

REPUBLIC OF GHANA

HAZARDOUS, ELECTRONIC AND OTHER WASTES (CLASSIFICATION), CONTROL AND MANAGEMENT REGULATIONS, 2016

(L.I. 2250)

HAZARDOUS, ELECTRONIC AND OTHER WASTES (CLASSIFICATION) CONTROL AND MANAGEMENT REGULATIONS, 2016

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In exercise of the power conferred on the Minister responsible for the Environment by section 36 (c), (e), (f) and (g) of the Hazardous and Electronic Waste Control and Management Act, 2016 (Act 917) and in consultation with the Environmental Protection Agency and other relevant national authorities, these Regulations are made this 11th day of October, 2016.

Purpose, Application and Classification

1. Purpose

The purpose of these Regulations is to

(a) regulate the classification, control and management of waste;
(b) establish a mechanism and procedure for the listing of waste management activities that do not require a Waste Management Permit;
(c) prescribe requirements for the establishment of take-back Systems;
(d) prescribe requirements and timeframes for the management Of wastes listed in the First Schedule;
(e) prescribe general duties of waste generators, waste transporters and waste managers; and
(f) prescribe requirements for the disposal of wastes.

2. Application and exemption

(1) Subject to subregulation (2), these Regulations apply to a waste generator, waste transporter and waste manager.
(2) These Regulations do not apply to a person who generates domestic waste which is collected by a District Assembly.
(3) The Agency may grant an exemption where the Agency considers it necessary.
(4) The Agency shall not grant an exemption under these Regulations where
(a) Ghana is a signatory to an international agreement relating to hazardous wastes; and
(b) the provisions of that international agreement conflict with the grant of the exemption.

3. Waste classification

(1) Subject to subregulation (2), a waste generator shall ensure that the waste generated by that waste generator is classified in accordance with the Ghana Waste List specified in the First Schedule, within one hundred and eighty-days of the coming into force of these Regulations.

(2) Waste listed in the Second Schedule does not require classification.

(3) For the purposes of classification in terms of subregulation (1), a waste generator, waste manager or waste transporter shall keep the waste separate and shall not mix the waste before the waste is classified.

(4) A waste generator shall re-classify was te in terms of subregulation (1) every five years.

(5) Where

(a) a modification to the process or activity that generated the waste occurs;

(b) a change in raw material or other input occurs; or

(c) any other variation of a relevant factor occurs resulting in changes to the waste, which affects the classification, the waste shall be reclassified within six months.

(6) Where waste undergoes a form of treatment, the waste generator shall re-classify the treated waste and any waste derived from the treatment process in terms of subregulation (1) within six months.

(7) Where the Agency reasonably believes that a waste has not been classified in accordance with subregulation (1), the Agency may direct or require the waste generator concerned to have the classification subjected to peer review to confirm the classification and the waste generator shall comply.

(8) A person who contravenes subregulation (7) is liable to pay to the Agency, an administrative penalty of two thousand five hundred penalty units.

4. Safety data sheet

(1) Subject to subregulation (1) of regulation 3 and subregulations (2) and (3), a generator of hazardous wastes shall ensure that a safety data sheet for the hazardous wastes is prepared in accordance with the proce- dure specified in the Globally Harmonised System of Classification and Labelling of Chemicals.

(2) Subregulation (l) does not apply to a person who generates waste listed in paragraph (3) of the Second Schedule.

(3) Despite subregulation (2), the person who generates the waste provide a safety data sheet for the waste as follows:

(a) a safety data sheet for waste listed in paragraph (3) (a) of the Second Schedule shall be prepared m accordance with the Globally Harmonised System of Classification and Labelling of Chemicals for the product the waste originates from; and

(b) a safety data sheet for waste listed in paragraph (3) (b) of the Second Schedule shall be prepared in accordance with the Globally Harmonised System of Classification and Labelling of Chemicals reflecting the details of the specific hazardous wastes or hazardous chemicals contained in the waste.

(4) .A Person who generates waste listed in paragraph (3) (c) of the Schedule shall not be required to prepare a safety data sheet for waste.

(5) A person who holds hazardous wastes, other than waste listed in paragraph (3) (*c*) of the second schedule, shall maintain a safety data sheet for the waste referred to in subregulations (l), (2) and (3).

Waste Management

5. General provisions

(1) A waste generator shall not keep waste that has not been classified in accordance with regulation 3 for a period of more than one hundred and eighty days.

(2) A waste transporter or waste manager shall not accept to transport or manage waste that has not been classified in accordance with regulation 3.

(3) A waste generator, waste transporter or waste manager shall not dilute any waste solely to reduce the concentration of the constituents of the waste for the purposes of

(a) classification of the waste m accordance with regulation 3 (l); or

(b) assessment of the waste for disposal in a landfill in accordance with the Third Schedule.

(4) A person who contravenes subregulation (l), (2) or (3) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

(5) A container or storage impoundment that holds waste shall .be labelled in accordance with the Globally Harmonised System of Class1fication and Labelling of Chemicals.

(6) Where the container or storage impoundment which holds. the waste cannot be labelled in accordance w1th the Globally Harmonised System of Classification and Labelling of Chemicals, the waste generator shall keep records indicating informat1on on the following:

(a) the date on which

i. the waste was first placed in the container or storage impoundment; and

ii. the waste was placed in the container or storage impoundment for the last time when the container was filled, closed, sealed or covered;

(b) the date on which and where necessary, the quantity of waste added and removed from the container or storage impoundment

(c) the specific category of waste in the container or storage impoundment; and

(d) the classification of the waste in accordance with regulation 3.

(7) A waste generator shall ensure that the waste generated is re-used, recycled, recovered, treated or landfilled within a period of eighteen months of the generation of the waste

(8) A waste manager shall not store waste for more than eighteen months from the date of the generation of the waste or receipt of the waste from the person who generates the waste.

(9) Despite subregulations (7) and (8), the re-use, recycling, recovery, treatment or landfilling of waste currently stored in a faci11ty shall commence within two years from the date of the coming into force of these Regulations.

(10) The Agency shall, in collaboration with relevant stakeholders, specify the requirements for the segregation, labelling or colour-coding, storage and transport of hazardous and other wastes as classified in the First Schedule.

6. Waste treatment

(1) A person shall not mix or treat waste where the mixture of the waste or the treatment of the waste is likely to

(a) reduce the potential for the re-use, recycling or recovery of the waste;

(b) result in treatment that is not controlled and not permanent; or

(c) result in the generation of more toxic material.

(2) Despite subregulation (l) and subregulation (3) of regulation 5,a person may blend or pre-treat waste to

(a) improve the potential for re-use, recycling, recovery or treatment of the waste; or

(b) reduce the risk associated with the management of the waste.

7. Waste treatment plants

(1) A person who installs and operates

(a) an incineration plant;

(b) a recovery and recycling plant;

(c) a composting plant; or

(d) wastewater treatment plant

shall apply for and obtain a permit in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652).

(2) Despite subregulation (l), the Agency shall not grant a permit to an operator of an incineration plant unless the Agency is satisfied that all the requirements in the Fourth Schedule have been complied with.

(3) The Agency may impose additional requirements or requirements which are stricter than those set out in the Fourth Schedule depending on the local conditions and characteristics.

(4) Despite subregulations (l), (2) and (3), the Agency may direct otherwise in an emergency Situation to protect human health, property or the environment

8. Disposal of waste to landfill

(1) A person shall not construct and operate a landfill unless that person obtains from the Agency an environmental permit in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652).

(2) In granting a landfill permit, the Agency shall classify a landfill into one or more of the following classes:

(a) Class 1, a landfill for hazardous waste;

(b) Class 2, a landfill for non-hazardous waste; and

(c) Class 3, a landfill for inert waste.

(3) The Agency shall ensure that the classification is stated in the landfill permit.

(4) A waste generator or a waste manager shall, before the disposal of waste to a landfill, ensure that the waste is assessed in accordance w1h the Criteria for Assessment of Waste for Landfill Disposal as set out m the Third Schedule.

(5) A waste generator or a waste manager who intends to dispose of waste to a landfill shall only dispose of the waste m accordance w1th the requirements for disposal of waste to landfill as set out in the Third Schedule.

(6) A person shall not dispose of or accept for disposal in a landfill the following types of waste:

(a) biologically degradable waste, other than waste wh1ch has a total organic carbon composition which does not exceed ten per cent or where ignition loss does not exceed twenty per cent;

(b) liquid waste;

(c) plastics used for

i. packaging and carrier bags, and

ii. agricultural purposes;

(d) waste which based on the condition of the landfill is regarded as

i. explosive,

ii. radioactive,

iii. corrosive,
iv. oxidizing,
v. highly flammable, or
vi. flammable;

(e) waste from a hospital, laboratory and other medical or veterinary establishment which is considered to be infectious;

(f) waste from a research, development or educational facility that contains chemical substances that are unknown, new and the effects of which on humans and the environment are not known;

(g) whole used tyres and shredded used tyres, other than bicycle tyres; or

(h) any other type of waste determined by the Agency in consultation with relevant stakeholders.

(7) A person shall not dispose of or accept for disposal in an underground storage site the following types of waste:

(a) waste and a waste Container which may react to the chemical and physical storage conditions and lead to a change in the volume or other radians which is likely to endanger the operational safety or the integrity of the barrier;

(b) waste that is biodegradable;

(c) waste that

i. generates a gas-air mixture which is toxic or explosive, and
ii. where the Container is closed, the Container shall not contain a concentration of explosive gas higher than ten per cent of the concentration which corresponds to the lower explosive limit;

(d) waste which has an insufficient stability to correspond to the geo-mechanical conditions;

(e) waste that is

i. auto-inflammable,
ii. liable to spontaneous combustion under the current storage conditions; or
iii. volatile;

(f) gaseous products; and

(g) an unidentified mixture of waste.

(8) Subregulations (4) and (5) apply to a waste generator except where the waste

(a) is specified m subparagraphs (a) and (b) of paragraph 2 of the Second Schedule; or

(b) is generated by a business or commercial entity that is collected by a District Assembly.

(9) Despite subregulation (l) to (7), the Agency may direct otherwise in an emergency Situation to protect human health, property or the environment.

(10) The Agency shall re-classify an existing landfill in terms of subregulation (2), within two years after the coming into force of these Regulations.

9. Establishment and approval of take-back System

(1) A person who produces a beverage product shall

(a) set up and manage; or

(b) join a take-back System for primary and secondary packaging in accordance with the criteria for establishment and approval of a takeback System as set out in the Fifth Schedule.

(2) A person who contravenes subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than five thousand penalty units and not more than ten thousand penalty units or to a term of imprisonment of not less than five years and not more than ten years or to both.

(3) A person other than a producer of beverage products shall obtain an environmental permit to enable that person set up and manage a take-back System for primary and secondary packaging in accordance with the Fifth Schedule.

(4) A District Assembly may establish or facilitate the establishment of a collection centre and a take-back System.

(5) The Agency shall, before granting approval for the Operation of a take-back System, request that the System

(a) achieves a minimum recovery rate to be determined by the Agency m consultation with the relevant stakeholders; and

(b) is managed in an environmentally-sound manner.

(6) Despite subregulations (1), (2), (3) and (4), the Agency may direct otherwise in an emergency to protect human health, property or the environment.

10. Financing of waste management activities

(1) The Agency shall, in applying the Polluter Pays Principle, ensure that a producer provides at least for the financing of the
- *(a)* collection,
- *(b)* treatment,
- *(c)* recovery, and
- *(d)* environmentally-sound disposal of end-of-life waste from a household that has been deposited at a collection facility set up under these Regulations.

(2) Where a product is placed on the market later than the date of commencement of these Regulations, each producer is responsible for financing the treatment of waste referred to in regulation 6 as regards the waste produced by that producer from the activities of that producer.

(3) A producer may decide to undertake the costs of financing the treatment of waste
- *(a)* individually, or
- *(b)* by joining a collective scheme.

(4) The Agency shall ensure that each producer
- *(a)* clearly marks the product of that producer; and
- *(b)* provides a guarantee at the time the producer places the product on the market which shows that the management of end-of-life waste shall be financed by the producer of the product on the market.

(5) A guarantee referred to in subregulation (4), may take the form of participation by the producer in an appropriate scheme for the purpose of financing the management of a waste product.

(6) The producer shall provide a guarantee that the operations referred to in subregulation (5) relating to the particular product shall be financed.

Record Keeping and Waste Manifest System

11. Records of waste generation and management

(1) A waste generator shall keep accurate and up to date records of the management of the waste that the waste generator generates.

(2) The records shall reflect

(a) the classification of the waste;

(b) the quantity of each waste generated per month expressed in tonnes;

(c) the quantity of each type of waste that has been

i. re-used,

ii. recycled,

iii. recovered,

iv. treated, or

v. disposed of; and

(d) the person responsible for managing the waste.

(3) Subregulation (2) does not apply to a waste generator who generates waste listed in subparagraph (a) of paragraph (2) of the Second Schedule.

(4) The records referred to in subregulation (2) shall be

(a) retained for a period of at least five years; and

(b) made available to the Agency upon request.

(5) A person who contravenes a provision of th1s regulation is liable to pay to the Agency an administrative penalty of one thousand penalty units and a further penalty of one hundred penalty units for each day during which the contravention continues.

12. Waste Manifest System

(1) A person who holds waste that has been classified as hazardous in accordance with subregulation (1) of regulation 3 or a waste that is listed in paragraph (3) of the Second Schedule shall

(a) keep a waste manifest which contains the relevant information set out in the Sixth Schedule; and

(b) complete a waste manifest containing the information specified in subparagraph (a) of paragraph of the Sixth Schedule for each consignment of waste that is transported to a waste manager.

(2) Subregulation (l) does not apply to a waste generator who is also a waste manager and manages the waste on the same premises where the waste is generated.

(3) A waste transporter shall not accept to transport waste which is

(a) classified as hazardous in accordance with subregulation (l) of regulation 3; or

(b) is listed in paragraph (3) of the Second Schedule unless the waste manifest accompanies the waste.

(4) A waste transporter who intends to transport waste which is classified as hazardous in accordance with subregulation (l) of regulation 3 or waste that is listed in paragraph (3) of the Second Schedule shall

(a) complete a waste manifest containing the Information specified in subparagraph (b) of paragraph (2) of the Sixth Schedule for each consignment of waste that is transported;

(b) provide the information to the waste generator before the waste is transported fi-om the premises of that person; and

(c) provide the information to the waste manager at the time of delivery of the waste to the facility for a waste management activity.

(5) A waste manager shall not accept waste which is classified as hazardous in accordance with subregulation (l) of regulation 3 or waste that is listed in paragraph (3) of the Second Schedule unless the waste manifest accompanies the waste.

(6) A waste manager who manages waste that is classified as hazardous in accordance with subregulation (l) of regulation 3 or waste that is listed in paragraph (3) of the Second Schedule shall complete the waste manifest in quadruplicate with the information specified in subparagraph (c) of paragraph (2) of the Sixth Schedule so as to confirm that the waste load has been accepted, and managed in accordance with these Regulations.

(7) Subject to subregulations (l), (3), (4), (5) and (6), a waste generator, a waste transporter or a waste manager shall
   (a) retain a copy of the waste manifest or have access to a copy or a record of the waste manifest for a period of at least five years; and
   (b) make the waste manifest available to the Agency upon request.

(8) A person who contravenes subregulation (3) or (5) commits an offence and is liable on summary conviction to a fine of not less than two thousand five hundred penalty units and not more than five thousand penalty units or to a term of imprisonment of not less than two years and not more than five years or to both.

(9) A person who contravenes subregulation (l), (4) or (6) is liable to pay to the Agency an administrative penalty of five hundred penalty units.

Control and Management of Hazardous Wastes or Other Wastes

13. Requirement of environmental permit for hazardous wastes or other wastes

(1) A person shall not commence an activity involving hazardous wastes or other wastes unless,
   (a) the activity has been registered by the Agency; and
   (b) an environmental permit m accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652) has been issued by the Agency in respect of the activity.

(2) A person shall not commence an activity which in the opinion of the Agency has or is likely to have an adverse effect on the environment or public health unless, the activity has been registered by the Agency.

(3) Where the Agency considers that an activity m existence on the date of the coming into force of the Regulations has or.is likely to have adverse effect on the environment or public health, the Agency shall issue a written notice to the person responsible, to seek registration and obtain an environmental permit in respect of the activity within a time that is specified in the notice.

(4) A person who carries out an activity that is in existence on the date of the coming into force of these Regulations and who has not registered with the Agency shall, within one year, register with the Agency and obtain an environmental permit.

(5) For the purpose of this regulation, "activity" includes the collection, storage, pre-treatment, transportation, disposal, purchase or dealing in hazardous wastes or other wastes.

14. Application for environmental permit for hazardous wastes or other wastes

(1) A person who seeks to collect, store, pre-treat, transport, dispose of, sell, purchase or deal in hazardous wastes or other wastes shall apply to the Agency as set out in Form A of the Seventh Schedule.

(2) The application shall be accompanied with

(a) a copy of the certificate of incorporation in the case of a body corporate;

(b) a statutory declaration of the partnership agreement in the case of a partnership;

(c) a copy of proof of proprietorship for an unlimited company;

(d) a copy of a national identification card for individual applicants;

(e) the required fee determined in accordance with the Fees and Charges (Miscellaneous Provisions) Act, 2009 (Act 793); and

(f) any other information the Agency may request including an environmental impact Statement in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652).

