

| REFERENCE OF TENDER  | DESCRIPTION OF TENDER                                                                                                                                                                                                                                                                                                                                                      | TIME PERIOD OF TENDER | DEPARTMENT/DIVISION/UNIT REQUESTING TENDER | FEES    | CLOSING DATE NOT LATER THAN 2.00PM | FOCAL PERSON                                                                                                                                                                                           |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------|---------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KK/176/2024/ESTETMOH | <p>TERM CONTRACT FOR DISPOSAL OF HAZARDOUS WASTE INCLUDING COLLECTION, TRANSPORTATION AND INCINERATE SERVICES FROM RIMBA DIALYSIS CENTRE AND KIARONG DIALYSIS CENTRE FOR A PERIOD OF ONE (1) YEAR</p> <p><b>Eligibility For Tenderers:</b><br/>Registered With Ministry Of Health And Department of Environment, Park and Recreation (JASTRE), Ministry of Development</p> | 1 YEAR                | ESTET MANAGEMENT & PROJECT DEVELOPMENT     | \$30.00 | 3 <sup>RD</sup> SEPT 2024          | <p>Acting Assistant Director of Project Development<br/>Estet Management &amp; Project Development<br/>Ministry of Health<br/>Negara Brunei Darussalam<br/>Contact No : 2381640 ext 7926/7924/7928</p> |

**NOMBOR TAWARAN: KK/176/2024/ESTETMOH**

**KEMENTERIAN KESIHATAN  
NEGARA BRUNEI DARUSSALAM**

**TERM CONTRACT FOR DISPOSAL OF HAZARDOUS WASTE  
INCLUDING COLLECTION, TRANSPORTATION AND INCINERATE  
SERVICES FROM RIMBA DIALYSIS CENTRE AND KIARONG  
DIALYSIS CENTRE FOR A PERIOD OF ONE (1) YEAR**

**YURAN TAWARAN: \$30.00**

**NOMBOR RESIT :**

**TARIKH TUTUP : HARI SELASA, 3HB SEPTEMBER 2024**

**JAM : 2.00 PETANG**

**KEPADA :**

**PENGERUSI LEMBAGA TAWARAN KECIL  
PETI TAWARAN, TINGKAT BAWAH  
BANGUNAN KEMENTERIAN KESIHATAN  
COMMONWEALTH DRIVE  
BANDAR SERI BEGAWAN BB 3910  
NEGARA BRUNEI DARUSSALAM**

**(CLUSTERING)**

## SECTION 2

### SPECIFICATIONS

TENDER REFERENCE NO.: KK/176/2024/ESTETMOH(TC)

#### INVITATION TO TENDER

**TERM CONTRACT FOR DISPOSAL OF HAZARDOUS WASTE INCLUDING COLLECTION, TRANSPORTATION AND INCINERATE SERVICES FROM RIMBA DIALYSIS CENTRE AND KIARONG DIALYSIS CENTRE FOR A PERIOD OF ONE (1) YEAR**

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#### 1.0 GENERAL

- 1.1 Tenderers are sought from suitably qualified contractors who wish to be considered for the provision of disposal services (hereinafter referred to as “Disposal Services”) for clinical wastes at the following sites (hereinafter referred to as “Dialysis Centre”):
- Rimba Dialysis Centre
  - Kiarong Dialysis Centre
- 1.2 The duration of the Disposal Services is for **ONE (1) year** OR upon reaching **10,000 kg** quota whichever comes first.
- 1.3 The Contractor shall warrant that he shall be registered and/or be permitted by the Department of Environment, Park and Recreation within a grace **one (1) year period** starting from the duration of duration of this Contract to obtain authorization/permission to conduct incineration activities. This shall also apply in obtaining a valid Builder’s License possessing suitable class and category for the nature of this work from the Authority for Building Control and Construction Industry (ABCI), Ministry of Development.

#### 2.0 SCOPE OF WORK

- 2.1 The Contractor shall provide Disposal Services which shall include collection of Clinical Waste at Hospital, transportation of said waste away from Hospital, incinerate and finally treatment and disposal of the waste at an approved facility.
- 2.2 The offsite transportation, including logistic staff, vehicles requirements, labelling of the transport vehicle and transport documentation, shall be in accordance with the requirements stipulated in the Ministry of Health’s Guidelines on Healthcare Waste Management (version October 2019).
- 2.3 The Site shall be a facility that has been approved by the Department of Environment, Parks and Recreation. The treatment and disposal methods shall be one or more of the recommended treatment and disposal options listed in the Ministry of Health’s Guidelines on Healthcare Waste Management (version October 2019).
- 2.4 Contractor shall, at all times and at his own due diligence, adhere to the relevant guidelines, directives and regulations issued by the relevant government agencies and/or authorities, including among others, Ministry of Health, Department of Environment, Parks and Recreation and Safety, Health and Environment National Authority (SHENA).

2.5 The designated collection point (hereinafter referred to as "Collection Point") for the Clinical Waste are as follows:

1. Rimba Dialysis Centre
2. Kiarong Dialysis Centre

During the Contract period, the collection point may be changed whenever required/directed by the Ministry and no additional charges shall be claimed by the Contractor.

2.6 The Contractor shall ensure his workers are trained for the proper handling of Clinical Waste and adhere to enforced protocols/procedures to prevent infection.

2.7 The Contractor shall weigh the Clinical Waste collected prior to incineration. All original receipt or documentation produced during the weighing shall be attached with the progress payment claim.

2.8 The Contractor must ensure his incinerator and all other equipment are well maintained and kept in good condition for the efficient incineration of Clinical Waste. This shall also include ensuring the emissions from the incineration standards meet the requirements set by Department of Environment, Park and Recreation.

2.9 The Contractor shall ensure Toxicity Characteristic Leaching Procedure (TCLP) test are conducted periodically to certify that the ashes/solid product from the incinerator meet the standards set by Department of Environment, Park and Recreation prior to disposing at approved facility.

2.10 A copy of the Toxicity Characteristic Leaching Procedure (TCLP) test result shall be submitted together during every payment claim.

2.11 The Contractor shall also attach a copy of consignment note after disposal of solid waste/ashes at approved facility.

### **3.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

3.1 The Contractor shall at his/her its own expense, supply its personnel and sub-contractor's personnel, required in connection with the safe performance of the work, with adequate protective personal clothing and other protective equipment which shall be maintained in good condition or replaced and shall be worn on relevant occasions as indicated by notices, instructions and good practice.

3.2 The S.O. have the right to stop the work or does not allow entry to Hospital if the PPE worn by the workers assigned is deemed unsatisfactory.

3.3 The PPE stated below are **mandatory** to be worn by the Contractor's workers during collection of Clinical Waste:

1. Helmets, with or without visors - depending on the activity
2. Face masks - obligatory
3. Eye protectors (safety goggles) - obligatory
4. Overalls (coveralls) – obligatory
5. Industrial aprons (length until shin) – obligatory
6. Leg protectors and/ or industrial boots – obligatory
7. Disposable gloves (for medical staff) or heavy duty/ cut resistance gloves (for waste workers) – obligatory

3.4 The PPE shall be cleaned by washing each time after collection. Disposable PPE shall not be reused.

3.5 A penalty shall be imposed on the Contractor if the PPE worn are not adequate.

#### 4.0 TRANSPORT

4.1 Any vehicle used to transport healthcare waste should fulfill several design criteria:

1. The body of the vehicle should be of a suitable size commensurate with the design of the vehicle.
2. There should be a bulkhead between the driver's cabin and the vehicle body, which is designed to retain the load if the vehicle is involved in a collision.
3. There should be a suitable system for securing the load during transport.
4. Empty plastic bags, suitable protective clothing, cleaning equipment, tools and disinfectant, special kits for dealing with liquid spillages, should be carried in a separate compartment in the vehicle.
5. The internal finish of the vehicle should allow it to be steam-cleaned and internal angles should be rounded to eliminate sharp edges to permit more thorough cleaning and prevent damage to waste containers.
6. The vehicle should be marked with the name and address of the waste carrier
7. An international hazard sign should be displayed on the vehicle and containers, as well as an emergency telephone number.

4.2 Vehicles or containers used for transporting healthcare waste should not be used for transporting any other materials. Vehicles should be kept locked at all times, except when loading and unloading, and kept properly maintained.

4.3 Contractor shall ensure clinical waste collected are secured, placed in container/bin/others suitable during collection and concealed using canvas/others from public during transport.

4.4 Vehicles and transporting containers used for the transportation of waste should be cleaned and disinfected daily after use. Mechanical cleaning, combined with soaps and detergents, which act as solubility promoting agents, can be used. Cleaning and disinfection have to be carried out in a standardized manner or by automated means that will guarantee an adequate level of cleanliness.

#### 5.0 DISPOSAL SERVICE

5.1 The Contractor shall be made aware that the average daily Clinical Waste produced is **2.0 tons per day** (from both Rimba Dialysis and Kiarong Dialysis Centre)

5.2 The Contractor is required to collect the Clinical Waste from Dialysis Centre on a daily basis including off day or public holiday at no extra charges.

5.3 The collection interval shall be at least **2 trips** per day and/or until fully cleared during office hours and at similar time during Friday, Sunday and Public Holiday.

5.4 The Contractor shall be responsible in ensuring the clinical waste at Collection Point are fully cleared/emptied on a daily basis.

5.5 The S.O. may instruct at any time to collect additional clinical waste as an adhoc request whenever necessary at no additional charges.

5.6 The Contractor shall submit daily report on the collected waste.

## **6.0 PENALTIES**

6.1 A penalty of **B\$100.00 per day** shall be imposed if the Contractor failed to collect the Clinical Waste each day without informing the S.O or without justified reasons (Clause 4.2, Section 2) and shall be deducted from the amount payable to the Contractor

6.2 A penalty of **B\$50.00** shall be imposed for each non-compliance to PPE requirements found during the collection of Clinical Waste which shall be deducted from the amount payable to the Contractor.

## **7.0 CONTRACT PRICE AND PAYMENTS**

7.1 The proposed Contract Sum shall be deemed to cover all costs involved in performing the Disposal Services including all costs, charges and expenses for labour, materials, consumables, tools, equipment, transport, documentation, insurance, taxes, duties, overheads and any other necessary items. This proposed Contract Sum shall remain fixed and firm for the contract duration.

7.2 The Contractor shall submit the invoice of the previous month on the first week of the following month. All claims shall be addressed to:

*Officer in-charge*  
*Estate Maintenance Section*  
*Estate Management and Project Development Section*  
*Ministry Of Health*  
*Negara Brunei Darussalam*

7.3 All progress payment claim shall consists of the following:

1. Service report consisting of the weigh of clinical waste collected per day.
2. Original weighing receipt/documentation.
3. TCLP test results.
4. Original consignment notes to approved landfill facilities.

