

# Appendix 8

## Lists for hazardous facilities and contaminated land

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## 1.0 Introduction

This appendix contains a number of lists for use in conjunction with [part 9 - Hazardous facilities and contaminated land](#). The lists are as follows:

- The hazardous activities and industries list (HAIL)
- A list of contaminated and potentially contaminated land
- A list of classifications for common substances.

## 2.0 Hazardous activities and industries list

### 2.1 Introduction

The hazardous activities and industries list (HAIL) is a compilation of activities and industries that are considered likely to cause land contamination as a result of the use, storage or disposal of hazardous substances. The HAIL is a revision of the list of industrial activities first published in the Australia New Zealand Guidelines for the Assessment and Management of Contaminated Sites 1992.<sup>1</sup> The HAIL is intended to identify most situations in New Zealand where hazardous substances could cause, and in many cases have caused, land contamination.

In some cases a generic activity involving hazardous substances is listed, irrespective of the industry, for example, petroleum storage. In other cases, an industry is listed on the basis that certain activities typical of that industry involve storage, use, or disposal of hazardous substances, and therefore all sites within that industry should be considered - for example the timber treatment industry. In other cases, particular activities are a small part of a particular industry, with the activity generally localised within larger sites. For example, animal dip sites are listed, but farming is not because dip sites are only a small part of a farm and farming, in general, do not have a high potential to contaminate the complete farm.

The HAIL should be used for consistently reporting on site history (see Contaminated Land Management Guidelines No.1: Reporting on Contaminated Sites in New Zealand, MfE 2003). In accordance with MfE guidelines, the council uses the HAIL for identifying potentially contaminated sites.

### 2.2 The HAIL

The HAIL (see below) defines industries and activities which typically use or store hazardous substances that could cause contamination if these substances escaped from safe storage, were disposed of on the site, or were lost to the environment through their use. The fact that an activity or industry appears on the list does not mean that hazardous substances were used or stored on all sites occupied by that activity or industry, nor that a site of this sort will have hazardous substances present in the land. The list merely indicates that such activities and industries are more likely to use or store hazardous substances and therefore there is a greater probability of site contamination occurring than other uses or activities. Conversely, where an activity or industry that does not appear on the list, this does not guarantee such a site will not be contaminated. Each case must be considered on its merits, considering the information at hand. In applying the list, it must be remembered that the activity may only have occupied a small part of the site, and therefore the possibility of contamination will also be for a small part of the site.

1. Abrasive blasting - carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths) or disposing of abrasive blasting material.
2. Acid/alkali plant, formulation and bulk storage.

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<sup>1</sup> Published by Australian and New Zealand Environment and Conservation Council ('ANZECC') and the National Health and Medical Research Council.

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3. Agrichemical spray contractor's premises used for filling and washing out tanks for commercial agrichemical application.
4. Airports - fuel storage, workshops, washdown areas, stormwater runoff from hardstanding.
5. Analysts - commercial analytical laboratory sites.
6. Asbestos products production, use, and disposal. Also sites with buildings containing asbestos products known to be in a deteriorated condition.
7. Asphalt or bitumen manufacture or bulk storage - manufacturing asphalt or bitumen, or bulk storage of these products, other than at a single-use site used by a mobile asphalt plant.
8. Battery manufacture or recycling - assembling, disassembling, manufacturing or recycling batteries (other than storing batteries for retail sale).
9. Brake lining manufacturers, repairers and recyclers.
10. Cement or lime manufacturing - manufacturing cement or lime from limestone material using a kiln and storing wastes from the manufacturing process.
11. Cemeteries.
12. Chemical manufacture and formulation and bulk storage such that land use consent is required.
13. Coal and coke yards.
14. Concrete manufacture and bulk cement storage.
15. Defence works and defence establishments, including ordinance storage and training areas where live firing is carried out.
16. Drum and tank reconditioning or recycling.
17. Dry cleaning plants - restricted to premises where dry cleaning is carried out and solvents are stored.
18. Electrical transformers - manufacturing, repairing or disposing of electrical transformers or other heavy electrical equipment.
19. Electronics - manufacturing and reconditioning.
20. Engine reconditioning - use of solvents and degreasers.
21. Explosive production or bulk storage.
22. Fertiliser manufacture - manufacturing or bulk storage of agriculture fertiliser.
23. Foundry operations - commercial production of metal products by injecting or pouring molten metal into moulds and associated activities.
24. Gasworks - manufacture of town gas from coal or oil feedstock.
25. Gun, pistol or rifle ranges or areas with lead shot deposition.
26. Iron and steel works.
27. Landfill sites.
28. Livestock dip or spray race operations.
29. Market gardens, orchards, glass houses or other areas where the use of persistent agricultural chemicals occurred.
30. Metal treatment or coating - including polishing, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and finishing, curing works or commercially finishing leather.
31. Mining and extractive industries and mineral processing - including chemically or physically extracting metalliferous ores, exposure of faces or release of groundwater containing hazardous contaminants and storing hazardous wastes, including waste dumps and tailings dams, but not gravel extraction (just note that these areas can be included because of fuel storage).