(3) The Agency shall, within fourteen days after receipt of the application, acknowledge receipt of the application.

(4) The Agency shall, on receipt of an application,

(a) verify and validate the information received; and

(b) determine whether the applicant has met the requirements of subregulation (2).

15. Grant of environmental permit for hazardous wastes or other wastes

(1) The Agency may grant or refuse to grant an environmental permit to an applicant after considering an application.

(2) The Agency shall, within twenty-five days after receipt of the application, make a decision whether or not to grant the environmental permit and inform the applicant of the decision.

(3) Where the Agency refuses to grant the environmental permit, the Agency shall state the reason for the refusal.
(4) An applicant whose application for an environmental permit is refused may lodge a complaint with the Minister who shall, within thirty days after receipt of the complaint, make a decision on the complaint.
(5) An applicant may seek remedy in court if the applicant is dissatisfied with the decision of the Minister or where the Minister fails to make a decision within the period specified in subregulation (4).

16. Non-transferability of environmental permit for hazardous wastes or other wastes

(1) An applicant who has been granted an environmental permit shall not transfer the permit to another person.
(2) A person who contravenes subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

17. Renewal of environmental permit for hazardous wastes or other wastes

(1) An environmental permit issued under regulation 15 is valid for a period of two years and is subject to renewal at the end of the period.
(2) An applicant who wishes to renew an environmental permit shall submit an application for renewal to the Agency not less than one month before the expiry date of the permit.
(3) The application for renewal shall be accompanied with
    (a) a copy of the expired permit;
    (b) an annual environmental report;
    (c) an environmental management plan;
    (d) an emergency response plan; and
    (e) the required renewal fee determined in accordance with the Fees and Charges (Miscellaneous Provisions) Act, 2009 (Act793).

(4) The Agency shall
- *(a)* acknowledge receipt of the application for renewal within five days of receipt of the application; and
- *(b)* notify the applicant of its decision within thirty days of the receipt of the application.

(5) The Agency shall, in making a decision on the application for renewal, take into account the monitoring and site verification report on whether and to what extent the applicant
- *(a)* has complied with the terms and conditions of the environmental permit; and
- *(b)* has met its obligations under these Regulations.

18. Suspension or revocation of environmental permit for hazardous wastes or other wastes

(1) The Agency may suspend an environmental permit issued under regulation 15 where the Agency determines that the holder of the permit
- *(a)* has failed to obtain any other authorisation required by law m relation to the activity before commencement of operations;
- *(b)* is in breach of a provision of these Regulations relating to the activity;
- *(c)* has failed to make any payments required under these Regulations on the due date;
- *(d)* acts in breach of any of the conditions to which the holder of the environmental permit is subject; or
- *(e)* has failed to comply with mitigation commitments in the assessment.

(2) The Agency may revoke an environmental permit issued under regulation 15 on the following grounds:
- *(a)* a serious and repeated breach of the conditions of the permit;
- *(b)* fraud or intentional misrepresentation by the holder of the environmental permit; or
- *(c)* where the holder of the environmental permit has been convicted for an offence involving fraud or dishonesty

(3) The Agency shall not suspend or revoke an environmental permit unless the Agency has

(a) given the holder of the permit at least seven days' written notice of the decision to suspend or revoke the environmental permit and has specified in the notice the nature of the defect, omission or breach; and

(b) requested the holder of the permit to remedy the defect, omission or breach within fourteen days from the date of the written notice.

(4) Where the holder of the permit fails to take the necessary action to remedy the defect, omission or breach, the Agency shall suspend or cancel the environmental permit.

(5) The suspension or revocation of an environmental permit is effective from the day that the holder of the permit receives the decision of the Agency in writing to suspend or revoke the permit.

19. Management of hazardous wastes or other wastes

(1) Subject to section 13 of the Act, the Agency shall manage hazardous wastes in a manner that ensures that a person

(a) Who

i. collects,
ii. Stores,
iii. pre-treats, or
iv. transports

hazardous wastes, takes measures to prevent any risk of pollution or damage to humans or animals;

(b) does not mix hazardous wastes with other wastes; and

(c) does not mix different types of hazardous wastes together where this may cause

i. a risk of pollution, or
ii. create a problem in the further management of the wastes.

(2) Subregulation (l) does not apply to

(a) an enterprise that holds a permit for the management of hazardous wastes that is generated from the activities of that enterprise;

(b) the recovery of the hazardous wastes of an enterprise which is produced by that enterprise and which takes place within the scope of the business unit where the recovery process does not involve a risk of pollution;

(c) the acceptance of hazardous wastes from a ship; or

(d) an arrangement between District Assemblies for the acceptance of hazardous wastes operated by the District Assembly or through co-operation between District Assemblies.

(3) An enterprise that generates hazardous wastes but that does not have the capacity for on-site management of the wastes shall deliver the hazardous wastes that the enterprise generates to an entity that can manage the hazardous wastes in accordance with these Regulations.

(4) The enterprise referred to in subregulation (3) shall deliver the hazardous wastes to the entity at least once a year.

(5) Where

(a) an entity which generates hazardous wastes is shut down; or

(b) the Operation of that entity is suspended for a period of more than three months

the delivery duty becomes effective immediately.

(6) Where an enterprise on whose premises hazardous wastes is stored is declared bankrupt, the directors of that enterprise shall notify the Agency immediately of the type and quantity of hazardous wastes that has been left on the premises.

(7) Where the owner of hazardous wastes cannot be traced or the owner has gone bankrupt, the Agency shall make an application to the Administrator of the Electrical and Electronic Waste Management Fund appointed under section 27 of the Act, for the proper management of the hazardous wastes.

(8) A District Assembly shall ensure that adequate Services are offered for the acceptance of small quantities of hazardous wastes from households and enterprises within that District Assembly.

(9) An enterprise that delivers hazardous wastes shall provide sufficient information on the origin, content and properties of the waste.

(10) An enterprise that delivers waste shall complete a Hazardous Wastes Declaration Form as set out in Form B of the Seventh Schedule upon delivery of the waste.

(11) A package for carrying hazardous wastes shall be clearly labelled with the serial number of the Hazardous Wastes Declaration Form and the labelling shall tolerate physical and climatic influences.

(12) An entity that handles hazardous wastes shall ensure that

(a) the waste that is accepted from an enterprise is declared; and

(b) the Hazardous Wastes Declaration Form as set out in Form B of the Seventh Schedule accompanies each delivery when the wastes is passed on.

(13) The entity that first accepts hazardous wastes that is subject to a declaration duty shall, at a date not later than the fifteenth day of the ensuing month, transfer a copy of the completed Hazardous Wastes Declaration Form as set out in Form B of the Seventh Schedule to the Agency.

(14) A person who contravenes subregulation (9) is liable to pay to the Agency an administrative penalty of five hundred penalty units.

Control and Management of Transboundary Movement of Hazardous Wastes or Other Wastes

20. General requirements for transboundary movement hazardous wastes or other wastes

(1) In accordance with section 4 of the Act, a person shall not engage m the transboundary movement of hazardous wastes or other wastes from another country to this country unless that person has obtained a written authorisation from the Minister.

(2) The Minister shall, on the advice of the Agency, grant a written authorisation to a person for the transboundary movement of hazardous wastes or other wastes which includes the export, import or transit of hazardous wastes or other wastes.

(3) The Agency shall register a person who has been granted a written authorisation. by the Minister for the transboundary movement of hazardous wastes or other wastes.

(4) The Agency shall register the owner of a vehicle used for the transboundary transportation of hazardous wastes or other wastes.

(5) A written authorisation for the transboundary movement of hazardous wastes or other wastes is valid for a period of one year.
(6) A failure to utilise the written authorisation granted within one year fiom the date of issue shall render the written authorization invalid after the period.
(7) Where an applicant whose written authorisation becomes invalid under subregulation (6) requires a valid written authorisation, that applicant shall resubmit an application to the Minister for approval in respect of the invalidated written authorisation and provide reasons for the new application.
(8) The Minister may, on consideration of an application under subregulation (7), decide that the
(a) assessment report already approved shall be used in respect of the resubmitted application, or
(b) assessment report shall be revised in the areas that the Agency directs.
(9) A person shall pay fees in respect of the transboundary movement of hazardous wastes and other wastes in accordance with the Fees and Charges (Miscellaneous Provisions) Act, 2009 (Act 793).

21. Application for written authorisation to export hazardous wastes or other wastes

(1) In accordance with sections l and 3 of the Act and regulation 20, a person shall not export hazardous wastes or other wastes out of the country unless that person has obtained a written authorisation issued by the Minister.
(2) The Minister shall, within fourteen days after receipt of the application for written authorisation, make a decision on whether or not to grant the written authorisation and inform the applicant of the decision.
(3) The Minister shall, in granting the written authorisation, request the exporter to provide the following:
(a) a completed notification form as set out in Form C of the Seventh Schedule;
(b) evidence of a contract between the exporter and the disposer specifying environmentally-sound management of the hazardous wastes or other wastes to be exported; and
(c) a completed movement document as set out in Form D of the Seventh Schedule.

(4) A person who contravenes subregulation (1) commits an offence and is liable on summary conviction

(a) to a fine of not less than two thousand five hundred penalty units and not more than sixty thousand penalty units or to a term of imprisonment of not less than one year and not more than ten years or to both, and

(b) for the cost of cleaning up any contamination caused by the hazardous wastes or other wastes and any other mitigating action required to deal with the effect of the waste.

22. Application for written authorisation to import hazardous wastes or other wastes

(1) In accordance with sections l and 2 of the Act and regulation 20, a person shall not Import hazardous wastes or other wastes into the country unless that person has obtained a written authorisation issued by the Minister.

(2) The Minister shall, within seven days after receipt of the application for written authorisation, make a decision whether or not to grant the written authorisation and inform the applicant of the decision.

(3) The Minister shall, in granting the written authorisation, request the importer to provide the following:

(a) a completed notification form as set out in the Form C of the Seventh Schedule;

(b) details of an approved site or facility for the disposal of the hazardous wastes or other wastes to show evidence that the importer is capable of managing and disposing of the hazardous wastes or other wastes in an environmentally-sound manner;

(c) evidence that the importer or the agent of the importer

i. is resident in the country, or

ii. in the case of a body corporate, has ti permanent place of business m the country; and

(d) evidence that the hazardous wastes or other wastes is covered by insurance or a bond or any other adequate financial guarantee.

(4) A person who contravenes subregulation (l) commits an offence and is liable on summary conviction to a fine of the Cedi equivalent of two million llnited States Dollars or to a term of imprisonment of not more than twenty years or to both and shall in addition

(a) re-export the waste; and

(b) pay for the cost of cleaning up any contamination caused by the hazardous wastes or other wastes and any other mitigating action required to deal with the effect of the waste.

23. Application for consent for the transit of hazardous wastes or other wastes

(1) In accordance with sections 5 and 6 of the Act and regulation 20, a person shall not transit hazardous wastes or other wastes through the Republic except with the written consent of the Minister.

(2) A person who seeks to transit hazardous wastes or other wastes through the Republic shall provide the following:

(a) a copy of a written consent m the English language that has been received from the country of Import at least three months before the intended date of shipment;

(b) a time table in the English language specifying the expected dates of transit through the Republic; and

(c) evidence that the hazardous wastes or other wastes in transit is covered by insurance or a bond, or any other adequate financial guarantee.

(3) The Minister shall, within seven days after receipt of the information specified in subregulation (2), make a decision whether or not to grant the consent and inform the applicant of the decision.

(4) A person who contravenes subregulation (l) is liable to pay to the Agency an administrative penalty of fifteen thousand penalty units and shall in addition re-export the hazardous wastes or other wastes to the State of export or the Minister shall re-export the waste at die expense of that person.

Control and Management of Healthcare Waste

24. General provision on healthcare waste

A person shall not

(a) store,

(b) transport; or

(c) treat,

healthcare waste, unless the waste has been classified in accordance with the First Schedule.

25. Application for a permit to store, transport and treat healthcare waste

(1) A person who seeks to store, transport or treat healthcare waste shall apply to the Agency for an environmental permit.

(2) An application for an environmental permit to store, treat or transport healthcare waste shall be as set out m Form E of the Seventh Schedule.

(3) The application in subregulation (2) shall be accompanied with

(a) a copy of the certificate of incorporation in the case of a body corporate;

(b) a statutory declaration of the partnership agreement in the case of a partnership;

(c) a copy of proof of proprietorship for an unlimited Company;

(d) a copy of a national identification card in the case of an individual;

(e) the required fee determined in accordance with the Fees and Charges (Miscellaneous Provisions) Act, 2009 (Act 793); and

(f) any other information the Agency may request including an environmental impact Statement m accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652).

(4) The Agency shall, within fourteen days after receipt of the application, acknowledge receipt of the application.

(5) The Agency shall, on receipt of an application,

(a) verify and validate the information received; and

(b) determine whether the applicant has met the requirements of subregulation (3).

26. Grant of environmental permit to store, transport and treat healthcare waste

(1) The Agency may grant or refuse to grant an environmental permit to store, transport or treat healthcare waste, to an applicant after considering an application.

(2) The Agency shall, within twenty-five days after receipt of the application, make a decision whether or not to grant the environmental permit and inform the applicant of the decision,

(3) Where the Agency refuses to grant the environmental permit, the Agency shall state the reason for the refusal.
(4) An applicant whose application is refused may lodge a complaint with the Minister who shall, within thirty days after receipt of the complaint, make a decision on the complaint.
(5) An applicant may seek remedy in court if the applicant is dissatisfied with the decision of the Minister or where the Minister fails to make a decision within the period specified in subregulation (4).

27. Non-transferability of environmental permit to store, transport or treat healthcare waste

(1) An applicant who has been granted an environmental permit under regulation 26 shall not transfer the permit to another person.
(2) A person who contravenes subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

28. Renewal of environmental permit to store, transport or treat healthcare waste

(1) An environmental permit issued under regulation 26 is valid for a period of two years and is subject to renewal at the end of the period.
(2) An applicant who wishes to renew an environmental permit to store, transport or treat healthcare waste, shall submit an application for renewal to the Agency not less than one month before the expiry date of the permit.
(3) The requirement for the renewal of an environmental permit is the same as that for the grant of the original permit and shall be accompanied with:
    (a) a copy of the expired permit;
    (b) a waste management plan;
    (c) an annual environmental report;
    (d) an emergency response plan; and
    (e) the required renewal fee determined in accordance with the Fees and Charges (Miscellaneous Provisions) Act, 2009 (Act793).

(4) The Agency shall
- *(a)* acknowledge receipt of the application for renewal within five working days of receipt of the application; and
- *(b)* notify the applicant of its decision within thirty days of the receipt of the application.

(5) The Agency shall, in making a decision on the application for renewal, take into account the monitoring and site verification report on whether and to what extent the applicant
- *(a)* has complied with the terms and conditions of the environmental permit; and
- *(b)* has met its obligations under these Regulations.

29. Suspension or revocation of environmental permit to store, transport or treat healthcare waste

(1) The Agency may suspend or revoke an environmental permit issued under regulation 26 where the Agency determines that the holder of the permit
- *(a)* has failed to obtain any other authorisation required by law in relation to the activity before commencement of operations;
- *(b)* is in breach of any provision of these Regulations or any other enactment relating to the activity;
- *(c)* has failed to make any payment required under these Regulations on the due date;
- *(d)* has acted in breach of any of the conditions to which the environmental permit of the holder is subject; or
- *(e)* has failed to comply with mitigation commitments in the assessment.

(2) The Agency shall not suspend or revoke an environmental permit to store, transport or treat healthcare waste unless the Agency has
- *(a)* given the holder of the permit at least seven days' written notice of the decision to suspend or revoke the environmental permit and has specified in the notice the nature of the defect, omission or breach; and
- *(b)* requested the holder of the permit to remedy the defect, omission or breach within fourteen days fi-om the date of the written notice.

(3) where the holder of the permit fails to take the necessary to remedy the defect, omission or breach, the Agency shall suspend revoke the environmental permit.

(4) The suspension or revocation of an environmental permit is effective from the day that the holder of the permit receives the decision of the Agency in writing to suspend or revoke the permit.

30. Management of healthcare waste

(1) A person who manages healthcare waste shall manage the waste in accordance with these Regulations and guidelines issued by the Agency.

(2) In furtherance of subregulation (1), the process for the management of healthcare waste shall follow the following stages:

(a) the generation of the healthcare waste;

(b) the segregation of the healthcare waste at source into appropriate colour-coded containers;

(c) the internal storage of the healthcare waste;

(d) the packaging and labelling of the healthcare waste;

(e) the internal transportation of the healthcare waste to an external storage site;

(f) the transportation of the healthcare waste to a treatment plant;

(g) the treatment of the healthcare waste; and

(h) the disposal of the healthcare waste.

(3) For the purpose of paragraph (e) of subregulation (2), "external storage site" includes a transit storage site and an on-site central storage point.

31. Segregation of healthcare waste

(1) A person who generates healthcare waste shall, in accordance with guidelines issued by the Agency,

(a) segregate the waste at the point of generation, and

(b) place the segregated waste into containers or bags at the point of generation.

(2) A person specified in subregulation (1), shall ensure that each waste stream which is segregated is packaged and labelled as follows:

(a) BLACK for general waste including kitchen waste, waste paper, waste cardboard and sweepings;

(b) YELLOW for infectious waste including sharps, patient waste, and cultures or specimens with the biohazard label, and radioactive waste with the radioactive symbol;

(c) RED for pathological waste including human or animal tissue, limbs, foetus or highly infectious waste; or

(d) BROWN for hazardous wastes including expired drugs, vaccines and chemicals.