## **8.0 USE OF SITE**

8.1 The Contractor shall keep both his site and Dialysis Centre clinical waste disposal clean and tidy at all times.

8.2 Any damages to the Dialysis Centre assets found on site shall be reported to the S.O. and if the damages occurred is due to negligence during the contract period, it shall be reinstated by the Contractor at no extra cost.

8.3 Any job done which are not within the contract scope and done without S.O.'s approval shall not be claimed and will not be entertained due to negligence of contractor.

## **9.0 SUPERVISION AND PERSONNEL**

9.1 The Contractor shall provide and employ qualified and competent workers to perform the Disposal Services.

9.2 The Contractor shall ensure that such personnel are properly trained, possess suitable work pass endorsed by the relevant Department or Authority, Brunei Darussalam and employed by the Contractor throughout the contract period.

## **10.0 INSURANCES**

10.1 The Contractor shall warrant that he will maintain at his own expense insurances such as workers' compensation for the duration of this Contract.

10.2 If the Contractor by default have been insured by the required insurance, he shall clarify whether the coverage is inclusive of this Contract and shall furnish certificates/documents showing that such insurance is in effect and sufficient.

10.3 In the event where the Contractor do not possess such insurance, his quoted price shall be deemed to have included the cost of obtaining such insurance and shall without failure submitted to the S.O. for verification during the tender award stage.

## **11.0 SECURITY**

11.1 Where the Maintenance Services is to be carried out within a secure area, the Contractor shall provide to the Superintending Officer full details of all his personnel and vehicles requiring access to the site, not less than seven (7) days before entry is required. Details shall include the following particulars:

- Name
- Address
- Identity card number / passport number
- Gender
- Citizenship
- Expiry date of work pass (for foreign workers)

11.2 Where security passes are issued to the Contractor's personnel, the Contractor is responsible for the proper use of the passes.

11.3 The Contractor shall ensure that the passes are immediately returned to the authorities when they are no longer required due to the employee not being engaged to work at the secured area, or if the employee has left the Contractor's employment.

## **12.0 REPORTS**

12.1 A record of the the Disposal Services shall be logged which shall contain:

- Name of workers who are collecting the clinical waste
- Plate license of the vehicle used
- Date and time of collection

12.2 The log book must be available for inspection by the Superintending Officer at any time.

12.3 Before sending hazardous healthcare wastes offsite, transport documentation (commonly called a 'consignment note' or 'waste tracking note') should be prepared and carried by the driver. The consignment note for a vehicle carrying hazardous healthcare waste should include the following information in case of accidents or official inspection:

1. Waste classification
2. Waste sources
3. Pick-up date management of wastes from healthcare activities
4. Destination
5. Driver name
6. Number of containers or volume
7. Receipt of load received from responsible person at pick-up areas

12.3 This information allows quick and effective counter measures to be taken in the event of an accident or incident. Weight of wastes is useful for commercial treatment and disposal operators who bill healthcare facilities for their waste services.

**13.0 HEALTH AND SAFETY PRECAUTIONS AGAINST FIRE, NOISE CONTROL, etc**

13.1 The Contractor shall provide all necessary measures to comply with all health and safety regulations and rules currently in place. The Contractor shall also comply with all orders and instructions given to him from time to time by the Superintending Officer with regards to health and safety of persons in the vicinity of any site, site regulations and the work in general.

13.2 The Contractor shall take all reasonable precautions to prevent loss or damage by fire, comply with existing fire regulations and all instructions given to him by the Superintending Officer with regards to fire precautions and prevention.

13.3 The Contractor shall also ensure that all measures are taken to control noise levels produced during the Disposal Services.



## **1.0 INTRODUCTION**

- 1.1 Environmental impacts can be mitigated by ensuring that any development is sited in a designated area and pollution control measures are incorporated in its design.
- 1.2 The purpose of the guidelines are to serve as quick reference on pollution control requirements of the Department of Environment, Parks and Recreation for industrial development being proposed or submitted through the industry/land development authority. It is hoped that the guidelines would assist industrialists, architects, professional engineers and consultants in the design and operation of industrial premises.
- 1.3 These requirements are based on the proposed Environment Order for Brunei Darussalam and complement other pollution control related requirements that may be set by the industry, land and/or building development control authorities. The type of industrial premises covered by the guidelines is for premises listed in **Appendix 1**.
- 1.4 To ascertain the impact of the development in relation to the surrounding environment and vice versa the project proponent or developer need to submit via the industry/land development authority the following details for review by the Department of Environment, Parks and Recreation:
- (i) The trade or industry process proposed to be carried in or on the premises;
  - (ii) The measures the applicant undertakes to adopt to control land, air, water and noise pollution from the premises; and
  - (iii) The measures the applicant undertakes to adopt to manage solid waste, hazardous substances and to treat and dispose of toxic substances originating from or stored within the premises.

## **2.0 WATER POLLUTION CONTROL**

- 2.1 General requirements for water pollution control are:
- 2.1.1 Trade effluent shall be treated to the allowable limits before discharge into a public sewer or watercourse. The recommended standards for industrial effluents to sewers that discharge themselves to a sewage treatment plant and direct discharges to the environment are given in **Appendix 2 & 3** respectively.
  - 2.1.2 Rainwater shall not be discharged into a public sewer. It shall be channelled into a watercourse. Contaminated rainwater from process areas shall be collected and treated before discharge into the watercourse.

2.1.3 Secondary containment facilities shall be provided for storage tanks containing oils and chemicals to contain accidental release of the entire content of the largest storage tank.

2.2 Specific Requirements for certain operations are as follows:

2.2.1 Chemical/Oil Store

A chemical/oil store shall be provided with facilities to contain any leak and spillage. Such an area shall not have any outlet/opening leading to a storm water drain or a sewer. All leaks and spillage shall be collected for proper disposal as toxic industrial wastes.

2.2.2 Chemical/Oil Bulk Storage Tanks

A full containment facility shall be provided for underground or above ground bulk storage tanks (including skid tanks). The capacity of the containment facility shall not be less than the capacity of the largest tank.

2.2.3 Chemical Warehouses

- (i) Separate fire compartments shall be provided for the storage of substances that can react dangerously with one another. Substances in the same hazard categories may be stored together as long as the compartment is protected against the most hazardous substance.
- (ii) A retention basin for fire fighting water shall be provided for the storage of hazardous substances.
- (iii) The floor of the chemical warehouse shall be coated with a layer of chemical-resistant material.

2.2.4 Laboratory

- (i) Wastewater generated from a chemical analysis laboratory shall be discharged into a sewer via a balancing tank, which is also known as a dilution tank.
- (ii) Wastewater generated from a biological/food analysis laboratory, however, shall be discharged directly into a sewer.

#### 2.2.5 Aquaculture Farm

- (i) Trade effluent generated from aquaculture farms shall be treated to comply with the allowable limits before it is discharged into a watercourse. If the trade effluent does not include rainwater, it may be treated for discharge into a public sewer.
- (ii) Sludge, if generated, shall be stabilised, dewatered and disposed of as solid waste.

#### 2.2.6 Livestock Farm

- (i) Trade effluent generated shall be collected and treated to comply with the allowable discharge limits before discharging into a public sewer or watercourse where a public sewer is not available.
- (ii) Animal wastes and sludge generated from wastewater treatment shall be stabilised, dewatered and disposed of as solid waste.
- (iii) Poultry wastes may be collected for disposal as solid wastes. The wastes shall be stored inside a storage shed with a containment facility.

#### 2.2.7 Horticultural Farm

Pesticides and fertilizers that are approved by the Agriculture Department shall be used. The pesticides and fertilizers shall be applied strictly in accordance with the guidelines of the manufacturers or distributors to prevent pollution of surface water.

### 3.0 AIR POLLUTION CONTROL

- 3.1 Trade and industrial premises, which carry out activities that can generate air impurities, are required to install, operate and maintain air pollution control equipment properly and efficiently. The pollution control equipment shall be designed to comply with the allowable emission standards. The recommended emission standards for air impurities are given in **Appendix 4**. For air impurities with no prescribed emission standards, the best practical means shall be adopted to minimise air pollution. Exhaust gases from the pollution control equipment shall be emitted into the atmosphere through a discharge stack.
- 3.2 The use of open fire to dispose of waste wood, timber and other combustible wastes is prohibited.

- 3.3 Fuel burning equipment shall be efficiently operated and maintained. A chimney of an agreed height shall be provided for the safe dispersion of flue gases from fuel burning equipment. The minimum height shall be at least 3m above roof level of the factory building or 15m measured from ground level whichever is the higher.
- 3.4 Monitoring equipment shall be provided at the discharge stacks and chimneys to monitor air impurities emitted. The monitoring equipment shall be installed in accordance with the technical specifications of the equipment supplier to give accurate readings. If sampling ports are provided for manual installation of portable sampling equipment, the ports shall be installed such that they are accessible. As an alternative to monitoring the emission of air impurities at discharge stacks or chimneys, equipment may be provided to monitor the performance of automatic devices used to secure more efficient operation of any pollution control or fuel burning equipment.

#### **4.0 NOISE POLLUTION CONTROL**

- 4.1 All practical noise abatement measures shall be adopted to comply with the allowable boundary noise levels. The recommended boundary noise levels are given in **Appendix 5**.
- 4.2 Mechanical equipment such as air compressors, chillers, cooling towers and air-conditioners, etc. shall be sited as far away as practical from the noise-sensitive and residential buildings. Noise abatement measures, if required, shall be provided to comply with the allowable boundary noise levels.

#### **5.0 HAZARDOUS SUBSTANCE CONTROL**

- 5.1 Industries that need to import, store and use hazardous substances are required to obtain approval from the Department of Environment, Parks and Recreation as well as submit to the Department the Material Safety Data Sheet (MSDS) for the substances. This is in addition to obtaining the necessary approval/license/permit for the import, store and use of the substances as may be specified by the relevant authority, laws and regulations covering that specific substance (e.g. Poisons Act). Storage and handling of the substance must be in accordance with the MSDS. Depending on the quantity and substance, the Fire Services Department and Police Department may also need to be notified prior to transporting the hazardous substances. **Appendix 6** is a list of Hazardous Substances.