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32. Motor vehicle workshops.
33. Paint manufacture and formulation.
34. Pest control - commercially operating premises (or former pest destruction board, now regional council sites) where storage and preparation of pesticide occurs, including preparation of poisoned baits and filling or washing of tanks.
35. Pesticide manufacture (including animal poisons, insecticides, fungicides and herbicides) - commercially manufacturing, blending, mixing or formulating pesticides.
36. Petroleum or petrochemical industries or storage, including oil production and operating a petroleum depot, terminal, blending plant or refinery, retail or commercial refuelling facility, and facilities for recovery, reprocessing or recycling petroleum based materials and bulk storage above and below ground.
37. Pharmaceutical manufacture - commercially manufacturing, blending, mixing or formulating pharmaceuticals, including animal remedies and illicit drug manufacturing.
38. Port activities - including dry docks and ship and boat maintenance facilities.
39. Power stations and switchyards.
40. Printing - commercial printing, using metal type, inks and dyes, or solvents.
41. Railway yards - operating a railway yard including goods-handling yards, workshops, refuelling facilities and maintenance areas.
42. Sawmills - use of antisapstain chemicals during milling.
43. Scrap yards - operating a scrap yard including automotive dismantling or wrecking yard or scrap metal yard.
44. Service stations.
45. Smelting or refining - fusing or melting metalliferous ores or refining the metal.
46. Tannery, fellmongery or hide curing - operating a tannery or fellmongery or hide curing works or commercially finishing leather.
47. Transport depots.
48. Storage tanks and drum storage for fuel, chemicals and liquid waste.
49. Waste storage, treatment and/or disposal including land disposal of wastes, but not the use of biosolids as soil conditioners.
50. Wood treatment and preservation and bulk storage of treated timber.
51. Wool, hide and skin merchants (eg drying, scouring).
52. Any site that has been, or could be, subject to the migration of hazardous substances from hazardous substances present in soil or water on adjacent sites.
53. Any other facility or activity that stores, uses or disposes of hazardous substances, in sufficient quantity that intentional or accidental discharge of the substance could be a risk to human health or the environment.

### 3.0 List of contaminated and potentially contaminated land

The following tables list sites identified as having at one time had activities taking place which have or may have resulted in site contamination. A resource consent is required in accordance with the rules under [clause 9.6](#), 'contaminated land' prior to any remediation or redevelopment taking place on these sites. These sites are also identified on the planning maps.