(3) The person who generates the healthcare waste shall ensure that the waste which is generated and passed on to an approved transporter or waste management Company to be transported for treatment or disposal is accompanied by a signed waste manifest as set out in the Sixth Schedule certifying that the waste has been properly segregated.

(4) A person who contravenes this regulation is liable to pay to the Agency an administrative penalty of one thousand penalty units and a further penalty of two hundred penalty units for each day during which the contravention continues.

32. Storage of healthcare waste

A person who is in Charge of a facility that is responsible for the storage of healthcare waste shall

(a) provide the appropriate colour-coded bins inside a healthcare facility at the point of waste generation;

(b) ensure that the bin for the storage of the healthcare waste is

i. non-transparent;
ii. impervious to moisture;
iii. strong to prevent damage during handling or use;
iv. leak-proof;
v. puncture-resistant;
vi. closed with a fitted lid;
vii. fitted with handles for easy manipulation;
viii. light weight and convenient for lifting;
ix. designed to minimise physical contact;
x. labelled with a "BIOHAZARD" logo; and
xi. lined with a plastic bag of a minimum of one hundred millimicron thickness;

(c) ensure that the healthcare waste is stored in a dedicated area or room;
(d) ensure that the storage facility is
i. impermeable with a hard-standing floor and good drainage which are easy to clean and disinfect;
ii. connected with water supply for cleaning purposes;
iii. easily accessible for staff in charge of handling the waste;
iv. possible to lock in order to prevent access by an unauthorised person;
v. easily accessible to waste collection vehicles;
vi. protected from sunlight;
vii. not accessible to animals, insects, and birds;
viii. well-lit and ventilated;
ix. situated away from fresh food stores or food preparation areas; and
x. located close to the storage area for easy supply of cleaning equipment, protective clothing, and waste bags or containers; and
(e) ensure that time for storage of the healthcare waste before treatment does not exceed
i. twenty-four hours, where the waste is stored under room temperature; or
ii. forty-eight hours, where the waste is stored at a temperature below four degrees Celsius.

33. Transportation of healthcare waste

(1) A person who intends to transport healthcare waste shall
(a) register with the Agency;
(b) obtain an Environmental Permit in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);
(c) ensure that healthcare waste which is infectious is not mixed with other healthcare waste;
(d) ensure that the healthcare waste is accompanied with a safety data sheet of the waste;

(e) ensure that the Container used in the transportation of the healthcare waste is labelled with a hazard symbol on all sides;

(f) ensure that the vehicle used in the transportation of the healthcare waste is non-compacting and is fitted with a cooling System;

(g) ensure that measures are taken to prevent odour and nuisance during transportation; and

(h) ensure that the healthcare waste is transported directly to the disposal or treatment site.

(2) A person who contravenes paragraph (c), (d), (e), (f) or (g) of subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand, five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

34. Responsibility of operator of healthcare waste treatment facility

(1) A person who operates a facility for the treatment of healthcare waste or intends to treat hea4thcare waste shall

(a) register with the Agency;

(b) obtain an environmental permit in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);

(c) keep a record of quantities and types of healthcare waste collected, treated and the technologies used in the treatment;

(d) adopt appropriate treatment technologies in accordance with the guidelines issued by the Agency in collaboration with the Ministry of Health;

(e) ensure that the required staff are trained to handle healthcare waste;

(f) Store the waste under appropriate storage conditions approved by the Agency; and

(g) transport healthcare waste in vehicles approved by the Agency.

(2) A person who contravenes

(a) paragraph (c), (f), or (g) of subregulation (1) is liable to pay to the Agency, an administrative penalty of five hundred penalty units, or

(b) paragraph (d) of subregulation (1), commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

35. Treatment and disposal of healthcare waste

(1) A person who is responsible for treatment and disposal of healthcare waste shall
   (a) keep records of the source of the waste, quantities and types received and treated;
   (b) treat healthcare waste in accordance with guidelines issued by the Agency on the treatment of the waste before disposal of the waste; and
   (c) adopt the best available technology including non-burn techniques for the treatment and disposal of waste.

(2) A person who contravenes subregulation (l) is liable to pay to Agency an administrative penalty of five hundred penalty units.

36. Treatment and disposal of healthcare waste water

(1) A person who generates healthcare waste shall not treat and dispose of water associated with the waste without obtaining an Environmental Permit from the Agency.

(2) The person shall segregate and treat the waste water in accordance with guidelines issued by the Agency where the waste water contains any of the following:
   (a) hazardous chemicals from cleaning and disinfection operations;
   (b) pharmaceuticals from pharmacies and patient care areas; or
   (c) radiological and radioactive waste.

(3) A person in charge of a facility that generates healthcare waste water shall not discharge the waste water into natural water bodies, surface drains, and functional municipal sewer unless the waste water is treated in compliance with the Agency's approved standard on efficient quality discharge.

(4) A person shall not use healthcare wastewater for agricultural or aquacultural purposes, to produce drinking water, or for recreational purposes.

(5) A person who contravenes subregulation (2), (3) or (4) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

37. Implementation of regulation 30 to 36

The Agency shall collaborate with the Ministry responsible for Health and the Ministry responsible for Local Government and Rural Development for the purpose of implementing the provisions of regulation 30 to 36.

Control and Management of Polychlorinated Biphenyls

38. Management of polychlorinated biphenyls

(1) In accordance with section 17 of the Act, a person shall not Import polychlorinated biphenyls into the country.

(2) Regulation 20 to 23 apply to polychlorinated biphenyls.

(3) A person who contravenes subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than ten thousand penalty units and not more than sixty thousand penalty units or to a term of imprisonment of not more than ten years or to both, and in addition the person shall re-export the polychlorinated biphenyls.

39. Registration of polychlorinated biphenyls

The following persons shall register with the Agency on the coming into force of these Regulations:

(a) an owner or operator of an industrial facility or installation in possession of or involved in the use of;

(b) a supplier, a waste Service provider or an electric' utility provider involved in the treatment and disposal of; and

(c) an owner or person in possession of a storage facility or building installed with or containing

polychlorinated biphenyls, polychlorinated biphenyls contaminated equipment, non-polychlorinated biphenyls equipment, polychlorinated biphenyls wastes, polychlorinated biphenyls article or polychlorinated biphenyls packaging.

40. Sampling and testing of polychlorinated biphenyls

(1) A person who operates a laboratory shall obtain a permit from the Agency for the purposes of sampling and analysis of polychlorinated biphenyls.

(2) The Agency shall agree with the operator of the laboratory that receives the permit on the following:

(a) the number of samples to be taken,

(b) the sampling frequency,

(c) the duration of the sampling project,

(d) the description of the sampling method including quality assurance procedures;

(e) the selection of a location or site;

(f) the time of taking samples including the description and geographic location;

(g) the identity of the person who will take the sample and condition; during sampling;

(h) the full description of the characteristics and labelling of the samp1es;

(i) the preservation of the integrity of samples during transport and storage before analysis;

(j) the nature of communication between the sampler of polychlorinated biphenyls and the laboratory; and

(k) appropriately trained sampling personnel.

(3) Sampling shall be in accordance with the following:

(a) the standard operating procedures for sampling of each of the matrices for subsequent polychlorinated biphenyls analysis; and

(b) established sampling, quality assurance and quality control procedures developed by the Agency.

(4) The following samples shall be collected for purposes of analysing polychlorinated biphenyls:

(a) liquids including

i. leachate from dumpsites and landfills;

ii. liquid collected from spills in to surface water and drinking water;

iii. industrial effluents; and
iv. biological fluids such as blood in case of health control of workers;

(b) solids, stockpiles, products and formulations consisting of, containing or contaminated with polychlorinated biphenyls from
i. industrial treatment or disposal processes;
ii. Containers, equipment or other packaging materials;
iii. rinse or wipe sample including the tissues or fabric used m the collection of wipe samples; and
iv. soil, sediment, rubble, sewage sludge or compost;

(c) gases, indoor ambient air, wet or dry deposition; and

(d) biotic and abiotic matrices including plant materials, food, breast milk or human blood in environmental and human monitoring programmes.

(5) A person who contravenes subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than five thousand penalty units and not more than ten thousand penalty units or to a term of imprisonment of not less than two years and not more than five years or to both.

41. Analysis of polychlorinated biphenyls

A laboratory that analyses polychlorinated biphenyls shall

(a) have the necessary infrastructure;

(b) have proven experience with the matrix and the polychlorinated biphenyls including successful participation at international inter-calibration studies; and

(c) be accredited by an independent body in accordance with ISO or any other recognised Standards for accreditation of laboratories including
i. specification of the analytical technique;
ii. maintenance of analytical equipment; and
iii. validation of all methods used including in-house methods and training of laboratory staff.

42. Handling, collection, packaging, labelling, transportation and storage of polychlorinated biphenyls

The handling, collection, packaging, labelling, transportation and storage of polychlorinated biphyenyls shall be in accordance with the following Conventions in addition to any other provisions under these Regulations:

(a) the Stockholm Convention on Persistent Organic Pollutants
(b) the Basel Convention Manual for Implementation (llNEP1995);
(c) the International Maritime Dangerous Goods Code (Inter. national Maritime Organisation (IMO), 2002);
(d) the International Civil Aviation Organisation Technical Instructions for the Transport of Dangerous Goods;
(e) the International Air Transport Association Dangerous Goods Regulations; and
(f) the united Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Orange Book).

43. Inventory of polychlorinated biphenyls

A holder of a permit granted by the Agency for analysing poly chlorinated biphenyls shall

(a) maintain an inventory to record the quantity, type, quality and origin of polychlorinated biphenyls generated, collected, stored, transported, recovered and disposed of by the holder of the permit; and
(b) submit to the Agency each year information on the poly chlorinated biphenyls analysed.

Electrical and Electronic Equipment Waste

44. Waste relating to electrical and electronic equipment

The following persons who deal with electrical and electronic equipment shall comply with these Regulations:

(a) A producer of electrical and electronic equipment specified in the Eighth Schedule;
(b) a refurbisher or repairer of electrical and electronic equipment specified in the Eighth Schedule;
(c) a dismantler;
(d) a recycler; and
(e) a person who operates a collection centre.

(2) The Agency shall
- *(a)* keep and maintain a register containing particulars of the conditions imposed under these Regulations to ensure environmentally-sound management of electrical and electronic waste; and
- *(b)* open the register for inspection during office hours to any interested person or affected person.

(3) The collection, storage, transportation, segregation, dismantling, recycling and disposal of electrical and electronic waste shall be in accordance with the procedures specified in guidelines issued by the Agency.

45. Responsibility of producer

(1) A producer of electrical and electronic equipment specified in the Eighth Schedule shall
- *(a)* obtain an environmental permit fi-om the Agency m accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);
- *(b)* collect the electrical and electronic waste that the producer generates during the manufacture of the electrical and electronic equipment;
- *(c)* ensure the recycle or disposal of the electrical and electronic waste that that producer generates during the manufacture of electrical and electronic equipment;
- *(d)* collect the electrical and electronic waste that that producer generates from the products of the producer in accordance with the principle of Extended Producer Responsibility;
- *(e)* ensure that the electrical and electronic waste
  - i. is sent to a registered dismantler or recycler; and
  - ii. is collected by an authorised collection agency;
- *(f)* set up, individually or collectively, a collection centre or take-back System;
- *(g)* organise and finance a System that meets the costs involved in the management m an environmentally-sound manner of
  - i. the electrical and electronic waste that the producer generates from products of the producer, and

ii. historical waste available on the date from which these Regulations came into force;

(h) provide contact details of an authorised collection centre to a consumer or bulk consumer in order to facilitate the return of used electrical and electronic equipment;

(i) create awareness through publication, advertisement, or by any other means of communication and information book- lets that accompany the electrical and electronic equipment in respect of

i. information on a hazardous constituent in electrical and electronic equipment specified in the Eighth Schedule;

ii. information on the hazard posed by improper handling, accidental breakage, damage or improper recycling of electrical and electronic waste; or

iii. an instruction for handling the electrical and electronic equipment after its use along with acts to be done and not to be done;

(j) affix a visible, legible and indelible symbol or mark on the product or information booklet to prevent the disposal of electrical and electronic waste into garbage bins containing waste destined for disposal;

(k) maintain records of the electrical and electronic waste that the producer handles and make the records available to the Agency upon request; and

(l) file annual returns as set out in Form F of the Seventh Schedule with the Agency on or before the 15th of March of the ensuing year.

(2) A person who contravenes

(a) paragraph (l) of subregulation (1) is liable to pay to the Agency an administrative penalty of one thousand penalty units; or

(b) paragraph (k) or (l) of subregulation (1) is liable to pay to the Agency an administrative penalty of five penalty units.

46. Responsibility of refurbisher or repairer

(1) A refurbisher or repairer of electrical and electronic equipment specified in the Eighth Schedule shall

(a) obtain an Environmental Permit from the Agency in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);

(b) ensure that the electrical and electronic waste that the refurbisher or repairer collects is stored in a secured manner until the electrical and electronic waste is sent to the registered dismantler or recycler;

(c) ensure that damage is not caused to the environment during the storage and transportation of electrical and electronic waste;

(d) ensure the recycle or disposal of the electrical and electronic waste that the refurbisher generates during the refurbishing or repair of the electrical and electronic equipment; and

(e) maintain records of the electrical and electronic waste that the refurbisher or repairer has handled and make the records available to the Agency upon request.

(2) A person who contravenes

(a) paragraph (c) of subregulation (l), commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand penalty units or to a term of imprisonment of not less than six months and not more than two years or to both, or

(b) paragraph (e) of subregulation (l) is liable to pay to the Agency an administrative penalty of five hundred penalty units.

47. Responsibility of operator of collection centre

(1) A person who operates a collection centre shall

(a) obtain an Environmental Permit from the Agency in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);

(b) provide to the public through print and electronic media the following information:

i. physical address of the collection centre;
ii. telephone number;
iii. helpline number; and
iv. electronic mail address;

(c) ensure that the electrical and electronic waste that the collection centre collects is stored in a secured manner until the electrical and electronic waste is sent to the registered dismantler or re-cycler;

(d) ensure that damage is not caused to the environment during the storage and transportation of the electrical and electronic waste;

(e) maintain records of the electrical and electronic waste that the operator handles and make the records available to the Agency upon request; and

(f) file annual returns as set out in Form F of the Seventh Schedule with the Agency on or before the 15th of March of the ensuing year.

(2) A person who contravenes

(a) paragraph (d) of subregulation (1) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment or not less than six months and not more than two years or to both; or

(b) paragraph (e) or (f) of subregulation (1) is liable to pay to the Agency an administrative penalty of five hundred penalty units.

48. Responsibility of consumer

(1) A consumer of electrical and electronic equipment specific in the Eighth Schedule shall ensure that the electrical and electronic waste that the consumer generates

(a) is channeled to

i. a collection centre authorised by the Agency;
ii. a registered dismantler; or
iii. a recycler; or

(b) is returned to the take-back system provided by the producer

(2) Where the consumer of the electrical and electronic equipment is an institution, the consumer shall

(a) maintain records of the electrical and electronic waste that the producer handles and make the records available to the Agency upon request; and

(b) file annual returns as set out in Form F of the Seventh Schedule with the Agency on or before the 15th of March of the ensuing year.

(3) A person who contravenes subregulation (2) is liable to pay to the Agency an administrative penalty of five hundred penalty units.

49. Responsibility of dismantler

(1) A dismantler of electrical and electronic waste shall

(a) register and obtain a permit from the Agency m accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);

(b) ensure that damage is not caused to the environment during the storage and transportation of the electrical and electronic waste;

(c) ensure that the dismantling process does not have any adverse effect on human health and the environment;

(d) ensure that the set-up of the facility and dismantling process are in accordance with guidelines issued by the Agency;

(e) ensure that electrical and electronic waste is dismantled and sent to a registered recycling facility for recovery of the materials;

(f) ensure that the components which are non-recyclable and non-recoverable are sent to an authorised treatment, storage and disposal facility;

(g) maintain records of the electrical and electronic waste that the producer handles and make the records available to the Agency upon request; and

(h) file annual returns as set out in Form F of the Seventh Schedule with the Agency on or before the 15th of March of the ensuing year.

(2) A person who contravenes

(a) paragraph (b) or (c) of subregulation (1) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both; or

(b) paragraph (g) or (h) of subregulation (1) is liable to pay to the Agency an administrative penalty of five hundred penalty units.

50. Responsibility of recycler

(1) A recycler of electrical and electronic waste shall

(a) register and obtain a permit from the Agency in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);

(b) not process any electrical and electronic waste for recovery or refining of materials unless the facility is registered with the Agency as a recycler for refining and recovery of materials;

(c) ensure that the set-up of the facility and recycling process are in accordance with guidelines issued by the Agency;

(d) ensure the disposal of the residue generated from the recycling process in an approved hazardous wastes treatment, storage or disposal facility;

(e) maintain records of the electrical and electronic waste that the producer handles and make the records available to the Agency upon request; and

(f) file annual returns as set out in Form F of the Seventh Schedule with the Agency on or before the l5th of March of the ensuing year.

(2) A person who contravenes

(a) paragraph (d) of subregulation (1), commits an offence and is liable on summary conviction to a fine of not less than S one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both; or

(b) paragraph (e) or ß) of subregulation (l), is liable to pay to the Agency an administrative penalty of five hundred penalty units.