- 5.2 Preventive measures to minimise accidental releases of hazardous substances into the environment need to be taken and emergency response plans need to be put in place to deal with all credible accident scenarios of release of hazardous substances. The preventive measures include the following:
- (i) containers constructed and inspected in accordance with internationally acceptable standards are used for the storage of hazardous substances and affixed with approved labels;
  - (ii) storage areas are equipped with containment as well as disposal facilities to deal with any accidental release of hazardous substances;
  - (iii) route and time of transportation are specified for the transportation of hazardous substances;
  - (iv) Drivers of vehicles carrying hazardous substances need to be knowledgeable and trained on safety requirements and precautions, first aid and fire fighting.
- 5.3 Companies that store and use hazardous substances should carry out a safety audit to systematically identify and rectify weakness in their management systems and practices for handling hazardous substances on a regular basis.

## **6.0 HAZARDOUS INDUSTRIAL WASTE CONTROL**

- 6.1 Factories are required to ensure that their hazardous wastes are treated and disposed in an environmentally safe manner. Examples of hazardous industrial wastes are listed in **Appendix 7**.
- 6.2 Department of Environment, Parks and Recreation need to be notified should the factory want to engage the services of industrial waste collectors to collect their wastes for recycling or treatment for safe disposal inside or outside the country.
- 6.3 Operators of specialised hazardous waste recycling, treatment and disposal plants are required to obtain approval from Department of Environment, Parks and Recreation to collect, treat and dispose of hazardous industrial wastes from industries. They are also required to inform the Fire Services Department when transporting the hazardous industrial wastes. The operators are required to maintain a proper record on collection, treatment and disposal of hazardous industrial wastes.

## **7.0 SELF-MONITORING AND SUBMISSION OF RESULTS**

- 7.1 The owner or occupier of any industrial premises from which any air impurity, trade effluent or hazardous substances is generated and emitted into the atmosphere, discharged into the environment need to install suitable monitoring equipment or system, agreed by the Department of Environment, Parks and Recreation, at any point along the line of discharge, to monitor the quality and quantity of such emission or discharge or both.
- 7.2 The owner or occupier of the industrial premises with monitoring equipment or systems installed shall:
- (i) ensure that such equipment or system is working in a proper and efficient manner;
  - (ii) Keep a proper record of all monitoring results; and
  - (iii) Submit the records to the Department of Environment, Parks and Recreation on a quarterly basis and as and when may be required.
- 7.3 The owner or occupier of the industrial premises with monitoring equipment or systems installed shall report to the Department of Environment, Parks and Recreation should the level of emission or discharge fails to comply with the recommended standards or requirements.

## **8.0 COMPLIANCE WITH STANDARDS**

- 8.1 Every new facility shall comply with the guideline's recommended standards.
- 8.2 The Department of Environment, Parks and Recreation retains the right to modify the standards. Additional standards may be introduced or specified for specific activities and circumstances.
- 8.2 Every existing facility that does not meet the guideline's recommended standards are required to operate and comply with a provisional standard agreed by the Department of Environment, Parks and Recreation within a specified time period. During such time the owner or occupier of the industrial premises that house the facility is required to report on progress of improvements made to meet the recommended standards.

## 9.0 USE OF OZONE DEPLETING SUBSTANCES

- 9.1 The use of ozone depleting substance (ODS) free technology is encouraged in industrial applications. ODS are also categorised as hazardous substances in **Appendix 6**, hence requirements set in part 5.0 of this guideline also applies.
- 9.2 The production of CFCs and use of CFC dependent technology is not permitted.
- 9.3 Installation of halon fire-fighting system is not allowed except when the use is deemed essential for the protection of human health or safety and no alternatives are available.

- end -

**PREMISES COVERED UNDER THE POLLUTION CONTROL GUIDELINES FOR INDUSTRIAL DEVELOPMENT**

Industrial Premises are any premises —

- (a) being used for —
  - (i) cement works, being works for the manufacture or packing of portland cement, similar cement or pozzolanic materials;
  - (ii) concrete works, being works for the manufacture of concrete and of each batch capacity greater than 0.5 cubic metre;
  - (iii) asphalt works, being works for the manufacture of asphalt or tarmacadam;
  - (iv) ceramic works, being works in which any products such as bricks, tiles, pipes, pottery goods, refractories or glass are manufactured in furnaces or kilns fired by any fuel;
  - (v) chemical works, being works in which acids, alkali, chemical fertilizer, soap, detergent, sodium silicates, lime or other calcium compounds, chlorine, chemicals or chemical products are manufactured;
  - (vi) coke or charcoal works, being works in which coke or charcoal is produced and quenched, cut, crushed or graded;
  - (vii) ferrous and non-ferrous metal works, being works in which metal melting process for casting and/or metal coating are carried out;
  - (viii) gas works, being works in which coal, coke, oil or other mixtures or derivatives are handled or prepared for carbonisation or gasification and in which such materials are subsequently carbonised or gasified;
  - (ix) crushing, grinding and milling works, being works in which rock, ores, minerals, chemicals or natural grain products are processed by crushing, grinding, milling or separating into different sizes by sieving, air elutriation or in any other manner;
  - (x) petroleum works, being works in which crude or shale oil or crude petroleum or other mineral oil is refined or reconditioned;



- (xi) scrap metal recovery works, being works in which scrap metals are treated in any type of furnace for recovery of metal irrespective of whether this is the primary object of any specific premises or not;
  - (xii) primary metallurgical works, being works in which ores are smelted or converted to metal of any kind;
  - (xiii) pulping works, being works in which wood or cellulose material is made into pulp;
  - (xiv) abrasive blasting works, being works in which equipment or structures are cleaned by abrasive blasting;
  - (xv) aquaculture, livestock and horticulture farms;
  - (xvi) food industry, in which slaughtering, preparing and preserving meat, manufacture of dairy products, canning and preserving of fruits and vegetables, canning, preserving and processing of fish, crustaceans and similar food, manufacture of vegetable and animal oils and fats, grain mill products, sugar factories and refineries, manufacture of or production of animal feed are carried out.
  - (xvii) vehicle manufacturing, repair and servicing and maintenance of engines, motors and mechanical pumps;
  - (xviii) waste recycling, treatment and disposal;
- (b) on which there is erected any boiler of steam generating capacity of 2,300 kilogrammes or more per hour, incinerator or furnace burning 500 kilogrammes or more of solid combustible material per hour or 220 kilogrammes or more of liquid material per hour;
- (c) being used or intended to be used for storing —
- (i) more than 100 tonnes of one or more of the following substances: chemicals, chemical products, hydrocarbons or hydrocarbon products which are toxic or which produce toxic gases on burning or on contact with water or air; or
  - (ii) more than 1,000 tonnes of one or more of the following substances: chemicals, chemical products, hydrocarbons or hydrocarbon products with a flash point lower than 55°C.

**RECOMMENDED STANDARDS FOR INDUSTRIAL EFFLUENTS TO SEWERS THAT  
DISCHARGE TO SEWAGE TREATMENT PLANTS**

| Parameters                      |                   |
|---------------------------------|-------------------|
| Temperature (°C)                | 45                |
| Ph                              | 6-9               |
| SS                              | 1000              |
| TDS                             | 3000              |
| Colour                          | Not Objectionable |
| BOD                             | 2000              |
| COD                             | 4000              |
| Amm N                           | 50                |
| Aluminium (as Al)               | 2                 |
| Arsenic (as As)                 | 1                 |
| Barium (as Ba)                  | 10                |
| Boron (as B)                    | 5                 |
| Cadmium (as Cd)                 | 0.1               |
| Chloride                        | 1000              |
| Chlorine (free)                 | 0.5               |
| Chromium 3 <sup>+</sup> (as Cr) | 2                 |
| Chromium 6 <sup>+</sup> (as G)  | 1                 |
| Copper (as Cu)                  | 5                 |
| Cyanide (as CN)                 | 2                 |
| Fluoride (as F)                 | 10                |
| Hydrocarbons                    | 20                |
| Iron (as Fe)                    | 20                |
| Lead (as Pb)                    | 5                 |
| Manganese (as Mn)               | 10                |
| Mercury (as Hg)                 | 0.1               |
| Nickel (as Ni)                  | 5                 |
| Oil and Grease                  | 50                |
| Phenols                         | 20                |
| Total Phosphorous (as P)        | 10                |
| Selenium (as Se)                | 2                 |
| Sulphate (as SO <sub>4</sub> )  | 1000              |
| Sulphide (as S)                 | 5                 |
| Synthetic Detergents            | 20                |
| Tin (as Sn)                     | 10                |
| Zinc (as Zn)                    | 10                |

All limits are given in mg/l except pH, temperature and colour.

Note: Values are 95 percentiles based on spot samples.

Note: Other restrictions could be introduced covering other specific, and potentially troublesome, constituents. The Government retains the right to modify the proposed standards.