#### 3.1 List for inner islands

Street or location	Street no.	Island	Certificate of title	Legal description	Status as at June 2006
Albert Crescent	2	Waiheke	CT 836/74	Pt Lots 130-131 DP11378	not investigated
Beatty Parade	2-6	Waiheke	CTs 1371/58, 924/8, 1835/7	Lot 619 DP16353; Lot 1 DP132463	under investigation
Beatty Parade	8	Waiheke	CT 916/193	Lot 622 DP16353	not investigated
Beatty Parade	10	Waiheke	CT 916/195	Lot 623 DP16353	not investigated
Beatty Parade	12	Waiheke	CT 1852/6	Lot 624 DP16353	not investigated
Belgium Street	6	Waiheke	CTs 78D/477, 78D/478	Lots 279 and 280 DP11378	not investigated
Belgium Street	8	Waiheke	CT 78D/479	Lot 281 DP14189	not investigated
Belgium Street	25	Waiheke	CT 15D/138	Lot 28 DP11378	not investigated
Calais Terrace	16	Waiheke		Lots 250-251 DP11378	not investigated
Causeway Road (south of road, west of Wharf Road (road reserve))		Waiheke			not investigated
Erua Road (cnr Poto Rd)	28	Waiheke	CT 51B/1086	Lot 94 DP14355	not investigated
Erua Road	30-32	Waiheke	CTs 423/206, 452/167	Lots 95, 96 DP14355	not investigated
Erua Road	34	Waiheke	CT 61A/632	Lot 97 DP14355	not investigated
Matai Road	5-9	Waiheke	CTs 1083/59, 1083/60, 859/264	Lots 375, 376 DP32505; Lot 377 DP29172	not investigated
Miro Road	1	Waiheke	CT 10B/780	Pt Lot 1 DP16816	not investigated
Moana Avenue	24	Waiheke		Pt Lot 13 DP16354; GAZ 1961 P1881	not investigated
Onetangi Road	24	Waiheke	CT 2063/74, 947/76	Lot 2 DP40076; Lot 96 DP11377	under investigation
Onetangi Road (Quarry)	88	Waiheke	CTs 1548/28, 2044/98, 479/138	Lot 8, Pt Lots 9,10 DP11656; Pt Lot 9 DP21487; Gaz 1955 P968; Gaz 1985 P3843	not investigated
Onetangi Road	165	Waiheke	CTs 30A/1492, 50D/1051	Lot 2 DP94533; Pt Lot 15 DP11657	not investigated
Onetangi Road	205	Waiheke	CT 823/81	Lot 1 DP32130	not investigated
Ostend Road	102	Waiheke		Lots 22-27 DP33320; Pt Lot 60	not investigated

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Street or location	Street no.	Island	Certificate of title	Legal description	Status as at June 2006
				DP11656	
Ostend Road	104-110	Waiheke		Lot 2 DP207850; Pt Lot 125 DP14355; Lot 3 DP207850; Area A SO 64165; Pt Lot 125 DP14355	not investigated
Tahi Road	4-6	Waiheke	CTs 47A/726, 47C/454	Lots 5,6 DP14355	not investigated
Tahi Road	8	Waiheke	CT 1333/47	Lot 7 DP14355	not investigated
<u>Tahi Road</u>	<u>10</u>	<u>Waiheke</u>	<u>CT1333/46</u>	<u>Lot 8 DP14355</u>	<u>not investigated</u>
Tahi Road	34	Waiheke	CT 64B/105	Lot 20 DP14355	not investigated
Tahi Road	35-37	Waiheke	CTs 47A/70, 717/206	Lots 106 and 107 DP14355	not investigated
Tahi Road	39-43	Waiheke	CT 58D/643	Lots 103-105, DP 14355	not investigated
Taraire Road (road reserve)	14-18	Waiheke			not investigated
The Esplanade, Surfdale - cnr of Blake Street	90	Waiheke		Lots 114 and <del>115</del> DP16354	not investigated
Tui Street	4	Waiheke	CT 123197	Lots 305 and 306 DP29172	under investigation
Administration Bay (Raupoiti), Outdoor Education Centre		Motutapu		Secs 10,11 block v Rangitoto survey district SO45588; SO55383; GN900606.1	not investigated
Islington Bay, DOC workshop		Motutapu		Secs 10,11 block v Rangitoto survey district SO45588; SO55383; GN900606.1	operational underground tank
Karamuramu Island		Karamuramu	CT 753/137	ML2974	operational quarry
Pakatoa Island		Pakatoa	CT 778/245	OL317	not investigated

**Note:** The above list does not necessarily identify all contaminated or potentially contaminated land for the inner islands. The list may be updated by means of a variation or plan change as new information becomes available.