51. Disposal Containers

(1) An importer, manufacturer, wholesaler, distributor, retailer, refurbisher or repairer of electrical and electronic equipment shall disposal Containers for the disposal of electrical and electronic equipment which are discarded.

(2) A person who contravences subregulation (l) is liable to pay to the Agency an administrative penalty of five hundred penalty units and a further penalty of fifty penalty units for each day during which the contravention continues.

Database of Electrical and Electronic Equipment Waste

52. Database of electrical and electronic equipment waste

(1) The Agency shall, in collaboration with relevant stakeholders, maintain a database of electrical and electronic equipment waste.

(2) The purpose of the database is to aid the Agency in the calculation of producer responsibility market share of each producer.

(3) The Agency shall record the following in the database:

(a) the receipt and determination of an application for registration;

(b) the issue of a permit and a permit number;

(c) the tonnage of electrical and electronic waste collected and processed by the authorised treatment facility;

(d) the total tonnage and category of electrical and electronic equipment waste that the producer places on the market; and

(e) the status of compliance based on the percentage of obligations that have been fulfilled.

Treatment of Electrical and Electronic Waste

53. Storage of electrical and electronic waste

(1) A producer, dismantler, recycler or a person who operates a collection centre

(a) may store electrical and electronic waste for a period of not more than one hundred and eighty days,

(b) shall maintain a record of the following in respect of the waste
i. collection,
ii. sale,
iii. transfer,
iv. storage, and
v. segregation; and
(c) shall make the records available for inspection upon request by an authorised officer of the Agency.

(2) The Agency may extend the period referred to in paragraph (a) of sub-regulation (1) up to two years in the following instances:
(a) Where
i. a collection centre in a region or district does not have a dismantling or recycling facility which has been registered; or
ii. a dismantler in a region or district does not have a recycling facility which has been registered; and
(b) where the electrical and electronic waste is required to be specifically stored for the purpose of development of a process for the recycling or re-use of the electrical and electronic waste.

(3) A person who contravenes paragraph (b) or (c) of subregulation (1) is liable to pay to the Agency an administrative penalty of one thousand penalty units.

54. Reduction in the use of hazardous materials in the manufacture of electrical and electronic equipment

(1) A producer of electrical and electronic equipment which is specified in the Eighth Schedule shall ensure that new electrical and electronic equipment that the producer produces does not contain the following:
(a) lead,
(b) mercury,
(c) cadmium,
(d) hexavalent chromium,
(e) polybrominated biphenyls, or
(f) polybrominated diphenyl ethers.

(2) Despite subregulation (l), where the new electrical and electronic equipment

(a) contains a maximum concentration value of 0.1 per cent by weight in homogenous materials for

i. lead,
ii. mercury,
iii. hexavalent chromium,
iv. polybrominated biphenyls, and
v. polybrommated diphenyl ethers, and

(b) weighs 0.01 per cent in homogenous materials for cadmium the use of the new electrical and electronic equipment is permitted.

(3) Despite subregulation (l), the Agency shall update the list of materials periodically in consultation with the relevant institutions.

(4) Subregulation (l) does not apply to components of electrical and electronic equipment which are manufactured or placed on the market six years before the date of coming into force of these Regulations.

(5) Where there is a reduction in the hazardous materials used in the production of the electrical and electronic equipment, the producer shall provide the detailed information on the constituents of the equipment in the product information booklet.

(6) The importation or placement on the market of new electrical and electronic equipment shall only be permitted where the provisions of subregulation (l) have been complied with.

(7) Despite subregulation (4), the manufacture and supply of electrical and electronic equipment used for defence applications shall be exempted from the requirements of subregulation (l).

(8) A reduction in the use of hazardous substances in manufactured or imported electrical and electronic equipment shall be achieved within a period of two years from the date of coming into force of these Regulations.

(9) A person who contravenes a provision of this regulation is liable to pay to the Agency an administrative penalty of two thousand penalty units.

55. Disposal of electrical and electronic waste and other waste by District Assemblies

(1) A District Assembly shall not permit the disposal of electrical and electronic waste and other waste in a waste facility of that District Assembly unless the disposal is done in accordance with Standards determined by the Agency.

(2) A District Assembly which permits the disposal of electrical and electronic waste and other waste in the waste facility of that District Assembly contrary to subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than two thousand five hundred penalty units and not more than sixty thousand penalty units.

56. Transportation of electrical and electronic waste

(1) A transporter of electrical and electronic waste shall transport the waste in an environmentally-sound manner.

(2) A transporter of electrical and electronic waste shall register and obtain a permit from the Agency in accordance with the Environmental Assessment Regulations, 1999 (L.1.1652) before the waste is transported.

(3) Where an accident occurs at a facility where electrical and electronic waste is processed or during the transportation of electrical and electronic waste, the

(a) producer,
(b) transporter,
(c) dismantler, or
(d) recycler

shall report the incident to the Agency in the form set out in Form G of the Seventh Schedule.

(4) A person who contravenes subregulation (3) is liable to pay to the Agency an administrative penalty of one thousand penalty units.

57. Treatment of electrical and electronic waste

(1) A person who is in Charge of a treatment facility or a producer of electrical and electronic waste shall ensure that

(a) a System is put in place to provide for the treatment of the electrical and electronic waste using the best available technology and best available practice; and

(b) the electrical and electronic waste is

i. treated at a treatment facility, or

ii. exported by an approved exporter for treatment outside the country.

(2) Paragraph (b) of subregulation (l) does not apply to electrical and electronic waste which is re-used as a whole appliance.

(3) A person who contravenes a provision of this regulation is liable to pay to the Agency an administrative penalty of two thousand penalty units.

58. Recovery of electrical and electronic waste

(1) A producer of electrical and electronic waste shall ensure that

(a) a System is put in place to provide for the recovery of the electrical and electronic waste; and

(b) the electrical and electronic waste is

i. recovered or recycled by a reprocessor; or

ii. exported by an approved exporter for recovery or recycling outside the country.

(2) The producer shall meet the following targets for electrical and electronic waste:

(a) for electrical and electronic waste that Falls within the first and tenth category of the Eighth Schedule,

i. at least eighty per cent of the electrical and electronic equipment is recovered by the average weight in tonnes; and

ii. at least seventy-five per cent re-use and recycling of the component material and substance by the average weight in tonnes of the electrical and electronic equipment;

(b) for electrical and electronic waste that falls within the third and fourth category of the Eighth Schedule,

i. at least seventy-five per cent of the electrical and electronic equipment is recovered by the average weight in tonnes; and

ii. at least fifty per cent of the components, materials and substances of the electrical and electronic equipment is re-used and recycled by the average weight in tonnes; and

(c) for electrical and electronic waste that falls within the second, fifth, sixth, seventh or ninth category of the Eighth Schedule,

i. at least seventy per cent of the electrical and electronic equipment, recovered by the average weight in tonnes of the electrical and electronic equipment; and

ii. excluding a gas discharge lamp, at least eighty per cent of the components, materials and substances are re-used and recycled by the average weight in tonnes of the lamp.

(3) A person who contravenes a provision of this regulation commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

59. Cessation and transfer of Operation

(1) A producer who intends to cease Operation shall

(a) give notice of the cessation to the Agency in writing, six months before the intended cessation; or

(b) provide the Agency with evidence of an arrangement for an alternative entity to bear the obligations of the producer, where the producer intends to transfer the Operation to another entity.

(2) The notice referred to in paragraph (a) of subregulation (l) shall include a plan for the closure of the facility.

(3) The alternative entity shall obtain an environmental permit from the Agency in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652).

Waste Relating to Tyres

60. Control and management of tyres

(1) A person who Imports, retails, collects, rethreads, shreds or recycles tyres shall comply with these Regulations.

(2) The Agency shall keep and maintain a register containing particulars of the conditions imposed under these Regulations for the environmentally-sound management of tyres.

(3) The register shall be opened for inspection during office hours to an interested or affected person or an authorised agent of an interested or affected person.

61. Responsibility of importer

(1) A person who Imports tyres shall

(a) apply to the Agency for a permit in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);

(b) set up a collection centre or take back System individually or collectively;

(c) collect, recycle or dispose of a waste tyre that a person generates through the use of the tyre;

(d) collect a waste tyre that a person generates fi-om the end of life of the tyre in accordance with the principle of extended producer responsibility;

(e) ensure that a waste tyre collected under the circumstances specified in paragraph (c) is sent to a person who is registered to rethread, shred or recycle tyres;

(f) finance and organise a System to meet the cost involved in the environmentally-sound management of waste tyres generated fi-om the end-of-life of tyres collected and the waste available on the date from which these Regulations come into force;

(g) provide the contact details of an authorised collection centre to a consumer to facilitate the return of waste tyres;

(h) ensure that awareness is created through the advertisement and publication of posters, information booklets or other means of communication in respect of

i. hazardous constituents in a waste tyre;

ii. the dangers in the improper handling or recycling of a waste tyre; and

iii. instructions, prohibitions and obligations for the handling or management of a waste tyre;

(i) maintain a record of the imported waste tyres that the importer manages;

(j) ensure that the record of waste tyres is made available to the Agency upon request; and

(k) file and submit an annual return to the Agency on or before the 15th M:arch of each ensuing year, as set out in Form F of the Seventh Schedule.

(2) A person who Imports tyres shall ensure that the waste tyre is collected by an authorised collection agency.

(3) A person who contravenes

(a) subregulation (l) with the exception of paragraph (a), or

(b) subregulation (2)

is liable to pay to the Agency an administrative penalty of two thousand five hundred penalty units.

62. Responsibility of waste tyre collection centre

(1) A person who operates a waste tyre collection centre shall

(a) apply for an environmental permit in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);

(b) provide to the public, through print and electronic media the following Information in respect of the waste collection centre:

i. the address;

ii. the telephone number;

iii. the helpline number; and

iv. the electronic mail address;

(c) ensure that a waste tyre that is collected by the waste tyre: collection centre is stored in a secure manner until the waste; tyre is sent to a person who is registered to rethread, shred or recycle the waste tyre;

(d) ensure that a waste tyre that is stored does not pose a risk to public health or the environment during storage or transportation of the waste tyre;

(e) maintain a record of waste tyres that the waste tyre collection centre has managed and shall make die records available to the Agency upon request;

(f) submit an annual return as set out in Form F of the Seventh Schedule on or before 15th March of each ensuing year to the

(2) A person who contravenes subregulation (l) with the exception of paragraph (a) is liable to pay to the Agency an administrative of one thousand penalty units.

63. Responsibility of tyre consumer

(1) A consumer of a tyre shall ensure that the waste tyre that the consumer generates is

(a) delivered to

i. an authorised collection centre;
ii. a registered rethreader;
iii. a registered shredder; or
iv. a registered recycler; and

(b) returned to the pick up service provider or take-back Service provider by an importer of tyres.

(2) Where the consumer of tyres is an institution, the consumer shall

(a) maintain a record of the waste tyres that the consumer generates; and

(b) make the records available to the Agency upon request.

(3) A person who contravenes a provision of this regulation is liable to pay to the Agency an administrative penalty of one thousand penalty units.

64. Responsibility of tyre rethreader

(1) A tyre rethreader shall

(a) apply for registration and a permit fi-om the Agency in accordance with the Environmental Assessment Regulations, l999(L.I. 1652);

(b) ensure that a waste tyre that is stored does not pose a risk to public health or the environment during the storage or rethreading of a. tyre;

(c) ensure that the set-up of a facility and rethreading process are in accordance with the guidelines published by the Agency;

(d) ensure that the waste generated from the rethreading process is sent to a registered recycling facility;

(e) maintain a record and make the record available to the Agency upon request; and

(f) submit an annual return as set out in Form F of the Seventh Schedule on or before 15th March of each ensuing year to the Agency.

(2) A person who contravenes paragraph (c), (d), (e) or (f) of subregulation (l) is liable to pay to the Agency an administrative penalty of one thousand penalty units.

(3) A person who contravenes paragraph (b) of subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than two thousand five hundred penalty units or to a trerm of imprisonment of not less than six months and not more than two years or to both.

65. Responsibility of tyre recycler

(1) A recycler of tyres shall

(a) apply for registration and a permit from the Agency in accordance with the Environmental Assessment Regulations, 1999 (L.I. 1652);

(b) ensure that the set-up of a recycling facility and recycling process are in accordance with the guidelines issued by the Agency;

(c) maintain and make available all records to the Agency for inspection;

(d) ensure that residue generated in a recycling process is disposed of in an approved hazardous wastes treatment, storage or disposal facility; and

(e) submit an annual return as set out in Form F of the Seventh Schedule on or before 15th March of each ensuing year to the Agency.

(2) A person who contravenes subregulation (l) with the exception of paragraph (a) is liable to pay to the Agency an administrative penalty of one thousand

66. Importers, collection centres, consumers, rethreaders and recyclers of waste tyres database

(1) The Agency shall maintain a database of importers, collection centres, consumers, rethreaders and recyclers of waste tyres.

(2) The Agency shall operate the database in collaboration with relevant stakeholders.

(3) The purpose of the database includes

(a) the reception and determination of the application for registration; and

(b) the issuance of a permit and a permit number.

(4) The database shall have information on the following:

(a) the tonnage of waste tyres collected and processed by each authorised treatment facility;

(b) the total tonnage of tyres placed on the market by producers; and

(c) the status of compliance by the importers, collection centres, consumers, rethreaders and recyclers of waste tyres based on the extent of compliance.

67. Storage of waste tyres

(1) A person who imports, collects, consumes, rethreads or recycles waste tyres

(a) may store a waste tyre for a period of not more than one hundred and eighty days;

(b) shall maintain a record of the

i. collection,

ii. (ii) sale,

iii. (iii) transfer,

iv. (iv) storage,

v. (v) rethreading, or

vi. (vi) recycling, of a waste tyre, and

(c) shall make the records available for inspection by the Agency.

(2) The Agency may extend the period specified in subregulation (l) to two years, where

(a) a collection centre in a Region or District Assembly does not have a registered rethreading or recycling facility;

(b) the Region does not have a registered rethreading or recycling facility; or

(c) the waste is required to be stored specially for development of a process for the recycling or reuse of the waste tyre.

(3) A person who contravenes subregulation (l) is liable to pay to the Agency an administrative penalty of five hundred penalty units and a further penalty of fifty penalty units for each day during which the contravention continues.

68. Disposal of waste tyres in District Assemblies

(l) A person shall not dispose of a waste tyre unless the disposal is carried out in accordance with these Regulations.

(2) A person who contravenes subregulation (l) commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than ten thousand penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

69. Burning of waste tyre

(1) A person shall not burn or cause the burning of a waste tyre.

(2) A person who bums or causes the burning of a waste tyre commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units or not more than two thousand five hundred penalty units or to a term of imprisonment of not less than six months and not more than two years and a further five hundred penalty units for each day during which the contravention continues.

Miscellaneous Provisions

70. Decommissioning and closure plan

(1) A person who operates a facility permitted under these Regulations shall

(a) submit a decommissioning and closure plan within one year of commencement of operations and every three years thereafter to the Agency; and

(b) submit the final or last decommissioning and closure plan twelve months before the decommissioning and closure of the facility.

(2) Despite subregulation (l), the Agency may in response to an emergency to protect human health, property or the environment, direct an immediate decommissioning and closure of a facility.

71. Offences and penalties

(1) A person who provides false or misleading information m a record or document required to be submitted in accordance with these Regulations, commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than ten thousand penalty units or to a term of imprisonment of not less than one year and not more than two years or to both.

(2) A person who fails to comply with a Provision of these Regulations for which a penalty has not been provided, commits an offence and is liable on summary conviction to a fine of not less than one thousand penalty units and not more than ten thousand penalty units or to a term of imprisonment of not less than six months and not more than two years or to both.

(3) Where an offence under these Regulations is committed by a body corporate or a partnership or a firm, a director or officer of that body corporate or partnership or any person connected with the management of the firm shall be deemed to have committed the offence.