**RECOMMENDED EFFLUENT STANDARDS FOR DIRECT DISCHARGE  
TO THE ENVIRONMENT**

| Parameters                                      | To Inland Watercourse                                                                   |                                         | To Estuary        | To SEA                        |
|-------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------|-------------------|-------------------------------|
|                                                 | Above Potable Water Abstraction                                                         | Not Affecting Potable Water Abstraction |                   |                               |
| Ph                                              | 6-9                                                                                     | 6-9                                     | 6-9               | 6-9                           |
| Temperature (°C)                                | 40                                                                                      | 40                                      | 40                | 45                            |
| Colour                                          | No Change                                                                               | Not Objectionable                       | Not Objectionable | Not Objectionable             |
| BOD <sub>5</sub>                                | 20                                                                                      | 20                                      | 50                | -                             |
| COD                                             | 150                                                                                     | 150                                     | 200               | -                             |
| SS                                              | 30                                                                                      | 30                                      | 50                | No identifiable sewage solids |
| TDS                                             | 2000                                                                                    | 2500                                    | 3000              | -                             |
| Aluminium (as Al)                               | 5                                                                                       | 5                                       | 10                | -                             |
| Arsenic (as As)                                 | 0.1                                                                                     | 0.5                                     | 0.5               | 1                             |
| Barium (as Ba)                                  | 2                                                                                       | 5                                       | 10                | 20                            |
| Beryllium (as Be)                               | 0.5                                                                                     | 1                                       | 1                 | 2                             |
| Cadmium (as Cd)                                 | 0.05                                                                                    | 0.1                                     | 0.1               | 0.1                           |
| Chromium 3 <sup>+</sup> (as Cr 3 <sup>+</sup> ) | 0.5                                                                                     | 1                                       | 2                 | 2                             |
| Chromium 6 <sup>+</sup> (as Cr 6 <sup>+</sup> ) | 0.1                                                                                     | 0.2                                     | 0.2               | 0.2                           |
| Chloride (as Cl)                                | 500                                                                                     | 750                                     | 2000              | 5000                          |
| Free Chlorine (as Cl)                           | 0.5                                                                                     | 0.5                                     | 1                 | 2                             |
| Cobalt (as Co)                                  | 0.1                                                                                     | 0.2                                     | 0.5               | 2                             |
| Copper (as Cu)                                  | 0.5                                                                                     | 0.5                                     | 1                 | 1                             |
| Cyanide (as CN)                                 | 0.1                                                                                     | 0.2                                     | 0.2               | 0.5                           |
| Synthetic Detergents (as ABS)                   | 1                                                                                       | 1                                       | 2                 | 4                             |
| Fluoride (as F)                                 | 1.5                                                                                     | 2                                       | 3                 | 3                             |
| Oil and Grease                                  | 2                                                                                       | 5                                       | 5                 | 50                            |
| Hydrocarbons                                    | 5                                                                                       | 5                                       | 10                | 30                            |
| Iron (as Fe)                                    | 1                                                                                       | 5                                       | 5                 | 20                            |
| Lead (as Pb)                                    | 0.1                                                                                     | 0.5                                     | 1                 | 1                             |
| Lithium (as Li)                                 | 5                                                                                       | 5                                       | 10                | 10                            |
| Manganese (as Mn)                               | 1                                                                                       | 5                                       | 5                 | 10                            |
| Mercury (as Hg)                                 | 0.005                                                                                   | 0.005                                   | 0.005             | 0.005                         |
| Molybdenum (as Mo)                              | 0.5                                                                                     | 1                                       | 1                 | 2                             |
| Ammoniacal Nitrogen (as N)                      | 5                                                                                       | 50                                      | 50                | 100                           |
| Nickel (as Ni)                                  | 0.2                                                                                     | 0.5                                     | 1                 | 2                             |
| Nitrate (as N)                                  | 10                                                                                      | 20                                      | 30                | 50                            |
| Nitrite (as N)                                  | 0.5                                                                                     | 1.0                                     | 2                 | 5                             |
| Total Nitrogen (as N)                           | 15                                                                                      | 50                                      | 50                | 100                           |
| Phenols                                         | 0.1                                                                                     | 0.5                                     | 0.5               | 1                             |
| Total Phosphorous (as P)                        | 30                                                                                      | 30                                      | 30                | 30                            |
| Radioactive Material                            | In accordance with limits and regulations set by the International Atomic Energy Agency |                                         |                   |                               |

|                                     |      |     |     |      |
|-------------------------------------|------|-----|-----|------|
| <b>Selenium (as Se)</b>             | 0.05 | 0.1 | 0.1 | 1    |
| <b>Sulphate (as SO<sub>4</sub>)</b> | 200  | 400 | 500 | 1000 |
| <b>Sulphide (as S)</b>              | 0.5  | 1   | 1   | 5    |
| <b>Vanadium (as Va)</b>             | 0.1  | 0.2 | 0.5 | 1    |
| <b>Zinc (as Zn)</b>                 | 1    | 2   | 5   | 5    |

All limits are given in mg/l except pH, temperature, colour and radioactive material.

Note: Values are 95 percentiles based on spot samples.

## RECOMMENDED STANDARDS FOR AIR EMISSIONS

| Substance                                                       | Trade, industry, process, fuel burning equipment or industrial plant | Emission limits                                      |
|-----------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------|
| (a) Ammonia and ammonium compounds                              | Any trade, industry or process                                       | 76 mg/Nm <sup>3</sup> expressed as ammonia           |
| (b) Antimony and its compounds                                  | Any trade, industry or process                                       | 3 mg/Nm <sup>3</sup> expressed as antimony           |
| (c) Arsenic and its compounds                                   | Any trade, industry or process                                       | 1 mg/Nm <sup>3</sup> expressed as arsenic            |
| (d) Benzene                                                     | Any trade, industry or process                                       | 5 mg/Nm <sup>3</sup>                                 |
| (e) Cadmium and its compounds                                   | Any trade, industry or process                                       | 3 mg/Nm <sup>3</sup> expressed as cadmium            |
| (f) Carbon monoxide                                             | Any trade, industry, process or fuel burning equipment               | 625 mg/Nm <sup>3</sup>                               |
| (g) Chlorine                                                    | Any trade, industry or process                                       | 32 mg/Nm <sup>3</sup>                                |
| (h) Copper and its compounds                                    | Any trade, industry or process                                       | 5 mg/Nm <sup>3</sup> expressed as copper             |
| (i) Dioxins and furans                                          | Any waste incinerator                                                | 0.1 ng TEQ/Nm <sup>3</sup>                           |
| (j) Ethylene oxide                                              | Any trade, industry or process                                       | 5 mg/Nm <sup>3</sup>                                 |
| (k) Fluorine, hydrofluoric acid or inorganic fluorine compounds | Any trade, industry or process                                       | 50 mg/Nm <sup>3</sup> expressed as hydrofluoric acid |
| (l) Formaldehyde                                                | Any trade, industry or process                                       | 20 mg/Nm <sup>3</sup>                                |
| (m) Hydrogen chloride                                           | Any trade, industry or process                                       | 200 mg/Nm <sup>3</sup>                               |
| (n) Hydrogen sulphide                                           | Any trade, industry or process                                       | 7.6 mg/Nm <sup>3</sup>                               |

| Substance                                                                                                                                        | Trade, industry, process, fuel burning equipment or industrial plant                                                 | Emission limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (o) Lead and its compounds                                                                                                                       | Any trade, industry or process                                                                                       | 5 mg/Nm <sup>3</sup> expressed as lead                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| (p) Mercury and its compounds                                                                                                                    | Any trade, industry or process                                                                                       | 3 mg/Nm <sup>3</sup> expressed as mercury                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (q) Oxides of nitrogen                                                                                                                           | Any trade, industry, process or fuel burning equipment                                                               | 700 mg/Nm <sup>3</sup> expressed as nitrogen dioxide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| (r) Particulate substances including smoke, soot, dust, ash, fly-ash, cinders, cement, lime, alumina, grit and other solid particles of any kind | Any trade, industry, process, fuel burning equipment or industrial plant (except for any cold blast foundry cupolas) | (i) 100 mg/Nm <sup>3</sup> ;or<br>(ii) where there is more than one flue, duct or chimney in any scheduled premises, the total mass of the particulate emissions from all of such flue, duct or chimney divided by the total volume of such emissions shall not exceed 100mg/Nm <sup>3</sup> and the particulate emissions from each of such flue, duct or chimney shall not exceed 200 mg/Nm <sup>3</sup> at any point in time.<br>(iii) Ringelmann No.1 or equivalent opacity (Not to exceed more than 5 minutes in any period of one hour) |
| (s) Styrene monomer                                                                                                                              | Any trade, industry or process                                                                                       | 100 mg/Nm <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| (t) Sulphur dioxide (non-combustion sources)                                                                                                     | Any trade, industry or process                                                                                       | 500 mg//Nm <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| (u) Sulphur trioxide and other acid gases                                                                                                        | The manufacture of sulphuric acid                                                                                    | 500 mg/Nm <sup>3</sup> expressed as sulphur trioxide. Effluent gases shall be free from persistent mist.                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| Substance                                   | Trade, industry, process, fuel burning equipment or industrial plant                                                        | Emission limits                                      |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| (v) Sulphur trioxide or sulphuric acid mist | Any trade, industry or process, other than any combustion process and any plant involving the manufacture of sulphuric acid | 100 mg/Nm <sup>3</sup> expressed as sulphur trioxide |
| (w) Vinyl chloride monomer                  | Any trade, industry or process                                                                                              | 20 mg/Nm <sup>3</sup>                                |

Note: The concentration of any substance specified in the first column emitted from any operation in any trade, industry, process, fuel burning equipment or industrial plant specified in the second column shall not at any point before admixture with air, smoke or other gases, exceed the limits specified in the third column.

“dioxins and furans” means polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF), being tricyclic and aromatic compounds formed by 2 benzene rings which are connected by 2 oxygen atoms in PCDD and by one oxygen atom in PCDF and the hydrogen atoms of which may be replaced by up to 8 chlorine atoms;

“mg” means milligram;

“ng” means nanogram;

“Nm<sup>3</sup>” means normal cubic metre, being that amount of gas which when dry, occupies a cubic metre at a temperature of 0 degree Centigrade and at an absolute pressure of 760 millimetres of mercury;

“TEF” means Toxic Equivalency Factor;

“TEQ” means Toxic Equivalent, being the sum total of the concentrations of each of the dioxin and furan compounds specified in the first column of the table below multiplied by their corresponding TEF specified in the second column thereof:

| <i>Dioxin/Furan</i>                       | <i>TEF</i> |
|-------------------------------------------|------------|
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin       | 1          |
| 1,2,3,7,8-Pentachlorodibenzo-p-dioxin     | 1          |
| 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin    | 0.1        |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin    | 0.1        |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin    | 0.1        |
| 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin | 0.01       |
| Octachlorodibenzo-p-dioxin                | 0.0001     |
| 2,3,7,8-Tetrachlorodibenzofuran           | 0.1        |
| 1,2,3,7,8-Pentachlorodibenzofuran         | 0.05       |
| 2,3,4,7,8-Pentachlorodibenzofuran         | 0.5        |
| 1,2,3,4,7,8-Hexachlorodibenzofuran        | 0.1        |
| 1,2,3,6,7,8-Hexachlorodibenzofuran        | 0.1        |
| 1,2,3,7,8,9-Hexachlorodibenzofuran        | 0.1        |
| 2,3,4,6,7,8-Hexachlorodibenzofuran        | 0.1        |
| 1,2,3,4,6,7,8-Heptachlorodibenzofuran     | 0.01       |
| 1,2,3,4,7,8,9-Heptachlorodibenzofuran     | 0.01       |
| Octachlorodibenzofuran                    | 0.0001     |

## RECOMMENDED BOUNDARY NOISE LEVELS

| Type of affected premises | Maximum permitted noise level (reckoned as the equivalent continuous noise level over the specified period) in decibels (dBA) |                         |                      |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|
|                           | Day<br>7 am - 7 pm                                                                                                            | Evening<br>7 pm – 11 pm | Night<br>11 pm -7 am |
| Noise Sensitive Premises  | 60                                                                                                                            | 55                      | 50                   |
| Residential Premises      | 65                                                                                                                            | 60                      | 55                   |
| Commercial Premises       | 70                                                                                                                            | 65                      | 60                   |

| Type of affected premises | Maximum permitted noise level (reckoned as the equivalent continuous noise level over 5 minutes) in decibels (dBA) |                         |                      |
|---------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|
|                           | Day<br>7 am - 7 pm                                                                                                 | Evening<br>7 pm – 11 pm | Night<br>11 pm -7 am |
| Noise Sensitive Premises  | 65                                                                                                                 | 60                      | 55                   |
| Residential Premises      | 70                                                                                                                 | 65                      | 60                   |
| Commercial Premises       | 75                                                                                                                 | 70                      | 65                   |
| Factory Premises          | 75                                                                                                                 | 70                      | 65                   |