### 3.2 List for outer islands

Street or location	Street no.	Island	Certificate of title	Legal description	Status as at June 2006
Aotea Road	2070	Great Barrier		Lot 4 DP125153	not investigated
Hector Sanderson Road	129 and 143	Great Barrier	CTs 120B/399, 121C/120, 121C/792, 135D/641, 120B/398, 55C/737	Lots 1 and 2 DP190213; Lot 2 DP100765; Lot 1 DP195229; Lots 2 and 3 DP209113; Pt Allot 180	not investigated
Mulberry Grove Road	1	Great Barrier	CT 31D/416	Lot 1 DP64350	not investigated
Port Fitzroy	-	Great Barrier		Port sea bed, Port Fitzroy	not investigated
Whangaparapara Road	-	Great Barrier	CT 604/213	Lot 7 DP44290	not investigated
Whangaparapara Wharf - Aotea Road	-	Great Barrier	CT 78C/171	Lot 1 DP132463	not investigated

**Note:** the above list does not necessarily identify all contaminated or potentially contaminated land for the outer islands. The list may be updated by means of a variation or plan change as new information becomes available.

## 4.0 List of classifications for common substances

The table below identifies the HSNO subclasses for some commonly used hazardous substances. This information is to assist users in applying [table 89.1 Hazardous facilities consent status](#).

Type of product	HSNO classification (sub- class)	Synonyms or product names	Comments
<b>Gases</b>			
1-Butene	2.1.1A	Butylene	
Ammonia, anhydrous	2.1.1B, 6.1C, 8.1A, 8.2B, 8.3A, 9.1A		
Ammonia, >50% aqueous solution	2.1.1B, 6.1D, 8.1A, 8.2B, 8.3A, 9.1A, 9.3B		
Ammonia, 35 - 50% aqueous solution	2.1.1B, 6.1D, 8.1A, 8.2B, 8.3A, 9.1A, 9.3B		
Chlorine	5.1.2A, 6.1A, 6.9A, 8.1A, 8.2A, 8.3A, 9.1A, 9.2A		
Cyclopropane	2.1.1A		
Ethene	2.1.1A	Ethylene	
Ethyne	2.1.1A	Acetylene, Narcylen	
LPG (liquefied petroleum gas)	2.1.1A		
Methane, ethane, butane, propane	2.1.1A		
Propane, 2-methyl-	2.1.1A	Isobutane	
Carbon dioxide and oxygen mixture, compressed (>23% oxygen)	5.1.2A		
Oxygen	5.1.2A		
<b>Fuels, solvents and other petrochemicals</b>			
Petrol	3.1A, 6.1E, 6.3B, 6.7B, 9.1B		
Diesel (automotive gas oil and marine diesel fuel)	3.1D, 6.1E, 6.3B, 6.7B, 9.1B		
Low flashpoint diesel (low flash domestic heating oil and alpine diesel)	3.1C, 6.1E, 6.3B, 6.7B, 9.1B		
Kerosene	3.1C, 6.1E, 6.3B, 9.1B	Kerosine	
Aviation gasoline and racing gasoline (Avgas 100 and Avgas 100LL)	3.1A, 6.1E, 6.3B, 6.7B, 6.8A, 9.1B		
Mineral turpentine	3.1C, 6.1E, 6.3B, 9.1B		
Cutback bitumen (containing more than 10% kerosene)	3.1D, 6.3B, 9.1C		
Heavy fuel oil	3.1D, 6.3B, 6.7B, 9.1C		
Aliphatic hydrocarbon solvents – very low flashpoint	3.1A, 6.1E, 6.3B, 9.1B		