72. Interpretation

In these Regulations, unless the context otherwise requires,

“biodegradable waste" means any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, paper, paperboard and timber;

“co-incineration plant" means any technical unit and equipment dedicated to the generation of energy, production or processing of material products, and which in addition incinerates waste and where the plant incinerates untreated mixed household waste, the plant shall be regarded as an incineration plant;

"collection centre" means a centre established individually or jointly or a registered society or a designated agency, a company or an association to undertake. the collection of electrical and electronic waste; .-

"composting plant" means a unit or equipment for the biological decomposition of organic materials by micro-organisms under controlled, aerobic conditions to relatively stable humus-like material called compost;

"dioxins" means all polychlorinated dibenzo-p-dioxins and dibenzofurans listed in the First Schedule;

"dismantler" means a person, registered society, designated agency, company or association engaged in the dismantling of used electrical and electronic equipment into their respective components;

"disposal' means depositing or incineration of waste without energy recovery;

"electric utility provider" means a person who generates, transmits or distributes electric power;

"emission limit values" means the quantity of emissions, expressed in terms of specific concentrations, which may not be exceeded during one or more periods of time;

"end-of-life waste" in relation to a product, means a product that can no longer be used, stored or re-used;

"explosive waste" means waste that may explode when exposed to the effects of heat, pressure or flame and that is more sensitive to shocks or friction than dinitrobenzene;

"existing co-incineration plants" mean plants dedicated to the generation of energy, production or adaptation of material products, which are in operation and have. permits to incinerate waste issued before 1st January, 2016 and which are put into operation by1st January, 2017, if the other conditions under these Regulations are met;

"existing incineration plant" means

(a) a plant with a permit to incinerate waste and witch is put into operation before 1st January, 2017;

(b) a plant with a permit to incinerate waste issued before 1st January, 2016 and put into Operation before l January, 2017;

"extended producer responsibility" means responsibility of any producer of electrical or electronic equipment, for the products of that producer beyond manufacturing until environmentally sound management of their end-of-life products;

"Globally Harmonised System of Classification and Labelling of Chemicals" means a harmonised System of classification and labelling that defines and classifies the hazards of chemical products and communicates health and safety information on labels and safety data sheets (GHS);

"healthcare waste" means the total waste stream from a healthcare facility;

"health facility" means a place that provides healthcare including a hospital, clinic, outpatient care centre and specialised care centre in the nature of a psychiatric care centre and a birthing centre;

"historical waste" means waste in existence before the coming into force these Regulations;

"incineration" means a treatment process where the thermal energy is generated through the oxidation of carbon or materials containing carbon into CO_2 and water, and other thermal treatment processes such as pyrolysis, gasification or plasma processes when the substances resulting from this treatment are subsequently oxidised;

"incineration plant" means a plant used for incineration;

“incineration residue" means any liquid or solid material generated through the Operation of an incineration plant and defined as waste in the nature of bottom ash and slag, fly ash and boiler dust, solid reaction products from gas treatment, sewage sludge fi-om the treatment of waste waters, spent catalysts and spent activated carbon;

"inert waste" means waste that does not undergo any significant physical, chemical or biological transformation and will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environ- mental pollution or harm human health;

"infectious waste" means waste that contains viable microorganisms or their toxins that are known to or are assumed to cause sickness in humans or other living organisms;

"landfill" means a permanent waste disposal site engineered for the deposit of waste onto or into land or underground; "landfill gas" means the .gases generated from the landfilled waste;

"leachate" means any liquid percolating through the deposited waste and emitted from or contained within a landfill;

"liquid waste" means any waste in liquid form;

"manage" means management and treatment of hazardous wastes;

"manufacturer, importer, distributor, assembler or producer" means a person or entity that introduces or causes to be introduced new and used electrical and electronic equipment into the market by sale, donation, gifts, inheritance or by any related methods;

"nominal capacity" means the sum of the incineration capacities of the furnaces of which an incineration plant is composed, based on the permanent heat release and which is expressed as the maximum possible quantity of waste which can be incinerated per time unit, related to the effective calorific value or the wet weight of the waste;

"non-burn techniques" means technologies that do not involve incineration for waste treatment;

"non-hazardous waste" means waste which is not assigned or covered by the definitions under these Regulations;

"on-site central storage point" means a site where waste is stored at the facility of the waste generator;

"Operation" means any Operation process at an incineration plant, including a process that takes place during the introductory phase of Operation, where waste is incinerated;

"operator" means the person responsible for a landfill; "patient care area" includes

(a) an out patient department, a ward, a dispensary or pharmacy, an operating theatre and a mortuary; and

(b) an area within a health facility where patients are managed;

"pick up Service provider" means a transporter who conveys waste on behalf of the producer or a designated take-back centre to a dismantling or recycling facility;

"producer of waste" means the party that generates the waste or who through the process of pre-treatment, mixing or otherwise alters the nature or composition of the waste;

"radioactive waste" means waste that is regulated by provisions pursuant to the Act on radiation protection and use of radiation;

"recovery" means any Operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfill a particular function;

"recycler" means a person engaged in recycling or reprocessing of used electrical and electronic equipment, assemblies or their components and any other waste; recycling" means any Operation by which waste materials are reprocessed into products, materials or substances whether for original purposes or other purposes;

“reprocessor" means to subject an object to special treatment in preparation for re-use;

“rethreader" means a person that recaps or remoulds tyres to replace the thread on worn tyres;

“safety data sheet" means a document that provides comprehensive information on the properties of hazardous chemicals and how they affect health and safety in an occupational setting;

"sharps" include

i. needles,
ii. syringes,
iii. knives,
iv. infusion sets,
v. blades; and
vi. a form of biomedical waste composed of used devices for puncturing or lacerating the skin; "sweepings" mean dirt or refuse collected by sweeping;

"take back" means the process of returning or repossessing used products from the market to the producer or representative of the producer;

"take back service provider" means a person who collects used or end of life products on behalf of the producer or on behalf of a representative of the producer;

"take-back system" means the scheme of returning or repossessing used products or used packaging from the market to the producer or to the representative of the producer;

"transit storage site" means a temporary holding or containment site for material with the intention of retrieving stored material later;

"transporter" means a facility that carries or conveys electrical and electronic waste from the collection centre to the treatment centre or another collection centre;

"treatment" means the physical, thermal, chemical or biological processes, and sorting, that change the characteristics of the waste in order to reduce the volume or hazardous nature of the waste and facilitates the handling or enhances the recovery of the waste;

"treatment facility" means a licensed plant, premises or establishment for processing of waste;

"underground storage site" means a place where waste is stored underground;

"waste" means discarded substances, objects, leftover surplus objects and substances from Service industries, manufacturing industries and treatment plants;

"waste classification" means establishing, in terms of the Globally Harmonised System of Classification and Labelling of Chemicals

(a) whether a waste is hazardous based on the nature of the physical, health and environmental hazardous properties of the waste in the nature of hazard classes; and

(b) the degree or severity of hazard posed in the nature of hazard categories;

"waste generator" means a person whose actions, production processes or activities in the nature of waste management activities results in waste;

"waste incineration plant" means a technical unit and equipment dedicated to the thermal treatment of waste with or without recovery of the combustion heat that is generated;

"waste management" means waste collection, transportation, disposal, recycling and monitoring of waste;

"waste manager" means a person who re-uses, recycles, recovers, treats or disposes of waste;

"waste manifest" means a record required to accompany the transportation of hazardous wastes fi-om the facility of the waste generator to a designated storage, recycling, treatment or disposal facility;

“waste manifest system" means a System of control documentation, which accompanies a load of waste transported from the point of generation to the site of management;

“waste transporter" means any person who conveys .or transfers waste

(a) between the waste generator and a waste management facility; or

(b) between waste management facilities; and

"waste water treatment plant" means a plant which treats waste water to meet the effluent discharge levels before discharge into the environment.

73. Transitional provisions

(1) Where waste is classified and approved by the Agency before the coming into force of these Regulations, the Agency shall
   (a) re-classify the waste in accordance with subregulation (1) of regulation 3; and
   (b) assess the waste to be disposed of in accordance with regulation 8, within three years from the date of coming into force of these Regulations.

(2) Where waste which is produced before the coming into force of these Regulations is not classified by the Agency at the date of commencement of these Regulations, the Agency shall
   (a) classify the waste in accordance with subregulation (1) of regulation 3; and
   (b) assess the waste to be disposed of in accordance with regulation 8 within eighteen months from the date of commencement of these Regulations.

(3) Subregulations (1) and (2) of regulation 5 do not apply for a period of three years from the date of the coming into force of these Regulations, unless the waste has been classified in accordance with the minimum requirements for the handling, classification and disposal of hazardous wastes approved by the Agency before the coming into force of these Regulations.

(4) Subregulation (1) of regulation 5 does not apply for a period of eighteen months from the date of the coming into force of these Regulations unless the waste has been produced but not classified.

(5) Subject to subregulations (6) and (7), subregulations (5) and (6) of regulation 5 shall apply within one year from the date, of the coming into force of these Regulations.

(6) Subregulation (5) of regulation 5 and paragraph (d) of subregulation (6) of regulation 5 do not apply for a period of three years from the date of the coming into force of these Regulations unless
   (a) an alternative classification of the waste was approved by the Agency before the coming into force of these Regulations; and

(b) the classification is reflected in the labelling of the waste or records related to the waste required in accordance with subregulation (5) of regulation 5 and subregulation (6) of regulation 5.

(7) Subregulation (9) of regulation 5 does not apply to waste that has been or is being treated by a process of macro-encapsulation approved by the Agency

(8) Subregulation (l) of regulation 9 does not apply for a period of three years from the date of the coming into force of these Regulations, unless

(a) the waste has been classified and approved by the Agency prior to the date of the coming into force of these Regulations; or

(b) an alternative classification of the waste was approved by the Agency prior to the date of the coming into Force of these Regulations.

(9) Regulations 12 and 53 shall take effect one year after the date of the coming into force of these Regulations.

FIRST SCHEDULE

(Regulations 1(d), 3 (1), 5 (10), 24 and 72)

GHANA WASTE LIST

WASTE CATALOGUE AND HAZARDOUS WASTES LIST

The Waste Catalogue and Hazardous Wastes List is used for the classification of all wastes and hazardous wastes. It is designed to form a consistent waste classification system in Ghana. It forms the basis for all national and international waste reporting obligations, such as those associated with waste licences and permits.

The Environmental Protection Agency, in classifying all wastes and hazardous wastes, seeks to ease the task of classifying waste and hazardous wastes and understanding the legislation associated with the classification of waste and hazardous wastes.

INSTRUCTIONS FOR USING THE LIST

The different types of wastes in the list are fully defined by the six-digit code for the waste and the respective two-digit and four-digit chapter headings. This implies that the following steps should be taken to identify a waste in the list.

1. Identify the source generating the waste in Chapters 01 to 12 or 17 to 20 and identify the appropriate six-digit code of the waste (excluding codes ending with 99 of these chapters). A specific production unit may need to classify its activities in several chapters. For instance, a car manufacturer may find its wastes listed in chapters 12 (wastes from shaping and surfacing treatment of metals, 11 (inorganic wastes containing metals from metal treatment and the coating of metals) and 08 (wastes from the use of coatings), depending on the process involved.

2. Note: separately collected packaging waste (including mixtures of different packaging materials) shall be classified in 15 01, not in 20 01.
3. If no appropriate waste code can be found in Chapters 01 to 12 or 17 to 20, the Chapters 13, 14 and 15 must be examined to identify the waste.
4. If none of these waste codes apply, the waste must be identified according to Chapter 16.
5. If the waste is not in Chapter 16 either, the 99 code (wastes not otherwise specified) must be used in the section of the list corresponding to the activity identified in step one.
6. Any waste marked with an asterisk (*) is considered as a hazardous waste.

CLASSIFICATION OF HAZARDOUS WASTES

A. PROPERTIES OF WASTES WHICH RENDER THEM HAZARDOUS

UN Class	Code	Characteristics
1	H1	Explosive
		An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.
3	H3	Flammable liquids
		The word "flammable" has the same meaning as "inflammable". Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers, etc., but not including substances or wastes otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5°C, closed-cup test, or not more than 65.6°C, open-cup test. (Since the results of open-cup tests and of closed-cup tests are not strictly comparable and even individual results by the same test are often variable, regulations varying from the above figures to make allowance for such differences would be within the spirit of this definition).
4.1	H4.1	Flammable solids
		Solids, or waste solids, other than those classified as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.
4.2	H4.2	Substances or wastes liable to spontaneous combustion
		Substances or wastes which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up on contact with air, and being then liable to catch fire.
4.3	H4.3	Substances or wastes which, in contact with water emit flammable gases
		Substances or wastes which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities

5.1	H5.1	Oxidizing
		Substances or wastes which, while in themselves not necessarily combustible, may, generally by yielding oxygen cause or contribute to, the combustion of other materials.
5.2	H5.2	Organic Peroxides
		Organic substances or wastes which contain the bivalent-o-o-structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition.
6.1	H6.1	Poisonous (Acute)
		Substances or wastes liable either to cause death or serious injury or to harm human health if swallowed or inhaled or by skin contact.
6.2	H6.2	Infectious substances
		Substances or wastes containing viable micro organisms or their toxins which are known or suspected to cause disease in animals or humans.
8	H8	Corrosives
		Substances or wastes which, by chemical action, will cause severe damage when in contact with living tissue, or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport; they may also cause other hazards.
9	H10	Liberation of toxic gases in contact with air or water.
		Substances or wastes which, by interaction with air or water, are liable to give off toxic gases in dangerous quantities.
9	H11	Toxic (Delayed or chronic)
		Substances or wastes which, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity.
9	H12	Ecotoxic
		Substances or wastes which if released present or may present immediate or delayed adverse impacts to the environment by means of bioaccumulation or toxic effects upon biotic systems.

9	H13	Capable, by any means, after disposal, of yielding another material, example, leachate, which possesses any of the characteristics listed above.

Category	Description
01	Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
04	Wastes from the leather, fur and textile industries
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
06	Wastes from inorganic chemical processes
07	Wastes from organic chemical processes
08	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), sealants and printing inks
09	Wastes from photographic industry
10	Wastes from thermal processes
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
13	Oil wastes and wastes of liquid fuels (except edible oils, 05 and 12)
14	Waste organic solvents, refrigerants and propellants (except 07 and 08)
15	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
16	Wastes not otherwise specified in the list
17	Construction and demolition wastes (including excavated soil from contaminated sites)
18	Wastes from human or animal health care or related research (except kitchen and restaurant wastes not arising from immediate health care)
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions

Category	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 0101	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 03	wastes from physical and chemical processing of metalliferous minerals
01 03 04*	acid-generating tailings from processing of sulphide ore
01 03 05*	other tailings containing dangerous substances
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 07*	other wastes containing dangerous substances from physical and chemical processing of metalliferous minerals
01 03 08	dusty and powdery wastes other than those mentioned in 01 03 07
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 07
01 03 99	wastes not otherwise specified
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 07*	waste containing dangerous substances from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 10	dusty and powdery wastes other than those mentioned in 01 04 07
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	waste from stone cutting and sawing other than those mentioned in 01 04 07
01 04 99	waste not otherwise specified
01 05	drilling muds and other drilling wastes
01 05 04	freshwater drilling muds and wastes
01 05 05*	oil-containing drilling muds and wastes
01 05 06*	drilling muds and other drilling wastes containing dangerous substances
01 05 07	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
01 05 08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
01 05 99	wastes not otherwise specified

02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning
02 01 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	waste from forestry
02 01 08*	agrochemical waste containing dangerous substances
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 01 10	waste metal
02 01 99	wastes not otherwise specified
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 01	sludges from washing and cleaning
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
02 02 99	waste not otherwise specified
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 02	waste from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 03 99	wastes not otherwise specified
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment

02 04 99	wastes not otherwise specified

02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
02 05 99	wastes not otherwise specified
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 06 03	sludges from on-site effluent treatment
02 06 99	wastes not otherwise specified
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 03	wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
02 07 99	wastes not otherwise specified

03	WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD
03 01	wastes from wood processing and the production of panels and furniture
03 01 01	waste bark and cork
03 01 04*	sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 01 99	wastes not otherwise specified
03 02	wastes from wood preservation
03 02 01*	non-halogenated organic wood preservatives
03 02 02*	organ chlorinated wood preservatives
03 02 03*	organ metallic wood preservatives
03 02 04*	inorganic wood preservatives
03 02 05*	other wood preservatives containing dangerous substances
03 02 99	wood preservatives not otherwise specified
03 03	wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood
03 03 02	green liquor sludge (from recovery of cooking liquor)
03 03 05	de-inking sludges from paper recycling
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 09	lime mud waste
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation

03 03 99	wastes not otherwise specified
04	WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES
04 01	wastes from the leather and fur industry
04 01 01	fleshings and lime split wastes
04 01 02	liming waste
04 01 03*	degreasing wastes containing solvents without a liquid phase
04 01 04	tanning liquor containing chromium
04 01 05	tanning liquor free of chromium
04 01 06	sludges, in particular from on-site effluent treatment containing chromium
04 01 07	sludges , in particular from on-site effluent treatment free of chromium
04 01 08	Waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
04 01 99	wastes not otherwise specified

04 02	wastes from the textile industry
04 02 09	wastes from composite materials (impregnable textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 14*	wastes from finishing containing organic solvents
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 16*	dyestuffs and pigments containing dangerous substances
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
04 02 19*	sludges from on-site effluent treatment containing dangerous substances
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
04 02 99	wastes not otherwise specified

05	WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL
05 01	wastes from petroleum refining
05 01 02*	Desaltersludges
05 01 03*	tank bottom sludges
05 01 04*	acid alkyl sludges
05 01 05*	oil spills
05 01 06*	oily sludges from maintenance operations of the plant or equipment
05 01 07*	acid tars
05 01 08*	other tars
05 01 09*	sludges from on-site effluent treatment containing dangerous substances
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09
05 01 11*	wastes from cleaning of fuels with bases

05 01 12*	oil containing acids
05 01 13	boiler feed water sludges
05 01 14	wastes from cooling columns
05 01 15*	spent filter clays
05 01 16	sulphur-containing wastes from petroleum desulphurization
05 01 17	bitumen
05 01 99	wastes not otherwise specified
05 06	waste from the pyrolytic treatment of coal
05 06 01*	acid tars
05 06 03*	other tars
05 06 04	waste from cooling columns
05 06 99	wastes not otherwise specified
05 07	waste from natural gas purification and transportation
05 07 01*	wastes containing mercury
05 07 02	wastes containing sulphur
05 07 99	wastes not otherwise specified
06 08 02*	waste containing dangerous silicones
06 08 99	wastes not otherwise specified