## LIST OF HAZARDOUS SUBSTANCES

## Part I – Hazardous Substances

| Substance                                                                                                                                               | Exclusion                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acetic acid                                                                                                                                             | Substances containing not more than 80%, weight in weight, of acetic acid;<br><br>Preparations and solutions for photographic use.                                                                                                                                                                                                                                                                                                                            |
| Acetyl bromide                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Alkali metal bifluorides; Ammonium bifluoride; Potassium fluoride; Sodium fluoride; Potassium silicofluoride; Sodium silicofluoride; Silicofluoric acid | Preparations containing not more than 0.3%, weight in weight, of potassium fluoride in radiator protectors;<br><br>Preparations containing not more than 0.96%, weight in weight, of potassium fluoride in photographic chemicals;<br><br>Substances containing not more than 3%, weight in weight, of sodium fluoride or sodium silicofluoride as a preservative;<br><br>Substances containing sodium fluoride intended for the treatment of human ailments. |
| Ammonia                                                                                                                                                 | Preparations and solutions of ammonia containing not more than 10%, weight in weight, of ammonia;<br><br>Refrigeration equipment;<br><br>Photographic and plan developers;<br><br>Hair colour dyes;<br><br>Perm lotions;<br><br>Smelling bottles.                                                                                                                                                                                                             |
| Ammonium chlorate                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Ammonium perchlorate                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| <b>Substance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Exclusion</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Anionic surface active agents                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>Preparations containing less than 5% by weight of anionic surface active agents;</p> <p>Preparations containing anionic surface active agents which are not less than 90% biodegradable under a test carried out in accordance with that part of the OECD method which is referred to as "Confirmatory Test Procedure" in European Communities Council Directive No. 73/405/EEC (C) or other equivalent test methods acceptable to the Director.</p>                                                                                                        |
| Antimony pentachloride                                                                                                                                                                                                                                                                                                                                                                                                                              | Polishes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>Arsenical substances, the following:</p> <p>    Arsenic acid</p> <p>    Arsenic sulphide</p> <p>    Arsenic trichloride</p> <p>    Arsine</p> <p>    Calcium arsenite</p> <p>    Copper arsenate</p> <p>    Copper arsenite</p> <p>    Lead arsenate</p> <p>    Organic compounds of arsenic</p> <p>    Oxides of arsenic</p> <p>    Potassium arsenite</p> <p>    Sodium arsenate</p> <p>    Sodium arsenite</p> <p>    Sodium thioarsenate</p> | <p>Pyrites ores or sulphuric acid containing arsenical poisons as natural impurities;</p> <p>Animal feeding stuffs containing not more than 0.005%, weight in weight, of 4-hydroxy-3-nitrophenyl-arsonic acid and not containing any other arsenical poison;</p> <p>Animal feeding stuffs containing not more than 0.01%, weight in weight, of arsanilic acid and not containing any other arsenical poison;</p> <p>Animal feeding stuffs containing not more than 0.0375%, weight in weight, of carbarsone and not containing any other arsenical poison.</p> |
| Asbestos in the form of crocidolite, amosite, chrysotile and amphiboles and products containing these forms of asbestos                                                                                                                                                                                                                                                                                                                             | <p>Asbestos products containing chrysotile other than roofing sheets, refuse chutes, ceiling boards, partition boards, fire barriers, doors, paints, cement, floor tiles and putty;</p> <p>Asbestos in the form of chrysotile in any vehicle brake or clutch lining not installed in any vehicle if the packaging of the vehicle brake or clutch lining is affixed with the</p>                                                                                                                                                                                |

| Substance                                                                                                                             | Exclusion                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                       | appropriate label.                                                                                                                                                                                                                                                                                                                                |
| Benzene                                                                                                                               | Substances containing less than 1%, weight in weight, of benzene.                                                                                                                                                                                                                                                                                 |
| Boric acid; Sodium borate                                                                                                             | <p>Boric acid or sodium borate in medicinal preparations, cosmetics, toilet preparations and substances being preparations intended for human consumption;</p> <p>Preparations containing boric acid or sodium borate or a combination of both where water or solvent is not the only other part of the composition.</p>                          |
| Boron trichloride                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                   |
| Boron trifluoride                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                   |
| Bromine; Bromine solutions                                                                                                            |                                                                                                                                                                                                                                                                                                                                                   |
| Cadmium-containing silver brazing alloy                                                                                               |                                                                                                                                                                                                                                                                                                                                                   |
| Captafol                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                   |
| Carbamates                                                                                                                            | <p>Benomyl;</p> <p>Carbendazim;</p> <p>Chlorpropham;</p> <p>Propham;</p> <p>Thiophanate-methyl;</p> <p>Preparations containing not more than 1%, weight in weight, of propoxur and not containing any other carbamate;</p> <p>Preparations containing not more than 1%, weight in weight, of methomyl and not containing any other carbamate.</p> |
| Carbon tetrafluoride                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                   |
| <p>Chlorinated hydrocarbons, the following:</p> <p>Aldrin</p> <p>Benzene hexachloride (BHC)</p> <p>Bromocyclen</p> <p>Camphechlor</p> | <p>Paper impregnated with not more than 0.3%, weight in weight, of benzene hexachloride or gamma - BHC provided it is labelled with directions that no food, wrapped or unwrapped, or food utensils are to be placed on the treated paper, and that it is not to be used where food is prepared or served.</p>                                    |

| Substance                                                                                                                                                                                                                                                                                                                                                                                     | Exclusion |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <p>Chlorbenseide</p> <p>Chlorbicyclen</p> <p>Chlordane</p> <p>Chlordecone</p> <p>Chlorfenethol</p> <p>Chlorfenson</p> <p>Chlorfensulphide</p> <p>Chlorobenzilate</p> <p>Chloropropylate</p> <p>Dicophane (DDT)</p> <p>pp'-DDT</p> <p>Dicofol</p> <p>Dieldrin</p> <p>Endosulfan</p>                                                                                                            |           |
| <p>Endrin</p> <p>Fenazaflor</p> <p>Fenson</p> <p>Fluorbenzide</p> <p>Gamma benzene hexachloride<br/>(Gamma - BHC)</p> <p>HEOD [1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a- octahydro-1, 4 (exo): 5,8 (endo)-dimethano naphthalene]</p> <p>HHDN [1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4 (exo):5,8 (endo)-dimethano naphthalene]</p> <p>Heptachlor</p> <p>Isobenzan</p> |           |

| Substance                                                                                                                                                                                                                                                                                                                                      | Exclusion                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <p>Isodrin</p> <p>Kelevan</p> <p>Methoxychlor [1,1,1-trichloro-2,2-di-(p-methoxyphenyl) ethane]</p> <p>Tetrachlordiphenylethane [TDE; 1,1-dichloro-2,2-bis (p-chlorophenyl) ethane]</p> <p>Tetradifon</p> <p>Tetrasul</p> <p>Toxaphene</p> <p>Allied chlorinated hydrocarbon compounds used as pesticides (insecticides, acaricides, etc.)</p> |                                                                             |
| Chlorine                                                                                                                                                                                                                                                                                                                                       | Chlorine used for chlorination of water in swimming pools.                  |
| Chlorine trifluoride                                                                                                                                                                                                                                                                                                                           |                                                                             |
| <p>Chlorobenzenes, the following:</p> <p>Monochlorobenzene</p> <p>Meta-dichlorobenzene</p> <p>Ortho-dichlorobenzene</p> <p>Trichlorobenzene</p> <p>Tetrachlorobenzene</p> <p>Pentachlorobenzene</p> <p>Hexachlorobenzene</p>                                                                                                                   |                                                                             |
| <p>Chlorophenols, the following:</p> <p>Monochlorophenol</p> <p>Dichlorophenol</p> <p>Trichlorophenol</p> <p>Tetrachlorophenol</p> <p>Pentachlorophenol and their salts</p>                                                                                                                                                                    | Substances containing not more than 1%, weight in weight, of chlorophenols. |

| Substance                                                                                          | Exclusion                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chlorophenoxyacids; their salts, esters, amines                                                    |                                                                                                                                                                                                                                                                                                         |
| Chloropicrin                                                                                       |                                                                                                                                                                                                                                                                                                         |
| Chlorosilanes, the following:<br>Hexachlorodisilane<br>Phenyltrichlorosilane<br>Tetrachlorosilane  |                                                                                                                                                                                                                                                                                                         |
| Chlorosulphonic acid                                                                               |                                                                                                                                                                                                                                                                                                         |
| Chromic acid                                                                                       | <p>Substances containing not more than 9%, weight in weight, of chromic acid;</p> <p>Photographic solutions containing chromic acid in individual containers containing not more than 15 kilograms each of such solutions and of aggregate weight of not more than 500 kilograms of such solutions.</p> |
| Cyanides                                                                                           | <p>Ferrocyanides;</p> <p>Ferricyanides.</p> <p>Acetonitrile;</p> <p>Acrylonitrile;</p> <p>Butyronitrile;</p> <p>2-Dimethylaminoacetonitrile;</p> <p>Isobutyronitrile;</p> <p>Methacrylonitrile;</p> <p>Propionitrile.</p>                                                                               |
| Diborane                                                                                           |                                                                                                                                                                                                                                                                                                         |
| Dibromochloropropane                                                                               |                                                                                                                                                                                                                                                                                                         |
| Diethyl sulphate                                                                                   |                                                                                                                                                                                                                                                                                                         |
| Dinitro-ortho-cresol (DNOC) and its salts (such as ammonium salt, potassium salt and sodium salt)" |                                                                                                                                                                                                                                                                                                         |
| Dinosam; its compounds with a metal or a base                                                      |                                                                                                                                                                                                                                                                                                         |
| Dinoseb and its salts and esters, which includes but is not limited to -                           |                                                                                                                                                                                                                                                                                                         |
| Binapacryl                                                                                         |                                                                                                                                                                                                                                                                                                         |
| Diquat; its salts                                                                                  |                                                                                                                                                                                                                                                                                                         |