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Type of product	HSNO classification (sub- class)	Synonyms or product names	Comments
Aromatic hydrocarbon solvents – very low flashpoint	3.1A, 6.1E, 6.3B, 6.7B, 9.1B		
<b>Agrichemicals</b>			
2,4-D	3.1D, 6.1D, 6.3B, 6.5B, 6.9A, 9.1A, 9.2A, 9.3C	Products include Pasture-Kleen Herbicide, Relay, Thistle Killen	There are other 2,4-D formulations that may have different classifications
Amitrole	6.1E, 6.4A, 6.8B, 6.9A, 9.1B, 9.2A	Products include Amitrole 400, Amitrole 4L, Chemagro Amitrole 40AC, Hard to Kill Weedkiller, Nuchem Activated, Yates Amitrole	There are other Amitrole formulations that may have different classifications
Carbaryl	6.1C, 6.5B, 6.7B, 6.9B, 9.1A, 9.2B, 9.3B, 9.4A	Yates Carbaryl Liquid	There are other Carbaryl formulations that may have different classifications
Carbendazim	6.6A, 6.8A, 6.9B, 9.1A, 9.2B	Products include Bavistin DF, Bavistin FL, Goldazim 500 SC, Headland Addstem, MBC 500 Flo, MBC 800 WDG, Prolific, Yates Carbendazim	There are other Carbendazim formulations that may have different classifications
Chlorothalonil	6.1B, 6.3B, 6.4A, 6.5B, 6.7B, 6.9A, 9.1A, 9.2B, 9.3B	Products include Balear 500SC, Barrachlor, Blizzard, Bravo 720SC, Chlorotek, Chrotop 720SC, Dacotec 720SC, Elect 750SC	There are other Chlorothalonil formulations that may have different classifications
Chlorpyrifos	3.1D, 6.1C, 6.3B, 6.4A, 6.9A, 9.1A, 9.2B, 9.3A, 9.4A	Products include Chlorpyrifos 48EC, Dursban NF Insecticide, Jolyn CHLOR-P 480EC, Lorbsan 50EC Insecticide, Pyrinex 480 EC Insecticide	There are other Chlorpyrifos formulations that may have different classifications
Copper	6.1D, 6.3B, 6.5B, 6.9B, 8.3A, 9.1A, 9.3C	Products include Blue ShiledPF, Champ DP, Hydropro WDG, Kocide 2000, Kocide DF	There are other copper formulations that may have different classifications
Diazinon	6.1D, 6.8B, 6.9A, 9.1A, 9.2D, 9.3A, 9.4A	Products include Basudin 600 EW, Diazinon 20G, Diazinon 50W, Diazol 50 EW Insecticide, Gesapon 20G, Hortcare Diazinon WP	There are other Diazinon formulations that may have different classifications
Dicamba	6.1E, 6.3A, 6.5B, 6.9B, 8.3A, 9.1A, 9.2A, 9.3C, 9.4C	Crop Care Dicamba	There are other Dicamba formulations that may have different classifications
Endosulfan	3.1B, 6.1C, 6.3A, 6.4A, 6.5B, 6.8B, 6.9A, 9.1A, 9.2B, 9.3B, 9.4B	Endo 350EC	There are other Endosulfan formulations that may have different classifications
Ethofumesate	9.1B, 9.2A	Products include Claw, Expo 500, Nortron, Pasture Clear	There are other Ethofumesate formulations that may have different classifications
Glyphosate3	6.1D, 6.4A, 9.1B	Products include Agrichem Glyphosate, Jolyn G360	There are other Glyphosate3 formulations that may have different