06	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 01 03*	hydrochloric acid
06 01 04*	phosphoric and phosphorous acid
06 01 05*	nitric acid and nitrous acid
06 01 06*	other acids
06 01 99	wastes not otherwise specified
06 02	wastes from the MFSU of bases
06 02 01*	calcium hydroxide
06 02 03*	ammonium hydroxide
06 02 04*	sodium and potassium hydroxide
06 02 05*	other bases
06 02 99	wastes not otherwise specified
06 03	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 11*	solid salts and solutions containing cyanides
06 03 13*	solid salts and solutions containing heavy metals
06 03 14	solid salts and solution other than those mentioned in 06 03 11 and 06 03 13
06 03 15*	metallic oxides containing heavy metals
06 03 16	metallic oxides other than those mentioned in 06 03 15
06 03 99	wastes not otherwise specified
06 04	metal-containing wastes other than those mentioned in 06 03

06 04 03*	wastes containing arsenic
06 04 04*	wastes containing mercury
06 04 05*	wastes containing other heavy metals
06 04 99	wastes not otherwise specified
06 05	sludges from on-site effluent treatment
06 05 02*	sludges from on-site effluent treatment containing dangerous solutions
06 05 03	sludges from onsite effluent treatment other than those mentioned in 06 05 02
06 06	wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurization processes
06 06 02*	wastes containing dangerous sulphides
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02
06 06 99	wastes not otherwise specified
06 07	wastes from the MFSU of halogens and halogen chemical processes
06 07 01*	wastes containing asbestos from electrolysis
06 07 02*	activated carbon from chlorine production
06 07 03*	barium sulphate sludge containing mercury
06 07 04*	solutions and acids, for example contact acid
06 07 99	wastes not otherwise specified
06 08	wastes from the MFSU of silicon and silicon derivatives
06 09	wastes from the MFSU of phosphorus chemicals and phosphorous chemical processes
06 09 02	phosphorus slag
06 09 03*	calcium-based reaction wastes containing or contaminated with dangerous substances
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
06 09 99	wastes not otherwise specified
06 10	wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture
06 10 02*	wastes containing dangerous substances
06 10 99	wastes not otherwise specified
06 11	wastes from the manufacture of inorganic pigments and opacificiers
06 11 01	calcium-based reaction wastes from titanium dioxide production
06 11 99	wastes not otherwise specified
06 13	wastes from inorganic chemical processes not otherwise specified
06 13 01*	inorganic plant protection products, wood-preserving agents and other biocides
06 13 02*	spent activated carbon (except 06 07 02)
06 13 03	carbon black
06 13 04*	wastes from asbestos processing
06 13 05*	soot
06 13 99	wastes not otherwise specified

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07	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 01*	aqueous washing liquids and mother liquors
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 07*	halogenated still bottoms and reaction residues
07 01 08*	other still bottoms and reaction residues
07 01 09*	halogenated filter cakes and spent absorbents
07 01 10*	other filter cakes and spent absorbents
07 01 11*	sludges from on-site effluent treatment containing dangerous substances
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
07 01 99	wastes not otherwise specified
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 01*	aqueous washing liquids and mother liquors
07 02 03*	organic halogenated solvents, washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 07*	halogenated still bottoms and reaction residues
07 02 08*	other still bottoms and reaction residues
07 02 09*	halogenated filter cakes and spent absorbents
07 02 10*	other filter cakes and spent absorbents
07 02 11*	sludges from on-site effluent treatment containing dangerous substances
07 02 12	sludges from on-site effluent treatment other than those mentioned in.....
07 02 13	waste plastic
07 02 14*	wastes from additives containing dangerous substances
07 02 15	wastes from additives other than those mentioned in.....
07 02 16*	waste containing dangerous silicones
07 02 17	waste containing silicones other than those mentioned in.....
07 02 99	wastes not otherwise specified
07 03	wastes from the MFSU of organic dyes and pigments (except 06 11)
07 03 01*	aqueous washing liquids and mother liquors
07 03 03*	organic halogenated solvents, washing liquids and mother liquors
07 03 04*	other organic solvents, washing liquids and mother liquors
07 03 07*	halogenated still bottoms and reaction residues
07 03 08*	other still bottoms and reaction residues
07 03 09*	halogenated filter cakes and spent absorbents
07 03 10*	other filter cakes and spent absorbents
07 03 11*	sludges from on-site effluent treatment containing dangerous substances
07 03 12	sludges from on-site effluent treatment other than those mentioned in.....
07 03 99	wastes not otherwise specified

07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
07 04 01*	aqueous washing liquids and mother liquors
07 04 03*	organic halogenated solvents, washing liquids and mother liquors
07 04 04*	other organic solvents, washing liquids and mother liquids
07 04 07*	halogenated still bottoms and reaction residues
07 04 08*	other still bottoms and reaction residues
07 04 09*	halogenated filter cakes and spent absorbents
07 04 10*	other filter cakes and spent absorbents
07 04 11*	sludges from on-site effluent treatment containing dangerous substances
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
07 04 13*	solid wastes containing dangerous substances
07 04 99	wastes not otherwise specified
07 05	wastes from the MFSU of pharmaceuticals
07 05 01*	aqueous washing liquids and mother liquors
07 05 03*	organic halogenated solvents, washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 07*	halogenated still bottoms and reaction residues
07 05 08*	other still bottoms and reaction residues
07 05 09*	halogenated filter cakes and spent absorbents
07 05 10*	other filter cakes and spent absorbents
07 05 11*	sludges from on-site effluent treatment containing dangerous substances
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 05 13*	solid wastes containing dangerous substances
07 05 14	solid wastes other than those mentioned in 07 05 13
07 05 99	wastes not otherwise specified
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 01*	aqueous washing liquids and mother liquors
07 06 03*	organic halogenated solvents, washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors
07 06 07*	halogenated still bottoms and reaction residues
07 06 08*	other still bottoms and reaction residues
07 06 09*	halogenated filter cakes and spent absorbents
07 06 10*	other filter cakes and spent absorbents
07 06 11*	sludges from on-site effluent treatment containing dangerous substances

07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
07 06 99	wastes not otherwise specified
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 01*	aqueous washing liquids and mother liquors
07 07 03*	organic halogenated solvents, washing liquids and mother liquors
07 07 04*	other organic solvents, washing liquids and mother liquors
07 0707*	halogenated still bottoms and reaction residues
07 07 08*	other still bottoms and reaction residues
07 07 09*	halogenated filter cakes and spent absorbents
07 07 10*	other filter cakes and spent absorbents
07 07 11*	sludges from on-site effluent treatment containing dangerous substances
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
07 07 99	wastes not otherwise specified

08	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS,) ADHESIVES, SEALANTS AND PRINTING INKS
08 01	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 13*	sludges from paint or varnish containing organic solvents or other dangerous substances
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
08 01 17*	wastes from paint or varnish removal containing organic solvents or other dangerous substances
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other dangerous substances
08 01 20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19
08 01 21*	waste paint or varnish remover
08 01 99	wastes not otherwise specified
08 02	wastes from MFSU of other coatings (including ceramic materials)
08 02 01	waste coating powders

08 02 02	aqueous sludges containing ceramic materials
08 02 03	aqueous suspensions containing ceramic materials
08 02 99	wastes not otherwise specified
08 03	wastes from MFSU of printing inks
08 03 07	aqueous sludges containing ink
08 03 08	aqueous liquid waste containing ink
08 03 12*	waste ink containing dangerous substances
08 03 13	waste ink other than those mentioned in 08 03 12
08 03 14*	ink sludges containing dangerous substances
08 03 15	ink sludges other than those mentioned in 08 03 14
08 03 16*	waste etching solutions
08 03 17*	waste printing toner containing dangerous substances
08 03 18	waste printing toner other than those mentioned in 08 03 17
08 03 19*	disperse oil
08 03 99	wastes not otherwise specified

08 04	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
08 04 11*	adhesive and sealant sludges containing organic solvents or other dangerous substances
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11
08 04 13*	aqueous sludges containing adhesives or sealants containing organic solvents or other dangerous substances
08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other dangerous substances
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
08 04 17*	rosin oil
08 04 99	wastes not otherwise specified
08 05	wastes not otherwise specified in 08
08 05 01*	waste isocyanates
09	WASTES FROM THE PHOTOGRAPHIC INDUSTRY
09 01	wastes for the photographic industry

09 01 01*	water-based developer and activator solutions
09 01 02*	water-based offset plate developer solutions
09 01 03*	solvent-based developer solutions
09 01 04*	fixed solutions
09 01 05*	bleach solutions and bleach fixer solutions
09 01 06*	wastes containing silver from on-site treatment of photographic wastes
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
09 01 13*	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06
09 01 99	wastes not otherwise specified

10	WASTES FROM THERMAL PROCESSES
10 01	wastes from power stations and other combustion plants (except 19)
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 02	coal fly ash
10 01 03	fly ash from peat and untreated wood
10 01 04*	oil fly ash and boiler dust
10 01 05	calcium-based reaction wastes from flue-gas desulphurization in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurization in sludge form
10 01 09*	sulphuric acid
10 01 13*	fly ash from emulsified hydrocarbons used as fuel
10 01 14*	bottom ash, slag and boiler dust from co-incineration containing dangerous substances
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 16*	fly ash from co-incineration containing dangerous substances

10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 18*	wastes from gas cleaning containing dangerous substances
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 20*	sludges from on-site effluent treatment containing dangerous substances
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20
10 01 22*	aqueous sludges from boiler cleansing containing dangerous substances
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22
10 01 24	sands from fluidised beds
10 01 25	wastes from fuel storage and preparation of coal-fired power plants
10 01 26	wastes from cooling-water treatment
10 01 99	wastes not otherwise specified
10 02	wastes from the iron and steel industry
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 07*	solid wastes from gas treatment containing dangerous substances
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 11*	wastes from cooling-water treatment containing oil
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 13*	sludges and filter cakes from gas treatment containing dangerous substances
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
10 02 99	wastes not otherwise specified
10 03	wastes from aluminium thermal metallurgy
10 03 02	anode scraps
10 03 04*	primary production slags
10 03 05	waste alumina
10 03 08*	salt slags from secondary production
10 03 09*	black drosses from secondary production
10 03 15*	skimmings that are flammable or emit, upon contact with water, flammable

	gases in dangerous quantities
10 03 16	skimming other than those mentioned in 10 03 15
10 03 17*	tar-containing wastes from anode manufacture
10 03 18	carbon-containing waste from anode manufacture other than those mentioned in 10 03 17
10 03 19*	flue-gas dust containing dangerous substances
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 21*	other particulates and dust (including ball-mill dust) containing dangerous substances
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 23*	solid wastes from gas treatment containing dangerous substances
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 25*	sludges and filter cakes from gas treatment containing dangerous substances
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 27*	wastes from cooling-water treatment containing oil
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 29*	wastes from treatment of salt slags and black drosses containing dangerous substances
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03
29 10 03 99	wastes not otherwise specified
10 04	wastes from lead thermal metallurgy
10 04 01*	slags from primary and secondary production
10 04 02*	dross and skimmings from primary and secondary production
10 04 03*	calcium arsenate
10 04 04*	flue-gas dust
10 04 05*	other particulates and dust
10 04 06*	solid wastes from gas treatment
10 04 07*	sludges and filter cakes from gas treatment
10 04 09*	wastes from cooling-water treatment containing oil
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
10 04 99	wastes not otherwise specified
10 05	wastes from zinc thermal metallurgy
10 05 01	slags from primary and secondary production
10 05 03*	flue-gas dust 10 05 04 other particulates and dust
10 05 05*	solid waste from gas treatment

10 05 06*	sludges and filter cakes from gas treatment
10 05 08*	wastes from cooling-water treatment containing oil
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 10*	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 05 99	wastes not otherwise specified
10 06	wastes from copper thermal metallurgy
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 03*	flue-gas dust
10 06 04	other particulates and dust
10 06 06*	solid wastes from gas treatment
10 06 07*	sludges and filter cakes from gas treatment
10 06 09*	wastes from cooling-water treatment containing oil
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
10 06 99	wastes not otherwise specified
10 07	wastes from silver, gold and platinum thermal metalurgy
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 07*	wastes from cooling-water treatment containing oil
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 07 99	wastes not otherwise specified
10 08	wastes from other non-ferous thermal metallurgy
10 08 04	particulates and dust
10 08 08*	salt slag from primary and secondary production
10 08 09	other slags
10 08 10*	dross and skimming that are flammable or emit, upon the contact with water, flammable gases in dangerous quanities
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 12*	tar-containing waste from anode manufacture
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 15*	flue-gas dust containing dangerous substances
10 08 16	flue-gas dust other than those mentioned in 10 08 15

10 08 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 19*	wastes from cooling-water treatment containing oil
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 08 99	wastes not otherwise specified
10 09	wastes from casting of ferrous pieces
10 09 03	furnace slag
10 09 05*	casting cores and moulds which have not undergone pouring containing dangerous substances
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 07*	casting cores and moulds which have undergone pouring containing dangerous substances
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 09*	flue-gas dust containing dangerous substances
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 11*	other particulates containing dangerous substances
10 09 12	other particulates other than those mentioned in 10 09 11
10 09 13*	waste binders containing dangerous substances
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 15*	waste crack-indicating agent containing dangerous substances
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
10 09 99	wastes not otherwise specified
10 10	wastes from casting of non-ferrous pieces
10 10 03	furnace slag
10 10 05*	casting cores and moulds which have not undergone pouring, containing dangerous substances
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 07*	casting cores and moulds which have undergone pouring, containing dangerous substances
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 09*	flue-gas dust containing dangerous substances
10 1010	flue-gas dust other than those mentioned in 10 10 09
10 10 11*	other particulates containing dangerous substances
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 13*	waste binders containing dangerous substances
10 10 14	waste binders other than those mentioned in 10 10 13

10 10 15*	waste crack-indicating agent containing dangerous substances
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
10 10 99	wastes not otherwise specified
10 11	wastes from manufacture of glass and glass products
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 09*	waste preparation mixture before thermal processing, containing dangerous substances
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 11*	waste glass in small particles and glass powder containing heavy metals (for example from cathode ray tubes)
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 13*	glass-polishing and -grinding sludge containing dangerous substances
10 11 14	glass-polishing and -grinding sludge other than those mentioned in 10 11 13
10 11 15*	solid wastes from flue-gas treatment containing dangerous substances
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 11 19*	solid wastes from on-site effluent treatment containing dangerous substances
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 1119
10 11 99	wastes not otherwise specified
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 09*	solid wastes from gas treatment containing dangerous substances
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 11*	wastes from glazing containing heavy metals
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 12 13	sludge from on-site effluent treatment
10 12 99	wastes not otherwise specified
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 01	waste preparation mixture before thermal processing

10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 07	sludges and filter cakes from gas treatment
10 13 09*	wastes from asbestos-cement manufacture containing asbestos
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 12*	solid wastes from gas treatment containing dangerous substances
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
10 13 99	wastes not otherwise specified
10 14	waste from crematoria
10 14 01*	waste from gas cleaning containing mercury

11	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 05*	pickling acids
11 01 06*	acids not otherwise specified
11 01 07*	pickling bases
11 01 08*	Phosphatising sludges
11 01 09*	sludges and filter cakes containing dangerous substances
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 11*	aqueous rinsing liquids containing dangerous substances
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11
11 01 13*	degreasing wastes containing dangerous substances
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 01 15*	eluate and sludges from membrane systems or ion exchange systems containing dangerous substances
11 01 16*	saturated or spent ion exchange resins
11 01 98*	other wastes containing dangerous substances
11 01 99	wastes not otherwise specified
11 02	waste from non-ferrous hydrometallurgical processes
11 02 02*	sludges from zinc hydrometallurgy (including jarosite, goethite)
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 05*	wastes from copper hydrometallurgical processes containing dangerous substances
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in

	11 02 05
11 02 07*	other wastes containing dangerous substances
11 02 99	wastes not otherwise specified
11 03	sludges and solids from tempering processes
11 03 01*	waste containing cyanide
11 03 02*	other wastes
11 05	wastes from hot galvanising processes
11 05 01	hard zinc
11 05 02	zinc ash
11 05 03*	solid wastes from gas treatment
11 05 04*	spent flux
11 05 99	wastes not otherwise specified

12	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 01	ferrous metal filings and turnings
12 01 02	ferrous metal dust and particles
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 05	plastics shavings and turnings
12 01 06*	mineral-based machining oils containing halogens (except emulsions and solutions)
12 01 07*	mineral-based machining oils free of halogens (except emulsions and solutions)
12 01 08*	machining emulsions and solutions containing halogens
12 01 09*	machining emulsions and solutions free of halogens
12 01 10*	synthetic machining oils
12 01 12*	spent waxes and fats
12 01 13	welding wastes
12 01 14*	machining sludges containing dangerous substances
12 01 15	machining sludges other than those mentioned in 12 01 14
12 01 16*	waste blasting material containing dangerous substances
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 18*	metal sludge (grinding, honing and lapping sludge) containing oil
12 01 19*	readily biodegradable machining oil
12 01 20*	spent grinding bodies and grinding materials containing dangerous substances
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
12 01 99	wastes not otherwise specified

12 03	wastes from water and steam degreasing processes (except 11)
12 03 01*	aqueous washing liquids
12 03 02*	steam degreasing wastes