| <b>Substance</b>                                                                                                                                                 | <b>Exclusion</b>                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Drazoxolon; its salts                                                                                                                                            | Dressings on seeds.                                                                                                                                                                                                                       |
| Dustable powder formulations containing a combination of –<br>Benomyl at or above 7 per cent,<br>Carbofuran at above 10 per cent, thiram at or above 15 per cent |                                                                                                                                                                                                                                           |
| Endothal; its salts                                                                                                                                              |                                                                                                                                                                                                                                           |
| Epichlorohydrin                                                                                                                                                  |                                                                                                                                                                                                                                           |
| Ethyl mercaptan                                                                                                                                                  | Substances containing less than 1%, weight in weight, of ethyl mercaptan                                                                                                                                                                  |
| Ethylene dichloride                                                                                                                                              |                                                                                                                                                                                                                                           |
| Ethylene imine                                                                                                                                                   |                                                                                                                                                                                                                                           |
| Ethylene oxide                                                                                                                                                   | Mixtures of inert gases and ethylene oxide comprising not more than 12%, weight in weight, of ethylene oxide contained in cylinders of water capacity less than 47 litres and for aggregate of not more than 3 numbers of such cylinders. |
| Ferric chloride                                                                                                                                                  |                                                                                                                                                                                                                                           |
| Fipronil                                                                                                                                                         | Formulated products containing Fipronil approved for household use and belonging to the WHO Class IV hazards                                                                                                                              |
| Fluorine                                                                                                                                                         |                                                                                                                                                                                                                                           |
| Fluoroacetamide                                                                                                                                                  |                                                                                                                                                                                                                                           |
| Formaldehyde                                                                                                                                                     | Substances containing not more than 5%, weight in weight, of formaldehyde;<br><br>Photographic glazing or hardening solutions.                                                                                                            |
| Formic acid                                                                                                                                                      | Substances containing not more than 5%, weight in weight, of formic acid.                                                                                                                                                                 |
| Germane                                                                                                                                                          |                                                                                                                                                                                                                                           |
| Hydrazine anhydrous; Hydrazine aqueous solutions                                                                                                                 |                                                                                                                                                                                                                                           |
| Hydrochloric acid                                                                                                                                                | Substances containing not more than 9% , weight in weight, of hydrochloric acid.                                                                                                                                                          |
| Hydrofluoric acid                                                                                                                                                | Preparations or solutions containing not more than 2%, weight in weight, of hydrofluoric acid.                                                                                                                                            |
| Hydrogen chloride                                                                                                                                                |                                                                                                                                                                                                                                           |
| Hydrogen cyanide; Hydrocyanic acid                                                                                                                               | Preparations of wild cherry;                                                                                                                                                                                                              |

| Substance                                                                                                                                                          | Exclusion                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                    | In reagent kits supplied for medical or veterinary purposes, substances containing less than the equivalent of 0.1%, weight in weight, of hydrocyanic acid.                                                                                                                                                                                                     |
| Hydrogen fluoride                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                 |
| Hydrogen selenide                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                 |
| Isocyanates                                                                                                                                                        | <p>Polyisocyanates containing less than 0.7%, weight in weight, of free monomeric diisocyanates;</p> <p>Pre-polymerised isocyanates in polyurethane paints and lacquers;</p> <p>Hardeners and bonding agents for immediate use in adhesives.</p>                                                                                                                |
| Lead compounds in paint                                                                                                                                            | <p>Lead compounds in paint in which the lead content is not more than 0.06% by weight of the paint;</p> <p>Lead compounds in paint in which the container is affixed with an appropriate label;</p> <p>The labels to be used for paints containing lead compounds are in accordance with Part IV of the Second Schedule.</p>                                    |
| Lead tetra-ethyl and similar lead containing compounds in petrol intended for use in Brunei Darussalam as fuel for motor vehicles                                  |                                                                                                                                                                                                                                                                                                                                                                 |
| Mercury compounds including inorganic mercury compounds, alkyl mercury compounds, alkyloxyalkyl and aryl mercury compounds, and other organic compounds of mercury |                                                                                                                                                                                                                                                                                                                                                                 |
| Mercuric chloride; Mercuric iodide; Organic compounds of mercury                                                                                                   | <p>Dressings on seeds or bulbs;</p> <p>Toilet, cosmetic and therapeutic preparations containing not more than 0.01%, weight in weight, of phenyl mercuric salts as a preservative;</p> <p>Antiseptic dressings on toothbrushes;</p> <p>Textiles containing not more than 0.01%, weight in weight, of phenyl mercuric salts as a bacteriostat and fungicide.</p> |
| Mercury and its compounds in batteries                                                                                                                             | Batteries other than mercury oxide batteries, zinc carbon batteries containing more than 0.001% by weight of mercury per cell and alkaline batteries, except those in button form, containing more than 0.025% by weight                                                                                                                                        |



| Substance                                                                    | Exclusion                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                              | of mercury per cell.                                                                                                                                                                                                                                                                  |
| Metanil yellow (sodium salt of metanilylazo-diphenylamine)                   | Dye-indicators used in laboratories.                                                                                                                                                                                                                                                  |
| Methyl chloride                                                              |                                                                                                                                                                                                                                                                                       |
| Methyl mercaptan                                                             | Substances containing less than 1%, weight in weight, of methyl mercaptan.                                                                                                                                                                                                            |
| Monomethyltetrachloro diphenyl methane                                       |                                                                                                                                                                                                                                                                                       |
| Monomethyl-dichloro-diphenyl methane                                         |                                                                                                                                                                                                                                                                                       |
| Monomethyl-dibromodiphenyl methane                                           |                                                                                                                                                                                                                                                                                       |
| Neonicotinoid compounds used as pesticides, the following:                   |                                                                                                                                                                                                                                                                                       |
| Imidacloprid                                                                 | Formulated products containing Imidacloprid approved for household use and belonging to the WHO Class IV hazards.                                                                                                                                                                     |
| Niclofolan                                                                   |                                                                                                                                                                                                                                                                                       |
| Nicotine sulphate                                                            |                                                                                                                                                                                                                                                                                       |
| Nitric acid                                                                  | Substances containing not more than 9%, weight in weight, of nitric acid.                                                                                                                                                                                                             |
| Nitric oxide                                                                 |                                                                                                                                                                                                                                                                                       |
| Nitrobenzene                                                                 | Substances containing less than 0.1%, weight in weight, of nitrobenzene;<br><br>Soaps containing less than 1%, weight in weight, of nitrobenzene;<br><br>Polishes and cleansing agents.                                                                                               |
| Nitrogen trifluoride                                                         |                                                                                                                                                                                                                                                                                       |
| Oleum                                                                        |                                                                                                                                                                                                                                                                                       |
| Orange II [sodium salt of p-(2-hydroxy-1-naphthylazo) benzenesulphonic acid] |                                                                                                                                                                                                                                                                                       |
| Organic peroxides                                                            | Car puttys;<br><br>Substances and preparations containing not more than 3%, weight in weight, of organic peroxides;<br><br>Solutions of not more than 60%, weight in weight, of methyl ethyl ketone peroxides and total aggregate weight of less than 50 kilograms of such solutions. |

| Substance                                                                                                                                                                                                                                                                                                                                                                                           | Exclusion                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Organo-tin compounds, the following:                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Compounds of fentin                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Cyhexatin                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Tributyl tin compounds                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p>Ozone depleting substances, namely:</p> <p>(a) Chlorofluorocarbons, the following:</p> <p>Chloroheptafluoropropane</p> <p>Chloropentafluoroethane</p> <p>Chlorotrifluoromethane</p> <p>Dichlorodifluoromethane</p> <p>Dichlorohexafluoropropane</p> <p>Dichlorotetrafluoroethane</p> <p>Heptachlorofluoropropane</p> <p>Hexachlorodifluoropropane</p>                                            | <p>Products containing any ozone depleting substance other than the following products:</p> <p>(a) in the case of chlorofluorocarbons —</p> <p>(i) air-conditioners in vehicles;</p> <p>(ii) equipment for domestic or commercial refrigeration or air-conditioning or heat pump equipment, which contains any chlorofluorocarbon substance as a refrigerant or in any insulating material of such equipment;</p> |
| <p>Pentachlorofluoroethane</p> <p>Pentachlorotrifluoropropane</p> <p>Tetrachlorodifluoroethane</p> <p>Tetrachlorotetrafluoropropane</p> <p>Trichlorofluoromethane</p> <p>Trichloropentafluoropropane</p> <p>Trichlorotrifluoroethane</p> <p>(b) Halons, the following:</p> <p>Bromochlorodifluoromethane</p> <p>Bromochloromethane</p> <p>Bromotrifluoromethane</p> <p>Dibromotetrafluoroethane</p> | <p>(iii) refrigerators that have a compressor rating which exceeds one horsepower;</p> <p>(iv) non-pharmaceutical aerosol products;</p> <p>(v) insulation boards, panels or pipe covers;</p> <p>(vi) polystyrene sheets or finished products;</p> <p>(b) in the case of Halons, portable fire extinguishers; and</p> <p>(c) in the case of bromotrifluoromethane, fire protection systems.</p>                    |

| Substance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Exclusion |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <p>(c) Hydrochlorofluorocarbons, the following:</p> <p>1,1-dichloro-1-fluoro-ethane</p> <p>1,1-dichloro-2,2,3,3,3-pentafluoropropane</p> <p>1,3-dichloro-1,2,2,3,3-pentafluoropropane</p> <p>1-chloro-1,1-difluoro-ethane</p> <p>Chlorodifluoroethane</p> <p>Chlorodifluoromethane</p> <p>Chlorodifluoropropane</p> <p>Chlorofluoroethane</p> <p>Chlorofluoromethane</p> <p>Chlorofluoropropane</p> <p>Chlorohexafluoropropane</p> <p>Chloropentafluoropropane</p> <p>Chlorotetrafluoroethane</p> <p>Chlorotetrafluoropropane</p> <p>Chlorotrifluoroethane</p> <p>Chlorotrifluoropropane</p> <p>Dichlorodifluoroethane</p> <p>Dichlorodifluoropropane</p> <p>Dichlorofluoroethane</p> <p>Dichlorofluoromethane</p> <p>Dichlorofluoropropane</p> <p>Dichloropentafluoropropane</p> <p>Dichlorotetrafluoropropane</p> <p>Dichlorotrifluoroethane</p> <p>Dichlorotrifluoropropane</p> <p>Hexachlorofluoropropane</p> <p>Pentachlorodifluoropropane</p> <p>Pentachlorofluoropropane</p> <p>Tetrachlorodifluoropropane</p> <p>Tetrachlorofluoroethane</p> <p>Tetrachlorofluoropropane</p> <p>Tetrachlorotrifluoropropane</p> |           |