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Type of product	HSNO classification (sub- class)	Synonyms or product names	Comments
			classifications
Iprodione	6.9B, 9.1A	Products include Defence, Ippon 500SC, Rapid 500, Rovral WP	There are other Iprodione formulations that may have different classifications
Maldison	3.1C, 6.1D, 6.3B, 6.4A, 6.8B, 6.9A, 9.1A, 9.3B, 9.4A	Products include Garden King Malathion, Insect Killer, Malathion 500EC, Maldison Liquid	There are other Maldison formulations that may have different classifications
Mancozeb	6.3B, 6.4A, 6.5A, 6.5B, 6.9B, 9.1A	Products include Dithane DF Rainshield Fungicide, Mancozeb 80W, Manzate 200DF, Manzate WP, Pennzocab DF	There are other Mancozeb formulations that may have different classifications
MCPA	6.1D, 6.9A, 8.3A, 9.1A, 9.2A, 9.3C	Products include Crop Care MCPA, Jolyn Clean Sweep, MCPA 400, MPCA Herbicide	There are other MCPA formulations that may have different classifications
Metsulfuron-methyl	6.3B, 6.4A, 9.1A, 9.2A	Products include Agpro Meturon, Associate 600 WDG, Dow Agrosiences Metsulfuron, Matrix, Metro 200WDG, Metsy 200G, Mustang, Xact	There are other Metsulfuron-methyl formulations that may have different classifications
Phorate	6.1A, 6.8B, 6.9A, 9.1A, 9.2B, 9.3A, 9.4B	Products include Crop Care Phorate 20G, Ground Zero, Nufarm Phorate, Thimet 20G	There are other Phorate formulations that may have different classifications
Thiram	6.1C, 6.3B, 6.4A, 6.5B, 6.9B, 9.1A, 9.3B	Products include No Garden Diseases Thiram 80% Fungicide, Yates Thiram, Thiram DF, Thiram Technical Seed Dressing Fungicide	There are other Thiram formulations that may have different classifications
Triclopyr	6.1D, 6.3B, 6.4A, 6.5B, 6.9B, 9.1A, 9.2A, 9.3C	Products include Brush Off, Grazon, Scrubcutter, Victory	There are other Triclopyr formulations that may have different classifications
<b>Miscellaneous chemicals</b>			
Acetaldehyde	3.1A, 6.1D, 6.4A, 6.6A, 6.7B, 6.8B, 6.9B, 9.1D, 9.2D, 9.3C		
Acetic acid, >80% aqueous solution	3.1C, 6.1B, 6.9B, 8.1A, 8.2B, 8.3A, 9.1D, 9.3C		
Acetic acid, 10-30% aqueous solution	6.1E, 6.9B, 8.1A, 8.2C, 8.3A		
Ammonia, >10-35% aqueous solution	6.1D, 8.1A, 8.2C, 8.3A, 9.1A, 9.3C		
Antifouling paints (generic)	3.1C, 6.1D, 6.3B, 6.4A, 6.5B, 6.7B, 6.8B, 6.9B, 9.1A, 9.2C, 9.3B		Applies to most antifouling paints containing any of chlorothalonil, cuprous oxide, zinc oxide or copper thiocyanate. Not all are suspected carcinogens, particularly in lower concentrations
Methylated spirits	3.1B, 6.1E, 6.4A, 6.8B, 6.9A, 9.1D		Restrictions proposed if it contains methanol and denatonium benzoate

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Type of product	HSNO classification (sub- class)	Synonyms or product names	Comments
Nitric acid, >70%, other than red fuming	5.1.1C, 6.1D, 6.9B, 8.1A, 8.2A, 8.3A, 9.1D		
Nitric acid, red fuming	5.1.1C, 6.1A, 6.9B, 8.1A, 8.2A, 8.3A, 9.1C		
Phosphoric acid, 1-10% aqueous solution	6.1C, 8.1A, 8.2C, 8.3A, 9.1D		
Sodium hydroxide, >5% aqueous solution	6.1C, 8.1A, 8.2B, 8.3A, 9.1D		
Sodium hydroxide, 0.5-2% aqueous solution	6.1E, 6.3A, 6.4A		
Sodium peroxide	5.1.1C, 8.1A, 8.2A, 8.3A, 9.1D		
Sulphuric acid, fuming	6.1A, 6.7A, 6.9A, 8.1A, 8.2A, 8.3A, 9.1D		
Sulphuric acid, 0.5-5% aqueous solution	6.1E, 6.3A, 6.4A, 8.1A, 9.1D		
Zinc chloride	6.1C, 8.1A, 8.2C, 8.3A, 9.1A, 9.3B		

### Note:

This table does necessarily list all the chemicals that you may seek to use. Be aware that all hazardous substances including petrochemicals, agrichemicals, explosives, fumigants, veterinary medicines, timber preservatives, antiseptics, antifouling paints and vertebrate toxic agents are controlled by the Hazardous Substances and New Organisms Act 1996 and have been assigned a hazard classification. The legal mechanism for transfer was by regulation for explosives or in the case of all other substances, by notice in the New Zealand Gazette. Transfer and gazette notices which list all substances and their hazard classifications are available from the Environmental Risk Management Authority (ERMA) New Zealand by contacting them on 0800 376 234 or online at [www.ermanz.govt.nz/hs/transfer/docs.html](http://www.ermanz.govt.nz/hs/transfer/docs.html)