13	OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)
13 01	waste hydraulic oils
13 01 01*	hydraulic oils, containing PCBs
13 01 04*	chlorinated emulsions
13 01 05*	non-chlorinated emulsions
13 01 09*	mineral-based chlorinated hydraulic oils
13 01 10*	mineral-based non-chlorinated hydraulic oils
13 01 11*	synthetic hydraulic oils
13 01 12*	readily biodegradable hydraulic oils
13 01 13*	other hydraulic oils
13 02	waste engine, gear and lubricating oils
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oils
13 03	waste insulating and heat transmission oils
13 03 01*	insulating or heat transmission oils containing PCBs
13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils
13 03 08*	synthetic insulating and heat transmission oils
13 03 09*	readily biodegradable insulating and heat transmission oils
13 03 10*	other insulating and heat transmission oils
13 04	bilge oils
13 04 01*	bilge oils from inland navigation
13 04 02*	bilge oils from jetty sewers
13 04 03*	bilge oils from other navigation
13 05	oil/water separator contents
13 05 01*	solids from grit chambers and oil/water separators
13 05 02*	sludges from oil/water separators
13 05 03*	interceptor sludges
13 05 06*	oil from oil/water separators
13 05 07*	oily water from oil/water separators

13 05 08*	mixtures of wastes from grit chambers and oil/water separators
13 07	wastes of liquid fuels
13 07 01*	fuel oil and diesel
13 07 02*	petrol
13 07 03*	other fuels (including mixtures)
13 08	oil wastes not otherwise specified
13 08 01*	desalter sludges or emulsions
13 08 02*	other emulsions
13 08 99*	wastes not otherwise specified
14	WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08)
14 06	waste organic solvents, refrigerants and foam/aerosol propellants
14 06 01*	chlorofluorocarbons, HCFC, HFC
14 06 02*	other halogenated solvents and solvent mixtures
14 06 03*	other solvents and solvent mixtures
14 06 04*	sludges or solid wastes containing halogenated solvents
14 06 05*	sludges or solid wastes containing other solvents
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
15 01 10*	packaging containing residues of or contaminated by dangerous substances
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers
15 02	absorbents, filter materials, wiping cloths and protective clothing
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02

16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST

16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 03	end-of-life tyres
16 01 04*	end-of-life vehicles
16 01 06	end-of-life vehicles, containing neither liquids nor other hazardous components
16 01 07*	oil filters
16 01 08*	components containing mercury
16 01 09*	components containing PCBs
16 01 10*	explosive components (for example air bags)
16 01 11*	brake pads containing asbestos
16 01 12	brake pads other than those mentioned in 16 01 11
16 01 13*	brake fluids
16 01 14*	antifreeze fluids containing dangerous substances
16 01 15	antifreeze fluids other than those mentioned in 16 01 14
16 01 16	tanks for liquefied gas
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 19	plastic
16 01 20	glass
16 01 21*	hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
16 01 22	components not otherwise specified
16 01 99	wastes not otherwise specified
16 02	wastes from electrical and electronic equipment
16 02 09*	transformers and capacitors containing PCBs
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 12*	discarded equipment containing free asbestos
16 02 13*	discarded equipment containing hazardous components (16) other than those mentioned in 16 02 09 to 16 02 12
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 15*	hazardous components removed from discarded equipment
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
16 03	off-specification batches and unused products
16 03 03*	inorganic wastes containing dangerous substances
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 05*	organic wastes containing dangerous substances
16 03 06	organic wastes other than those mentioned in 16 03 05

16 04	waste explosives
16 04 01*	waste ammunition
16 04 02*	fireworks wastes
16 04 03*	other waste explosives
16 05	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing dangerous substances
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
16 05 06*	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
16 05 07*	discarded inorganic chemicals consisting of or containing dangerous substances
16 05 08*	discarded organic chemicals consisting of or containing dangerous substances
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
16 06	batteries and accumulators
16 06 01*	lead batteries
16 06 02*	Ni-Cd batteries
16 06 03*	mercury-containing batteries
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
16 06 06*	separately collected electrolyte from batteries and accumulators
16 07	wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)
16 07 08*	wastes containing oil
16 07 09*	wastes containing other dangerous substances
16 07 99	wastes not otherwise specified
16 08	spent catalysts
16 08 01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)
16 08 02*	spent catalysts containing dangerous transition metals or dangerous transition metal compounds
16 08 03	spent catalysts containing transition metals or transition metal compounds not otherwise specified
16 08 04	spent fluid catalytic cracking catalysts (except 16 08 07)
16 08 05*	spent catalysts containing phosphoric acid
16 08 06*	spent liquids used as catalysts
16 08 07*	spent catalysts contaminated with dangerous substances
16 09	oxidising substances
16 09 01*	permanganates, for example potassium permanganate
16 09 02*	chromates, for example potassium chromate, potassium or sodium dichromate

16 09 03*	peroxides, for example hydrogen peroxide
16 09 04*	oxidising substances, not otherwise specified

16 10	aqueous liquid wastes destined for off-site treatment
16 10 01*	aqueous liquid wastes containing dangerous substances
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 03*	aqueous concentrates containing dangerous substances
16 10 04	aqueous concentrates other than those mentioned in 16 10 03
16 11	waste linings and refractories
16 11 01*	carbon-based linings and refractories from metallurgical processes containing dangerous substances
16 11 02	carbon-based linings and refractories from metallurgical processes other than those mentioned in 16 11 01
16 11 03*	other linings and refractories from metallurgical processes containing dangerous substances
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 05*	linings and refractories from non-metallurgical processes containing dangerous substances
16 11 06	linings and refractories from non-metallurgical processes other than those mentioned in 16 11 05

[16] Hazardous components from electrical and electronic equipment may include accumulators and batteries mentioned in 16 06 and marked as hazardous; mercury switches, glass from cathode ray tubes and other activated glass, etc.

[17] For the purpose of this entry, transition metals are: scandium, Vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum. These metals or their compounds are dangerous if they are classified as dangerous substances. The Classification of dangerous substances shall determine which among those transition metals and which transition metal compounds are hazardous.

17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances
17 01 07	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17

	01 06
17 02	wood, glass and plastic
17 02 01	wood
17 02 02	glass
17 02 03	plastic
17 02 04*	glass, plastic and wood containing or contaminated with dangerous substances
17 03	bituminous mixtures, coal tar and tarred products
17 03 01*	bituminous mixtures containing coal tar
17 03 02	bituminous mixtures containing substances other than those mentioned in 17 03 01
17 03 03*	coal tar and tarred products
17 04	metals (including their alloys)
17 04 01	copper, bronze, brass
17 04 02	Aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 09*	metal waste contaminated with dangerous substances
17 04 10*	cables containing oil, coal tar and other dangerous substances
17 04 11	cables other than those mentioned in 17 04 10
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing dangerous substances
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 05*	dredging spoil containing dangerous substances
17 05 06	dredging spoil other than those mentioned 17 05 05
17 05 07*	track ballast containing dangerous substances
17 05 08	track ballast other than those mentioned in 17 05 07
17 06	insulation materials and asbestos-containing construction materials
17 06 01*	insulation materials containing asbestos
17 06 03*	other insulation materials consisting of or containing dangerous substances
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	construction materials containing asbestos (18)
17 08	gypsum-based construction material
17 08 01*	gypsum-based construction materials contaminated with dangerous substances
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09	other construction and demolition waste
17 09 01*	construction and demolition wastes containing mercury

17 09 02*	construction and demolition wastes containing pcb (for example pcb-containing sealants, pcb-containing resin-based floorings, pcb-containing sealed glazing units, pcb-containing capacitors)
17 09 03*	other construction and demolition wastes (including mixed wastes) containing dangerous substances
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

18	WASTES FROM HUMAN OR ANIMAL HEALTH CARE OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 01	sharps (except 18 01 03)
18 01 02	body parts and organs including blood bags and blood preserves (except 18 01 03)
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
18 01 06*	chemicals consisting of or containing dangerous substances
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 08*	cytotoxic and cytostatic medicines
18 01 09	medicines other than those mentioned in 18 01 08
18 01 10*	amalgam waste from dental care
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 01	sharps except (18 02 02)
18 02 02*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
18 02 05*	chemicals consisting of or containing dangerous substances
18 02 06	chemicals other than those mentioned in 18 02 05
18 02 07*	cytotoxic and cytostatic medicines
18 02 08	medicines other than those mentioned in 18 02 07

19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 01	wastes from incineration or pyrolysis of waste
19 01 02	ferrous materials removed from bottom ash
19 01 05*	filter cake from gas treatment
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes
19 01 07*	solid wastes from gas treatment
19 01 10*	spent activated carbon from flue-gas treatment
19 01 11*	bottom ash and slag containing dangerous substances
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 13*	fly ash containing dangerous substances
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 15*	boiler dust containing dangerous substances
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 17*	pyrolysis wastes containing dangerous substances
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
19 01 99	wastes not otherwise specified
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 05*	sludges from physico/chemical treatment containing dangerous substances
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 07*	oil and concentrates from separation
19 02 08*	liquid combustible wastes containing dangerous substances
19 02 09*	solid combustible wastes containing dangerous substances
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 02 11*	other wastes containing dangerous substances
19 02 99	wastes not otherwise specified
19 03	stabilised/solidified wastes (19)
19 03 04*	wastes marked as hazardous, partly (20) stabilised
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 06*	wastes marked as hazardous, solidified
19 03 07	solidified wastes other than those mentioned in 19 03 06
19 04	vitrified waste and wastes from vitrification
19 04 01	vitrified waste
19 04 02*	fly ash and other flue-gas treatment wastes
19 04 03*	non-vitrified solid phase
19 04 04	aqueous liquid wastes from vitrified waste tempering

19 05	wastes from aerobic treatment of solid wastes
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 05 99	wastes not otherwise specified
19 06	wastes from anaerobic treatment of waste
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
19 06 99	wastes not otherwise specified
19 07	landfill leachate
19 07 02*	landfill leachate containing dangerous substances
19 07 03	landfill leachate other than those mentioned in 19 07 02
19 08	wastes from waste water treatment plants not otherwise specified
19 08 01	screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
19 08 06*	saturated or spent ion exchange resins
19 08 07*	solutions and sludges from regeneration of ion exchangers
19 08 08*	membrane system waste containing heavy metals
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 10*	grease and oil mixture from oil/water separation other than those mentioned in 19 08 09
19 08 11*	sludges containing dangerous substances from biological treatment of industrial waste water
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 13*	sludges containing dangerous substances from other treatment of industrial waste water
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 08 99	wastes not otherwise specified

19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 01	solid waste from primary filtration and screenings
19 09 02	sludges from water clarification
19 09 03	sludges from decarbonation
19 09 04	spent activated carbon
19 09 05	saturated or spent ion exchange resins
19 09 06	solutions and sludges from regeneration of ion exchangers
19 09 99	wastes not otherwise specified
19 10	wastes from shredding of metal-containing wastes
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 10 03*	fluff-light fraction and dust containing dangerous substances
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 05*	other fractions containing dangerous substances
19 10 06	other fractions other than those mentioned in 19 10 05
19 11	wastes from oil regeneration
19 11 01*	spent filter clays
19 11 02*	acid tars
19 11 03*	aqueous liquid wastes
19 11 04*	wastes from cleaning of fuel with bases
19 11 05*	sludges from on-site effluent treatment containing dangerous substances
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05
19 11 07*	wastes from flue-gas cleaning
19 11 99	wastes not otherwise specified
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
19 12 06*	wood containing dangerous substances
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles

19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	wastes from soil and groundwater remediation
19 13 01*	solid wastes from soil remediation containing dangerous substances
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 03*	sludges from soil remediation containing dangerous substances
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 05*	sludges from groundwater remediation containing dangerous substances
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing dangerous substances
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07

[19] Stabilisation processes change the dangerous nature of the constituents in the waste and thus transform hazardous waste into non-hazardous waste. Solidification processes only change the physical state of the waste (e.g. liquid into solid) by using additives without changing the Chemical properties of the waste.

[20] A waste is considered as partly stabilised if, after the Stabilisation process, dangerous constituents which have not been changed completely into non-dangerous constituents could be released into the environment in the short, middle or long term.

20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 13*	solvents
20 01 14*	acids

20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 25	edible oil and fat
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing dangerous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 29*	detergents containing dangerous substances
20 01 30	detergents other than those mentioned in 20 01 29
20 01 31*	cytotoxic and cytostatic medicines
20 01 32	medicines other than those mentioned in 20 01 31
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 37*	wood containing dangerous substances
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 41	wastes from chimney sweeping
20 01 99	other fractions not otherwise specified
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	other municipal wastes
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues

20 03 04	septic tank sludge
20 03 06	waste from sewage cleaning
20 03 07	bulky waste
20 03 99	municipal wastes not otherwise specified

[21] Hazardous components from electrical and electronic equipment may include accumulators and batteries mentioned in 16 06 and marked as hazardous; mercury switches, glass from cathode ray tubes and other activated glass etc.

CATEGORIES OF WASTES TO BE CONTROLLED

(B) WASTE STREAMS

Y1	Clinical wastes from medical care in hospitals, medical centers and clinics
Y2	Wastes from the production and preparation of pharmaceutical products
Y3	Waste pharmaceuticals, drugs and medicines
Y4	Wastes from the production, formulation and use of biocides and phytopharmaceuticals
Y5	Wastes from the manufacture, formulation and use of wood preserving chemicals
Y6	Wastes from the production, formulation and use of organic solvents
Y7	Wastes from heat treatment and tempering operations containing cyanides
Y8	Waste mineral oils unfit for their originally intended use
Y9	Waste oils/water, hydrocarbons/water mixtures, emulsions
Y10	Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs) or polychlorinated terphenyls (PCTs)or polybrominated biphenyls (PBBs)
Y11	Waste tarry residues arising from refining, distillation and any pyrolytic treatment
Y12	Wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish
Y13	Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives
Y14	Waste chemical substances arising from research and development or teaching activities which are not identified or are new
Y15	Wastes of an explosive nature not subject to other legislation

Y16	Wastes from production, formulation and use of photographic chemicals and processing materials
Y17	Wastes resulting from surface treatment of metals and plastics
Y18	Residues arising from industrial waste disposal operations

C. Classification of polychlorinated biphenyls waste for segregation

PCB oil	High chloride concentration
PCB contaminated mineral oil	Low chloride concentration
Water contaminated by PCB	Separation and adsorption process
Solvent contaminated by PCB	Miscible
Porous material (PCB oil)	Decontamination process
Porous material (PCB contaminated mineral oil)	Decontamination process
Non porous material	Recycling of metallic parts

SECOND SCHEDULE

(Regulations 3 (2); 4(2),(3), (4) and (5); 8 (8)(a); 11 (3); and 12 (1), (3)(b), (4), (5) and (6))

WASTES THAT DO NOT REQUIRE CLASSIFICATION OR ASSESSMENT

1. The wastes specified in paragraphs 2 and 3 of this Schedule do not require classification in terms of regulation 4 (1), nor assessment in terms of the Third Schedule.

2. General waste
   - *(a)* Domestic waste;
   - *(b)* Business waste not containing hazardous wastes or hazardous chemicals;
   - *(c)* Non-infectious animal carcasses;
   - *(d)* Garden waste;
   - *(e)* Waste packaging not contaminated with hazardous material;
   - *(f)* Waste tyres;
   - *(g)* Building and demolition waste not containing hazardous wastes or hazardous chemicals; and
   - *(h)* Excavated earth material not containing hazardous wastes or hazardous chemicals.

3. Hazardous wastes
   - *(a)* Waste Products:
     - (i) Asbestos Waste.
     - (ii) Expired or unused hazardous products
   - *(b)* Mixed Waste:
     - (i) General waste, excluding domestic waste, which contains hazardous wastes or hazardous chemicals; and
     - (ii) Mixed, hazardous chemical wastes from analytical laboratories.
   - *(c)* Other:

     (Health Care Risk Waste (HCRW)

THIRD SCHEDULE

(Regulations 5 (3)(b), 8 (4) and 8 (5))

CRITERIA FOR ASSESSMENT OF WASTE FOR LANDFILL DISPOSAL

1. **Approach**

(1) To assess waste for the purpose of disposal to landfill, the following are required:

(a) identification of chemical substances present in the waste; and

(a) sampling and analysis to determine the total concentrations (TC) and leachable concentrations (LC) for the elements and chemical substances that have been identified in the waste and that are specified in paragraph 4 of these criteria.

(2) The TC and LC values of the chemical substances in the waste must be compared to the threshold limits specified in paragraph 4 of these criteria for total concentrations (TCT values) and leachable concentrations (LCT values) of specific elements and chemical substances.

(3) Based on the TC and LC values of the elements and chemical substances in the waste exceeding the corresponding TCT and LCT values respectively, the specific type of waste for disposal to landfill must be determined in terms of paragraph 5 of these criteria.

2. **Total Concentration (TC) Analysis**

(1) The TC of all the elements and chemical substances specified in paragraph 9 of these criteria that are known to occur, likely to occur or can reasonably be expected to occur in the waste must be determined.

(2) The TC of elements and chemical substances in waste must be determined using suitable national or international standard techniques and analysis methods that will provide reliable, accurate and repeatable results of the TC of elements and chemical substances specified in paragraph 4 of these criteria.

(3) Within three years of these criteria coming into operation, all analyses of the TC of elements and chemical substances in waste must be conducted by accredited laboratories to conduct the particular techniques and analysis methods required.

3. **Leachable Concentration (LC) Analysis**

(1) The LC of elements and chemical substances must be determined using the Australian Standard Leaching Procedure (AS 4439.1, 4439.2 and 4439.3).

