guidance

- MPI will only issue a permit if the biosecurity risks can be managed to an acceptably low level. The importer will need to provide information with the permit application to demonstrate equivalence with the requirements of this IHS.
- A permit will specify:
  - whether the goods are eligible for biosecurity clearance on arrival;
  - whether the goods must be directed to a transitional or containment facility on arrival and the standards that facility must be approved to;
  - whether any HSNO approvals are required to carry out the proposed activities;
  - any special conditions necessary to:
    - support and/or clarify the requirements of this IHS;
    - show that the requirements of this IHS are met; and
    - effectively manage the biosecurity risk.
- To apply for a permit, complete the form Application for a Permit, and email it to plantimports@mpi.govt.nz.

Part 2: Specific Requirements

2.1 All consignments

(1) Goods may not be imported for the purpose of isolating or propagating any organisms they may harbour.

(2) Goods that are not eligible for biosecurity clearance may be:

a) directed to a suitable transitional facility (see Part 1.7); or
b) imported with a permit (see Part 1.8)

Guidance
- There are no quantity limits unless otherwise specified.
- Goods for the purpose of isolation or propagation of organisms may qualify for import under the IHS Research samples (excluding animal samples) or Microorganisms from all countries.
- For any use not covered by the above IHS, please contact Plant Imports plantimports@mpi.govt.nz to request consideration for a new pathway.

2.2 Water

2.2.1 Potable water

(1) Potable water is eligible for biosecurity clearance.

(2) There are no specific requirements for potable water.

(3) If it is unclear whether the water is potable, the water will be treated as Part 2.2.2 'Non-potable water'.

Guidance
Examples of potable water include commercially packaged water, drinkable municipal water, drinking water on ships and aircraft, distilled water, desalinated water and drinking water from bores, springs, and aquifers.

2.2.2 Non-potable water

(1) Non-potable water is eligible for biosecurity clearance if it meets the requirements set out in Table 2.

Guidance
- Examples of non-potable water include ice, snow, steam and ground water or surface water that is not fit for drinking.
- Water for religious purposes is treated as non-potable even if consumption is the intended use.

Table 2

	Type of goods	Requirements
1	Water for religious purposes	• 5 litre maximum total volume • Inspection on arrival in New Zealand to confirm no visible contamination with plant material, animal material, or soil OR

	Type of goods	Requirements
		One of the following treatment types (see Part 1.6): • Boiling • Filtration • Chemical • Irradiation
2	Geothermal water	One of the following treatment types (see Part 1.6): • Filtration • Chemical • Irradiation
3	Proficiency or calibration samples	Declaration stating that the samples contain no biological material. **Guidance** Distilled water comes under Part 2.2.1 Potable water Samples containing biological material including viable organisms may be eligible for import under the *Research Samples IHS*.
4	All other non-potable water	One of the following treatment types (see Part 1.6): • Boiling • Filtration • Chemical • Irradiation

2.3 Soil

(1) Consignments of soil are eligible for biosecurity clearance if they meet the requirements in Table 3.

Guidance
Other goods included in this section are unconsolidated sediments, silt, mud, sludge, and permafrost.

Table 3

	Type of goods	Requirements
1	Soil collected from more than 3 metres below surface level The 3 m depth does not include covering water. Measurement starts at the surface level of the soil.	• Declaration (see Part 1.8) stating: a) the origin of the soil; and b) that all of the soil was collected at least 3 metres below surface level • If the declaration is missing or unclear, the goods will be treated as Table 3-2 'All other soil'. **Guidance** Care must be taken to prevent cross contamination with surface soils

	Type of goods	Requirements
2	All other soil	One of the following treatment types (see Part 1.6): • Irradiation • Moist heat • Dry heat • Autoclave

2.4 Rock, sand and clay

(1) Consignments of rock, sand and clay are eligible for biosecurity clearance if they meet the requirements in Table 4.

Guidance
Other goods included in this section are consolidated sediments, marine sediments from beyond the euphotic zone, gravel, and unprepared fossils.

Processed inorganic materials are not risk goods and do not need to meet the requirements in this IHS. Examples include:
- Manufactured beauty products containing natural minerals or clay
- Refined decorative rock products, including jewellery, cut gems, polished stones, carved statues
- Manufactured stone benchtops and furniture
- Prepared fossils
- Industrial crushed stone, slag, aggregate and ore
- Commercially packaged clay, including art and potter's clay
- Glass, baked clays, or kiln-fired ceramics
- Chalk, salt, diatomaceous earth (fossilised algae), or (nonviable) coral rock products
- Inorganic growing media (e.g. perlite, vermiculite, akadama, kanuma)

Table 4

	Type of goods	Requirements
1	Rock, sand, or clay under 100 kg	Declaration (see Part 1.8) stating: a) the origin of the goods; and b) that the goods are free of plant material, animal material, and soil. OR
		One of the following treatment types (see Part 1.6): • Irradiation • Moist heat • Dry heat • Autoclave • Cleaning OR
		Inspection on arrival in New Zealand to confirm no visible plant material, animal material, or soil from the entire surface area of the goods.

	Type of goods	Requirements
2	Rock, sand, or clay collected from more than 3 metres below surface level The 3m depth does not include covering water.	Declaration (see Part 1.8) stating: a) the origin of the goods; and b) that all of the goods were collected at least 3 metres below surface level. If the declaration is missing or unclear, the goods will be treated as Table 4-3 "All other rock, sand, or clay".
3	All other rock, sand, or clay	One of the following treatment types (see Part 1.6): • Irradiation • Moist heat • Dry heat • Autoclave • Cleaning OR
		Permit (see Part 1.8)

2.5 Goods sourced from the continental shelf (including New Zealand's exclusive economic zone (EEZ))

(1) Consignments of soil, rock, sand, clay or water sourced from the continental shelf of New Zealand are eligible for biosecurity clearance if they are accompanied by a declaration (see Part 1.8) stating:

a) the goods have been sourced from the ocean or ocean floor within the continental shelf of New Zealand only; and
b) the goods have either:

i) not left the continental shelf before being brought into New Zealand territory; OR
ii) been held securely in a sealed container that is inert, clean, and appropriate for the goods until being brought into New Zealand territory.