| Substance                        | Exclusion |
|----------------------------------|-----------|
| Trichlorodifluoroethane          |           |
| Trichlorodifluoropropane         |           |
| Trichlorofluoroethane            |           |
| Trichlorofluoropropane           |           |
| Trichlorotetrafluoropropane      |           |
| Trichlorotrifluoropropane        |           |
| (d) Hydrobromofluorocarbons, the |           |
| following:                       |           |
| Bromodifluoroethane              |           |
| Bromodifluoromethane             |           |
| Bromodifluoropropane             |           |
| Bromofluoroethane                |           |
| Bromofluoromethane               |           |
| Bromofluoropropane               |           |
| Bromohexafluoropropane           |           |
| Bromopentafluoropropane          |           |
| Bromotetrafluoroethane           |           |
| Bromotetrafluoropropane          |           |
| Bromotrifluoroethane             |           |
| Bromotrifluoropropane            |           |
| Dibromodifluoroethane            |           |
| Dibromodifluoropropane           |           |
| Dibromofluoroethane              |           |
| Dibromofluoromethane             |           |
| Dibromofluoropropane             |           |
| Dibromopentafluoropropane        |           |
| Dibromotetrafluoropropane        |           |
| Dibromotrifluoroethane           |           |
| Dibromotrifluoropropane          |           |
| Hexabromofluoropropane           |           |
| Pentabromodifluoropropane        |           |
| Pentabromofluoropropane          |           |
| Tetrabromodifluoropropane        |           |
| Tetrabromofluoroethane           |           |

| Substance                                                                                                                                                                                                                                                                                                                            | Exclusion                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tetrabromofluoropropane<br>Tetrabromotrifluoropropane<br>Tribromodifluoroethane<br>Tribromodifluoropropane<br>Tribromofluoroethane<br>Tribromofluoropropane<br>Tribromotetrafluoropropane<br>Tribromotrifluoropropane<br><br>(e) Carbon tetrachloride<br><br>(f) 1,1,1-trichloroethane (methyl chloroform)<br><br>(g) Methyl bromide |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Organo-tin compounds, the following:<br>Compounds of fentin<br><br>Cyhexatin                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Paraquat; its salts                                                                                                                                                                                                                                                                                                                  | Preparation in pellet form containing not more than 5%, weight in weight, of salts of paraquat ion.                                                                                                                                                                                                                                                                                                                                                                |
| Perchloromethyl mercaptan                                                                                                                                                                                                                                                                                                            | Substances containing less than 1%, weight in weight, of perchloromethyl mercaptan.                                                                                                                                                                                                                                                                                                                                                                                |
| Phenols, the following:<br><br>Catechol<br><br>Cresol<br><br>Hydroquinone<br><br>Octyl phenol<br><br>Phenol<br><br>Resorcinol                                                                                                                                                                                                        | Preparations containing less than 1%, weight in weight, of phenols;<br><br>Phenols which are intended for the treatment of human ailments and other medical purposes;<br><br>Soaps for washing;<br><br>Tar (coal or wood), crude or refined;<br><br>Photographic solutions containing hydroquinone in individual containers containing not more than 15 kilograms each of such solutions and of aggregate weight of not more than 500 kilograms of such solutions. |
| Phosgene                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Phosphides                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Phosphine                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Phosphoric acid                                                                                                                                                                                                                                                                                                                      | Substances containing not more than 50%, weight in weight, of phosphoric acid.                                                                                                                                                                                                                                                                                                                                                                                     |

| Substance                                                                                                                                                                                                         | Exclusion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Phosphorus compounds used as pesticides (insecticides, acaricides, etc.), which includes but is not limited to:</p> <p>Methamidophos<br/>Methyl-parathion<br/>Monocrotophos<br/>Parathion<br/>Phosphamidon</p> | <p>Acephate;</p> <p>Bromophos;</p> <p>Iodofenphos;</p> <p>Malathion;</p> <p>Pirimiphos-methyl;</p> <p>Temephos;</p> <p>Tetrachlorvinphos;</p> <p>Trichlorfon;</p> <p>Preparations containing not more than 0.5%, weight in weight, of chlorpyrifos and not containing any other phosphorus compound;</p> <p>Preparations containing not more than 0.5%, weight in weight, of dichlorvos and not containing any other phosphorus compound;</p> <p>Materials impregnated with dichlorvos and not containing any other phosphorus compound for slow release;</p> <p>Preparations containing not more than 1%, weight in weight, of azamethiphos and not containing any other phosphorus compound.</p> |
| Phosphorus oxychloride                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Phosphorus pentachloride                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Phosphorus pentafluoride                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Phosphorus trichloride                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Polybrominated biphenyls                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Polychlorinated biphenyls                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Polychlorinated terphenyls                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Potassium hydroxide                                                                                                                                                                                               | <p>Substances containing not more than 17%, weight in weight, of potassium hydroxide;</p> <p>Accumulators;</p> <p>Batteries.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Prochloraz                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Fenvalerate                                                                                                                                                                                                       | Formulated products containing Fenvalerate approved for household use and belonging to the WHO Class IV hazards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| <b>Substance</b>                                                                   | <b>Exclusion</b>                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sodium azide                                                                       | Air bag devices in motor vehicles                                                                                                                                                                                                                |
| Sodium hydroxide                                                                   | Substances containing not more than 17%, weight in weight, of sodium hydroxide;<br><br>Made-up formulated preparations either liquid or solid for biochemical tests.                                                                             |
| Sulphur in diesel intended for use in fuel for motor vehicles or industrial plants | Sulphur in diesel in which the sulphur content is 0.005% or less by weight.                                                                                                                                                                      |
| Sulphur tetrafluoride                                                              |                                                                                                                                                                                                                                                  |
| Sulphur trioxide                                                                   |                                                                                                                                                                                                                                                  |
| Sulphuric acid                                                                     | Substances containing not more than 9%, weight in weight, of sulphuric acid;<br><br>Accumulators;<br><br>Batteries;<br><br>Fire extinguishers;<br><br>Photographic developers containing not more than 20%, weight in weight, of sulphuric acid. |
| Sulphuryl chloride                                                                 |                                                                                                                                                                                                                                                  |
| Sulphuryl fluoride                                                                 |                                                                                                                                                                                                                                                  |
| Tetraethyl lead, tetramethyl lead and similar lead containing compounds            |                                                                                                                                                                                                                                                  |
| Thallium; its salts                                                                |                                                                                                                                                                                                                                                  |
| Titanium tetrachloride                                                             |                                                                                                                                                                                                                                                  |
| Tris (2, 3-dibromo-1-propyl) phosphate                                             |                                                                                                                                                                                                                                                  |

## **Part II - General Exemptions**

Adhesives;  
 Anti-fouling compositions;  
 Anti-fouling compositions other than those containing tributyl tin compounds as defined in Part I of this Schedule;  
 Builders' materials other than those containing asbestos as defined in this List;  
 Ceramics;  
 Distempers;  
 Electrical valves;  
 Enamels;  
 Explosives;  
 Fillers;  
 Fireworks;  
 Fluorescent lamps;

Glazes;  
Glue;  
Inks;  
Lacquer solvents;  
Loading materials;  
Matches;  
Motor fuels and lubricants except diesel oil and petrol;  
Paints other than paints containing mercury compounds, paints containing lead compounds and paints containing asbestos as defined in Part I of this Schedule;  
Pharmaceutical Aerosols  
Photographic paper;  
Pigments other than those containing tributyl tin compounds as defined in Part I of this Schedule;  
Plastics;  
Propellants other than those containing ozone depleting substances;  
Rubber;  
Varnishes;  
Vascular plants and their seeds.



**LIST OF HAZARDOUS INDUSTRIAL WASTES****SW 1      METAL AND METAL-BEARING WASTES**

- SW 101      Waste containing arsenic or its compound
- SW 102      Waste lead acid batteries, whole or crushed
- SW 103      Waste batteries containing cadmium and nickel or mercury or lithium
- SW 104      Dust, slag, dross or ash containing oxides or sulphate of metals including lead, cadmium, chromium, nickel, copper, vanadium or beryllium
- SW 105      Galvanic sludge
- SW 106      Residues from recovery of acid pickling liquor
- SW 107      Slag from copper processing for further processing or refining containing arsenic, lead or cadmium
- SW 108      Leaching residues from zinc processing, dust and sludge
- SW 109      Waste containing mercury or its compound
- SW 110      Waste electrical and electronic assemblies containing components such as accumulators, mercury-switches, glass from cathode-ray tubes and other activated glass or polychlorinated biphenyl-capacitors contaminated with cadmium, mercury, lead or polychlorinated biphenyl

**SW 2      WASTES CONTAINING PRINCIPALLY INORGANIC CONSTITUENTS WHICH MAY CONTAIN METALS AND ORGANIC MATERIALS**

- SW 201      Asbestos wastes in sludge, dust or fibre forms
- SW 202      Waste catalysts
- SW 203      Immobilized scheduled waste, including chemically fixed, encapsulated sludge, solidified or stabilized sludge
- SW 204      Metal hydroxide, oxide or sulphate sludge containing one or several metals, including chromium, copper, nickel, zinc, lead, cadmium, aluminium, tin, vanadium and beryllium
- SW 205      Waste gypsum arising from chemical industry processes
- SW 206      Spent inorganic acids

**SW 3      WASTES CONTAINING PRINCIPALLY ORGANIC CONSTITUENTS WHICH MAY CONTAIN METALS AND INORGANIC MATERIALS**

- SW 301      Spent organic acids with pH  $\leq 2$  which are corrosive or hazardous
- SW 302      Sludge containing fluoride from the wastewater treatment system of electronic or semiconductor manufacturing plant
- SW 303      Flux waste, containing mixture of organic acids, solvents or compounds of ammonium chloride from fluxing bath of metal treatment process
- SW 304      Adhesive or glue waste containing organic solvents, excluding solid polymeric materials
- SW 305      Press cake from pre-treatment of glycerol soap lye from detergent soap or toiletries plant
- SW 306      Spent lubricating oil from industrial or automotive sources
- SW 307      Spent hydraulic oil from machines, including plastic injection moulding machines, turbines and die-casting machines
- SW 308      Spent oil-water emulsion used as coolants
- SW 309      Oil tanker sludge
- SW 310      Oil-water mixtures such as ballast water
- SW 311      Sludge from oil storage tank
- SW 312      Waste oils or oily sludge from wastewater treatment plant of refinery or crude oil terminal
- SW 313      Oily residues from automotive workshop or service station oil or grease interceptor
- SW 314      Oil contaminated earth from re-refining of used lubricating oil
- SW 315      Oil or sludge from oil refinery maintenance operation
- SW 316      Tar or tarry residues from oil refinery or petrochemical plant
- SW 317      Acid sludge from the re-refining of used lubricating oil
- SW 318      Spent organometallic compounds may be mixed with benzene excluding mercury compound, or residues of organometallic compounds, including tetraethyl lead, tetramethyl lead and organotin compounds from mixing process of anti-knock compound with gasoline
- SW 319      Waste, substances and articles containing, consisting of or contaminated with Polychlorinated Biphenyls (PCB) or Polychlorinated Triphenyls (PCT)
- SW 320      Waste phenols, phenol compounds including chlorophenol in the form of liquids or sludge
- SW 321      Waste containing formaldehyde
- SW 322      Rubber or latex wastes containing organic solvents or heavy metals