2.6 Core samples

(1) Core samples are eligible for biosecurity clearance if they meet the requirements in Table 5.

Table 5

	Type of core	Requirements
1	Ice or snow from any depth	The following post-clearance requirement must be applied to ice or snow core samples. • The core must be kept frozen until disposal. • Untreated meltwater: – must not be disposed of into the general environment; and – may be disposed of via a municipal water treatment system. • Meltwater may be disposed of into the general environment if it is first treated using one of the following treatment types (see Part 1.6): – Boiling – Filtration

	Type of core	Requirements
		– Chemical – Irradiation
2	Core samples collected from more than 3 metres below surface level The 3 m depth does not include covering water.	Declaration (see Part 1.8) stating: a) the origin of the sample; and b) that the consignment consists only of goods collected 3 metres below surface level. If the declaration is missing or unclear, the goods will be treated as Table 5-4 "All other core samples".
3	Core samples which do not contain any soil in the first 3 metres below surface level The 3 m depth does not include covering water.	Declaration (see Part 1.8) stating: a) the origin of the sample; and b) that the first 3 metres of the sample is free of plant material, animal material, and soil If the declaration is missing or unclear, the goods will be treated as Table 5-4 "All other core samples". OR
		Inspection on arrival in New Zealand to confirm no visible plant material, animal material, or soil from the entire surface area of the goods.
4	All other core samples	One of the following treatment types (see Part 1.6): • Irradiation • Moist heat • Dry heat • Autoclave

2.7 Samples for re-import

(1) Samples for re-import are samples which have received biosecurity clearance or originate in New Zealand, are sent overseas for research, and are then returned to New Zealand.

(2) Samples for re-import are eligible for biosecurity clearance if they are accompanied by a declaration (see Part 1.8) stating:

a) the origin of the goods
b) while outside of New Zealand, the goods have only been opened in an indoor laboratory environment
c) while outside of New Zealand, the goods have been protected from cross-contamination with other research samples

(3) Samples which do not originate from New Zealand but have previously received biosecurity clearance must also be accompanied by evidence of previous biosecurity clearance (for example a BACC number).

Appendix 1: Definitions

Definitions have the same meaning as defined by the Act and ISPM 5, unless set out below.

clay
Fine-grained inorganic natural mineral material characterised by plasticity when wet

core sample
A cylindrical section of a naturally occurring substance obtained by drilling

euphotic zone
The layer of the ocean up to 200m deep in which there is sufficient light for photosynthesis to occur

exclusive economic zone (EEZ)
New Zealand's exclusive economic zone is as described in section 9 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977.
It comprises the area between 12 and 200 nautical miles off the coast of New Zealand.

continental shelf
New Zealand's continental shelf is as described in section 2 of the Continental Shelf Act 1964.

It comprises the seabed and subsoil of those submarine areas that extend beyond the territorial limits of New Zealand, throughout the natural prolongation of the land territory of New Zealand, to the seaward-side boundaries. The continental shelf includes New Zealand's exclusive economic zone. The Continental Shelf Order 2018 delineates certain boundaries of the continental shelf of New Zealand.

geothermal
Heated by the internal heat of the earth

gravel
Mixture of coarse sand and small rock

ISPM
International Standards for Phytosanitary Measures

IPPC
International Plant Protection Convention

mud
Mixture of soil and water

municipal water
Water originating from the official supply of a village, town, or city

potable water
Water that is fit for human consumption, having minimal contamination with microorganisms, bacteria, toxic chemicals, viruses and faecal matter

processed inorganic materials
Materials which are mineral in origin and have been modified from their raw form by mechanical or chemical means such as filtering, crushing or milling, firing, polishing, or carving

rock
Naturally occurring solid mass or aggregate of minerals forming part of the surface of the Earth's crust and most of its interior.

sand
Loose granular substance formed from worn down rocks, often composed mainly of silica quartz

sediment
Naturally occurring particulate material that consists of differing amounts of soil, silt, sand, clay, rocks and minerals, as well as the remains of plants and animals, that is transported and deposited in a new location by the action of natural processes (e.g., wind, water, ice, gravity).

> **consolidated sediment** has been compacted and the particles cemented together to resemble rock
>
> **unconsolidated sediment** is arranged loosely with particles not cemented together

silt
Solid, dust-like sediment transported and deposited by water, ice, or wind; often found in river deltas and flood plains

slag
Glass-like by-product left over after an industrial process, such as smelting, welding and other metallurgical and combustion processes

sludge
Generic term for a suspension of solids (organic and inorganic) in a liquid slurry usually produced from a range of industrial processes, from water treatment, wastewater treatment and sanitation systems (e.g., sewage sludge, biosolids, industrial wastewater sludge, faecal sludge)

soil
Upper layer of earth containing a mixture of organic material and mineral components

water
Includes water in different states, including liquid, gas (steam, water vapour) and solid (ice, snow); may be fresh or salinated (containing salt)

Appendix 2: Amendment Record

This table summarises amendments to this Import Health Standard.

Number	Details	Date
0	• First publication	10 July 2023
1	• Added Lugol's iodine as a chemical treatment option • Added proficiency and calibration samples to non-potable water	13 September 2023
2	• Added mercuric chloride as a chemical treatment option	7 March 2024