- SW 323 Waste non-halogenated organic solvents
- SW 324 Waste halogenated organic solvents
- SW 325 Waste halogenated or unhalogenated non-aqueous distillation residues arising from organic solvent recovery process
- SW 326 Uncured resin waste containing organic solvents or heavy metals including epoxy resin, phenolic resin
- SW 327 Waste organic phosphorus compound

**SW 4 WASTES WHICH MAY CONTAIN EITHER INORGANIC OR ORGANIC CONSTITUENTS**

- SW 401 Spent alkalis containing heavy metals
- SW 402 Spent alkalis with pH  $\geq 11.5$  which are corrosive or hazardous
- SW 403 Discarded drugs containing organic solvents, euphoric compounds, living vaccines, biocides or heavy metals
- SW 404 Pathogenic, clinical wastes or quarantined materials
- SW 405 Waste from the pharmaceutical products manufacturing plant or packaging of drugs
- SW 406 Clinker, slag and ashes from scheduled wastes incinerator
- SW 407 Air pollution control system residues containing dioxins, furans and their precursor
- SW 408 Contaminated soil, debris or matter resulting from clean-up of a spill of chemical or mineral oil or scheduled waste
- SW 409 Containers, bags or process equipment contaminated with chemicals or pesticides or mineral oil or scheduled wastes
- SW 410 Rags, plastics, papers or filters contaminated with paint or ink or organic solvent or mineral oil or scheduled wastes
- SW 411 Spent activated carbon excluding from the treatment of potable water and processes of the food industry and vitamin production
- SW 412 Plating bath sludge containing cyanide from metal finishing processes
- SW 413 Spent salt containing cyanide from heat treatment processes
- SW 414 Spent aqueous alkaline solution containing cyanide from treatment process metal or plastic surfaces
- SW 415 Spent quenching oils containing cyanides
- SW 416 Sludge of inks, paints, pigments, lacquer, dye or varnish
- SW 417 Waste of inks, paints, pigments, lacquer, dye or varnish

- SW 418 Discarded or off-specification inks, paints, pigments, lacquer, dye or varnish products
- SW 419 Spent di-isocyanates and residues of isocyanate compounds excluding solid polymeric material from foam manufacturing process
- SW 420 Leachate from scheduled waste landfill or leachate from municipal solid waste landfill
- SW 421 A mixture of scheduled wastes
- SW 422 A mixture of scheduled and non-scheduled wastes
- SW 423 Spent processing solution, discarded photographic chemicals or discarded photographic wastes from film processing or plates making
- SW 424 Spent oxidizing agent
- SW 425 Wastes from the production, formulation, trade or use of pesticides, herbicides or biocides
- SW 426 Off-specification products from the production, formulation, trade or use of pesticides, herbicides or biocides
- SW 427 Mineral sludge, including calcium hydroxide sludge, phosphate sludge, calcium sulphite sludge and carbonates sludge
- SW 428 Wastes from wood preserving operation using inorganic salts containing-copper, chromium and arsenic of fluoride compounds or using compound containing chlorinated phenol or creosote
- SW 429 Chemicals that are discarded or off-specification
- SW 430 Obsolete laboratory chemicals
- SW 431 Waste from manufacturing or processing or use of explosives
- SW 432 Waste thermal (heat transfer) fluids including ethylene glycol
- SW 433 Waste containing, consisting of or contaminated with peroxides

**SW 5      OTHER WASTE**

- SW 501 Waste that demonstrates one or more hazardous properties by the presence of substance or products that are explosive, oxidising, flammable, toxic, harmful, corrosive, irritant, carcinogenic, teratogenic or mutagenic.

**SCHEDULE 1 – TENDER FORM**

To:

**TENDER REFERENCE NO.: KK/176/2024/ESTETMOH**

**INVITATION TO TENDER**

**TERM CONTRACT FOR DISPOSAL OF HAZARDOUS WASTE INCLUDING COLLECTION,  
TRANSPORTATION AND INCINERATE SERVICES FROM RIMBA DIALYSIS CENTRE AND  
KIARONG DIALYSIS CENTRE FOR A PERIOD OF ONE (1) YEAR**

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**TENDER OF (*name of tenderer*)**

Company/Business Registration No \_\_\_\_\_

Tender Closing Date: \_\_\_\_\_

| Bil. No.   | Keterangan Description                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Unit Unit | Kadar Rate | Kuantiti Quantity | Jumlah Amount |   |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-------------------|---------------|---|
|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           |            |                   | \$            | ¢ |
|            | Note:<br>Rate shall be deemed to have included all preliminaries such as mobilization of manpower, tools, equipment, transport charges, insurance (workmen compensation) and all others necessary for the execution of the services stated in this Tender.                                                                                                                                                                                                                 |           |            |                   |               |   |
| <b>1.0</b> | <b>DISPOSAL SERVICES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           |            |                   |               |   |
| 1.1        | To provide Disposal Services of clinical waste by collecting, transporting away from Rimba Dialysis Centre and Kiarong Dialysis Centre, incinerate at Contractor's site/approved facilities and finally disposal at approved facilities. Rate shall also include conducting Toxicity Characteristic Leaching Procedure (TCLP) periodically during the period of this Contract.<br><br>For one (1) month both location 10,000kg<br>For one (1) year both location 120,000kg | KG        |            | 120,000           |               |   |
|            | <b>JUMLAH KESELURUHAN BAGI RINGKASAN TAWARAN INI</b><br>TOTAL AMOUNT FOR THIS SUMMARY OF TENDER                                                                                                                                                                                                                                                                                                                                                                            |           |            |                   |               |   |

**Note: Contractor shall check and ensure all prices quoted in the Tender Form are same including in words. If found to be not same, this Tender can be treated as invalid (Clause 3.1.4, Financial Regulation 2022).**

TOTAL AMOUNT (IN WORDS) IN BRUNEI DOLLARS:

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1. We offer and undertake on your acceptance of our Tender to provide the above-mentioned services in accordance with your Invitation To Tender.
2. Our Tender is fully consistent with and does not contradict or derogate from anything in your Invitation To Tender. We have not qualified or changed any of the provisions of your Invitation To Tender.
3. We shall execute a formal agreement in the appropriate form set out in Section 4 – Contract of the Invitation to Tender together with such further terms and conditions, if any, agreed between the Government and us.
4. OUR OFFER IS VALID FOR **SIX (6)** CALENDER MONTHS FROM THE TENDER CLOSING DATE.
5. When requested by you, we shall extend the validity of this offer.
6. We further undertake to give you any further information which you may require.

Dated this                      day of                      2024

\_\_\_\_\_  
**Signature of authorised officer of Tenderer**

Name:

Designation:

Tenderer's official stamp:

## SCHEDULE 2 – INFORMATION SUMMARY

2.1 Tenderers shall provide in this Schedule the following information:

(a) Management summary

(b) Company profile (including Contractor and sub-contractor(s), if any)

(c) Years of experience (as of the Tender Closing Date) of the Contractor and sub-contractor(s) in the:

- *Disposal services of clinical waste*

(d) Other information which is considered relevant

**SCHEDULE 3 – SUB-CONTRACTS**

- 3.1 Tenderers shall complete Table 3.1 with information about all the companies involved in the provision of the services and items specified in this tender. This shall include details about the Contractor and each sub-contractor involved, as well as their respective responsibilities.
- 3.2 Tenderers shall also indicate in Table 3.1 any alliance relationship established with each sub-contractor. An alliance is defined as a formal and binding business relationship between the allied parties.

Table 3.1                      Responsibility Table

| Company Name      | Responsibility Description | Alliance Relationship between Contractor and Sub-contractor(s) |                  |                      |
|-------------------|----------------------------|----------------------------------------------------------------|------------------|----------------------|
|                   |                            | Alliance Exists? (Y/N)                                         | Date Established | Alliance Description |
| Contractor        |                            |                                                                |                  |                      |
|                   |                            | Not Applicable                                                 | Not Applicable   | Not Applicable       |
| Sub-contractor(s) |                            |                                                                |                  |                      |
|                   |                            |                                                                |                  |                      |



#### **SCHEDULE 4 – COMPANY’S BACKGROUND**

- 4.1 Each of the companies involved in this tender, including Contractor and sub-contractor(s) (if any), shall provide information on the company’s background, scope of operations, financial standing and certified copy of its Certificate of Incorporation or Certificate of Registration (as the case may be).

## SCHEDULE 5 – REFERENCES

- 5.1 Tenderers shall submit a list of customers in Table 5.1 to whom the Contractor has provided similar services and items as specified in this tender in the recent 3 years as of the Tender Closing Date.

Table 5.1 References of previous customers

| <b>Customer Name and Address</b> | <b>Customer Type (Govt or Quasi Govt)*</b> | <b>Contact Person</b> | <b>Title</b> | <b>Contact Number, Fax Number and E-mail Address</b> |
|----------------------------------|--------------------------------------------|-----------------------|--------------|------------------------------------------------------|
|                                  |                                            |                       |              |                                                      |

**\*Note: Tenderers shall indicate whether the customer is a Government or Quasi Government organisation. A Quasi Government is defined as an organisation which (1) is managed and controlled by the Government; or (2) has at least 50% shares being held by the Government. Please leave the column blank if the customer is neither a Government or Quasi Government organisation.**

- 5.2 The Ministry of Health shall treat all the information submitted under this schedule in strict confidence.
- 5.3 The Ministry of Health reserves the right to contact the references for tender assessment purposes.

**SCHEDULE 6**  
**PENGAKUAN PENENDER**  
***TENDERER'S DECLARATION***