(2) Within three years of these criteria coming into operation, all analyses of the LC of elements and chemical substances in waste must be conducted by accredited laboratories to conduct the particular techniques and analysis methods required.

(3) The type of leaching fluid used in the leaching procedure will depend on the nature of the waste or the particular disposal practice, and must be determined as follows:

(a) waste to be disposed of, or waste that contains, putrescible wastes: Use 0.1M acetic acid solution with altered pH 5.0 or pH 2.9;

(b) waste to be disposed of with non-putrescible waste: Use a basic 0.1 M sodium tetraboratedecahydrate solution of pH 9.2 ±0.1, as well as an acetic acid solution (pH 5.0 or 2.9); or

(c) non-putrescible waste to be disposed of without any other wastes: Use reagent water.

4. **LCT and TCT Threshold Values**

(1) Total Concentration Limit (TCT) Thresholds (mg/kg):

Elements & Chemical Substances in Waste	TCT0	TCT1	TCT2
Metal Ions			
As, Arsenic	5.8	500	2000
B, Boron	150	15000	60000
Ba, Barium	62.5	6250	25000
Cd, Cadmium	7.5	260	1040
Co, Cobalt	50	5000	20000
Cr_{Total}, Chromium Total	46000	800000	N/A
Cr(VI), Chromium (VI)	6.5	500	2000
Cu, Copper	16	19500	78000
Hg, Mercury	0.93	160	640
Mn, Manganese	1000	25000	100000
Mo, Molybdenum	40	1000	4000
Ni, Nickel	91	10600	42400
Pb, Lead	20	1900	7600
Sb, Antimony	10	75	300
Se, Selenium	10	50	200
V, Vanadium	150	2680	10720
Zn, Zinc	240	160000	640000

Inorganic Anions			
TDS			
Chloride			
Sulphate			
NO_3 as N, Nitrate-N			
F, Fluoride	100	10000	40000
CN^- (total), Cyanide Total	14	10500	42000
Organics			
Benzene		10	40
Benzo(a)pyrene		1.7	6.8
Carbon tetrachloride		4	16
Chlorobenzene		8800	35200
Chloroform		700	2800
2-Chlorophenol		2100	8400
Di (2 ethylhexyl) phthalate		40	160
1,2-Dichlorobenzene		31900	127600
1,4-Dichlorobenzene		18400	73600
1,2-Dichloroethane		3.7	14.8
1,1-Dichloroethylene		150	600
1-2-Dichloroethylene		3750	15000
Dichloromethane		16	64
2,4-Dichlorophenol		800	3200
2,4-Dinitrotoluene		5.2	20.8

Elements & Chemical Substances in Waste	TCT0	TCT1	TCT2
Ethylbenzene		540	2160
Formaldehyde		2000	8000
Hexachlorobutadiene		2.8	5.4
Methyl ethyl ketone		8000	32000
MTBE (Methyl t-butyl ether)		1435	5740
Nitrobenzene		45	180
PAHs (total)		50	200
Petroleum H/Cs, C6 to C9		650	2600
Petroleum H/Cs, C10 to C36		10000	40000
Phenols (total, non-halogenated)		560	2240
Polychlorinated biphenyls		12	48
Styrene		120	480
1,1,1,2-Tetrachloroethane		400	1600
1,1,2,2-Tetrachloroethane		5.0	20
Tetrachloroethylene		200	800
Toluene		1150	4600
Trichlorobenzenes (total)		3300	13200
1,1,1-Trichloroethane		1200	4800
1,1,2-Trichloroethane		48	192
Trichloroethylene		11600	46400
2,4,6-Trichlorophenol		1770	7080
Vinyl chloride		1.5	6.0
Xylenes (total)		890	3560

Pesticides			
Aldrin + Dieldrin	0.05	1.2	4.8
DDT + DDD + DDE	0.05	50	200
2,4-D	0.05	120	480
Chlordane	0.05	4	16
Heptachlor	0.05	1.2	4.8

(2) Leachable Concentration Limit (LCT) Thresholds (mg/l):

Elements & Chemical Substances in Waste	LCT0	LCT1	LCT2	LCT3
Metal Ions				
As, Arsenic	0.01	0.5	1	4
B, Boron	0.5	25	50	200
Ba, Barium	0.7	35	70	280
Cd, Cadmium	0.003	0.15	0.3	1.2
Co, Cobalt	0.5	25	50	200
Cr_{Total}, Chromium Total	0.05	2.5	5	20
Cr(VI), Chromium (VI)	0.05	2.5	5	20
Cu, Copper	2.0	100	200	800
Hg, Mercury	0.006	0.3	0.6	2.4

5. Determining Waste Types for Landfill Disposal

(1) The specific type of waste for disposal to landfill must be determined by comparing the TC and LC of the elements and chemical substances in the waste with the TCT and LCT values specified in paragraph 6 of these criteria.

(2) Based on the assessment of the particular waste destined for disposal to landfill, the type of waste is determined as follows-

(a) Wastes with any element or chemical substance concentration above the LCT3 or TCT2 values (LC > LCT3 or TC > TCT2) are Type 0 Wastes;

(b) Wastes with any element or chemical substance concentration above the LCT2 but below LCT3 values, or above the TCT1 but below TCT2 values (LCT2 < LC :s; LCT3 or TCT1< TC :s; TCT2), are Type 1 Wastes;

(c) Wastes with any element or chemical substance concentration above the LCT1 but below the LCT2 values and all concentrations below the TCT1 values (LCT1 < LC :s; LCT2 and TC : s; TCT1) are Type 2 Wastes;

(d) Wastes with any element or chemical substance concentration

above the LCTO but below LCT1 values () and all concentrations below the TCT1 values (LCTO < LC:::; LCT1 and TC:::; TCT1} are Type 3 Wastes;

(e) Wastes with all element and chemical substance concentration levels for metal ions and inorganic anions below the LCTO and TCTO values (LC :::; LCTO and TC :::; TCTO), as well as below the following limits for organics and pesticides, are Type 4 Wastes-

Chemical Substances In Waste	Total Concentration (mg/kg)
Organics	
TOC	30 000 (= 3%)
BTEX	6
PCBs	1
Mineral Oil (C10 to C40)	500
Pesticides	
Aldrin + Dieldrin	0.05
DDT + DDD + DDE	0.05
2,4-D	0.05
Chlordane	0.05
Heptachlor	0.05

(3) If a particular chemical substance in a waste is not listed with corresponding LCT and TCT thresholds in paragraph 6 of these criteria, and the waste has been classified as hazardous in terms of GHS health or environmental hazards due to the hazard characteristics of the particular substance, the waste is considered to be Type 1 Waste.

(4) If a representative sample of a hazardous waste cannot be taken or obtained that would enable accurate LC and TC analyses due to the nature of the waste, the waste is considered to be Type 1 waste.

(5) If the TC of a chemical substance is > TCT2, and the concentration cannot be reduced by waste avoidance, re-use, recycling or recovery, or it is not economically feasible e.g. due to very small quantities, the waste must be stabilised to a minimum of LC < LCT2, and will then be considered Type 1 Waste.

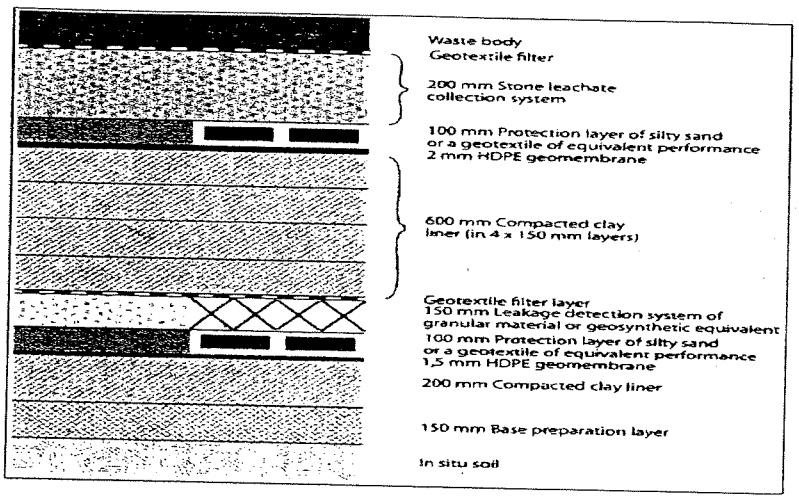
(6) Laboratory wastes listed in paragraph (2)(b) of the Second Schedule to the Regulations are considered to be Type 1 Waste, unless assessed and determined otherwise in terms of these criteria.

Requirements for Disposal of Waste for Landfill

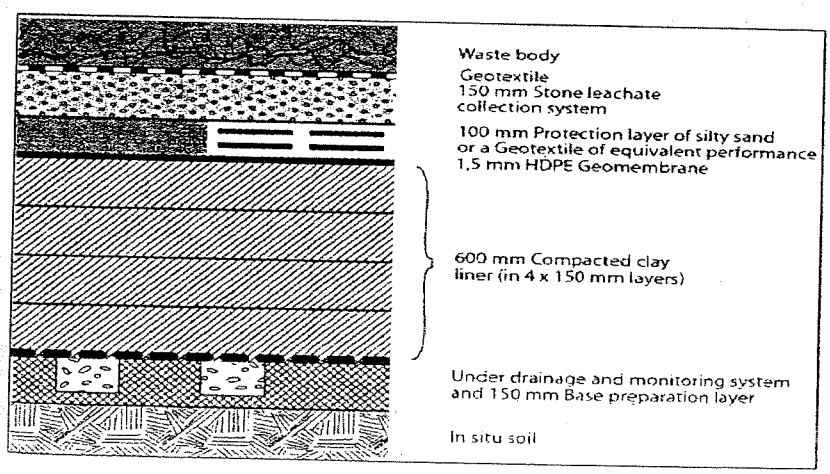
1. Landfill Classification and Containment Barrier Design

(1) The containment barriers of landfills for the disposal of waste in terms of paragraph 4 of these requirements must comply with the following minimum engineering design requirements-

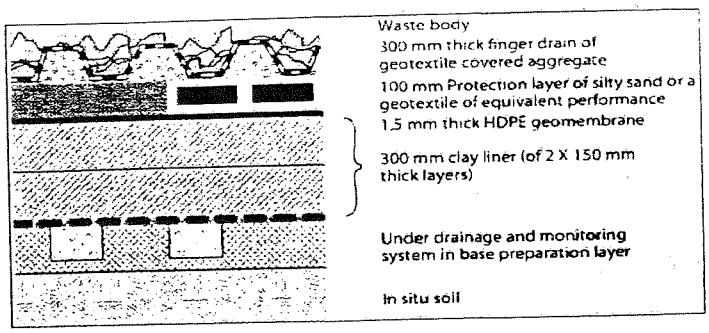
(a) Class 1 Landfill:



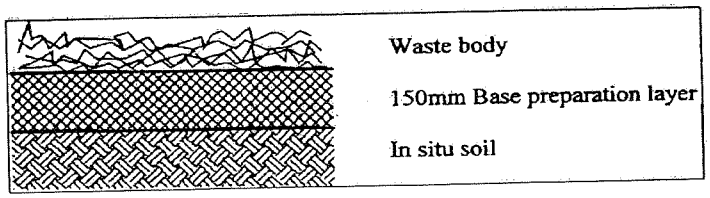
(b) Class 2 Landfill:



(c) Class 3 Landfill:



(d) Class 4 Landfill:



(2) The following containment barrier requirements must be included in an application for waste management licence approval of a landfill or cell -

(a) design reports and drawings that must be certified by a registered, professional civil engineer prior to submission to the Agency;

(b) service life considerations that must be quantified taking into account temperature effects on containment barriers;

(c) total solute seepage (inorganic and organic) that must be calculated in determining acceptable leakage rates and action leakage rates;

(d) alternative elements of proven equivalent performance which has been considered, such as the replacement of –

(i) granular filters or drains with geosynthetic filters or drains;

(ii) protective soil layers with geotextiles; or

(iii) clay components with geomembranes or geosynthetic clay liners;

(e) All drainage layers must contain drainage pipes of adequate size, spacing and strength to ensure atmospheric pressure within the drainage application for the service life of the landfill;

(f) Alternative design layouts for slopes exceeding 1:4 (vertical: horizontal) may be considered provided equivalent performance is demonstrated;

(g) Construction Quality Assurance during construction;

(h) Geosynthetic materials must comply with relevant Ghanaian National Standard specifications, or any prescribed management practice or standards which ensure equivalent performance; and

(i) Consideration of the compatibility of liner material with the waste stream, in particular noting the compatibility of natural and modified clay soils exposed to waste containing salts.

(3) The classification and containment barrier design of all new landfills, as well as new working cells at existing landfills, must be implemented in accordance with paragraphs 3(1) and (2) of these requirements.

(4) Notwithstanding paragraph 3(3) of these requirements, waste may be disposed of in terms of paragraphs 4(1), (2), (3) and (4) of these requirements at landfills with the liner design requirements for landfills or at landfills with an alternative liner design approved by the Agency for the life-span of the operational cell, subject to the following conditions-

(a) the current working cell at the landfill was operating lawfully in terms of the Environmental Protection Agency, 1994 (Act 490) prior to the Regulations coming into operation;

(b) the next working cell at the landfill was legally approved prior to the Regulations coming into operation; or

(c) an application for approval of a new landfill or working cell was submitted to the Agency, and a decision has not been taken or is still under consideration prior to the Regulations coming into operation.

2. Waste Acceptance Criteria for Disposal to Landfill

(1) Waste assessed in terms of the Criteria for Assessment of Waste for Landfill Disposal set out in terms of the Third Schedule must be disposed to a licensed landfill as follows:

Waste Type	Landfill Disposal Requirements
Type 0 Waste	The disposal of Type 0 waste to landfill is not allowed. The waste must be treated and re-assessed in terms of the Criteria for Assessment of Waste for Landfill Disposal.
Type 1 Waste	Type 1 waste may only be disposed of at a Class A landfill designed in accordance with paragraphs 3(1) and (2) of these requirements, or subject to paragraph 3(4) of these requirements, may be disposed of at a landfill designed as such.
Type 2 Waste	Type 2 waste may only be disposed of at a Class B landfill designed in accordance with paragraphs 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, may be disposed of at a landfill designed as such.
Type 3 Waste	Type 3 waste may only be disposed of at a Class C landfill designed in accordance with paragraphs 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, may be disposed of at a landfill designed as such.
Type 4 Waste	Type 4 waste may only be disposed of at a Class D landfill designed in accordance with paragraphs 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, may be disposed of at a landfill designed as such.

(2) The following waste destined for disposal to landfill must be disposed of as follows-

Listed Waste	Landfill Disposal Requirements
(i) Domestic waste (ii) Business waste not containing hazardous wastes or hazardous chemicals. (iii) Non-infectious animal carcasses. (iv) Garden waste	Disposal only allowed at a Class B landfill designed in accordance with paragraphs 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, at a landfill designed as such.
(v) post-consumer	Disposal only allowed at a Class C landfill designed in accordance with paragraphs 3(1) and (2) of these

packaging (vi) Waste tyres	requirements, or, subject to paragraph 3(4) of these requirements, at a landfill designed as such.
(vii) Building and demolition waste not containing hazardous chemicals. (viii) Excavated earth material not containing hazardous waste or hazardous chemicals.	Disposal allowed at a Class D landfill designed in accordance with paragraphs 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, at a landfill designed as such.

(3) Unless assessed in terms of the Criteria for Assessment of Waste for Landfill Disposal set in terms of the Third Schedule and disposed of in terms of paragraph 4(1) of these requirements, the following wastes included in paragraph 3 of the Regulations and destined for disposal to landfill must be disposed of as follows-

Listed Waste	Landfill Disposal Requirements
(i) Asbestos waste (ii) Expired, spoilt or unusable hazardous products (iii) PCBs (or rather PCB containing waste (>50ppm)) (iv) General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals. (v) Mixed, hazardous chemical wastes from analytical laboratories and laboratories from academic institutions in containers less than 100 litres.	Disposal only allowed at a Class A landfill designed in accordance with paragraph 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, at a landfill designed as such.

(4) Waste that has been classified in terms of any Minimum Requirements for the Handling, Classification and Disposal of Hazardous Wastes prior to the Regulations coming into operation, may be accepted and disposed of as set out below for a period not exceeding three (3) years after the date of coming into operation of the Regulations-

Waste	Landfill Disposal Requirements
Hazardous Wastes - Hazard Rating 1 or 2	Disposal only allowed at a Class A landfill designed in accordance with paragraphs 3(1) and 3(2) of these requirements, or, subject to paragraph 3(4) of these criteria, at a landfill designed as such.
Hazardous Wastes - Hazard Rating 3 or 4	Disposal only allowed at a Class A landfill designed in accordance with paragraphs 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, at a landfill designed as such.
Hazardous Wastes - Delisted	Disposal only allowed at a Class B landfill designed in accordance with paragraphs 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, at a landfill designed as such
General Waste	Disposal only allowed at a Class B landfill designed in accordance with paragraph 3(1) and (2) of these requirements, or, subject to paragraph 3(4) of these requirements, at a landfill designed as such.

(5) Notwithstanding the requirements of paragraphs 4(1), (2) and (3) of these requirements, waste may be disposed of at landfills with a higher level of containment design than specified, subject to the restriction in paragraph 5(2)(a)(ii) of these requirements.

3. Waste Disposal Restrictions

(1) The following prohibitions and restrictions on the disposal of waste to landfill comes into effect after the timeframes indicated for each waste from the date of the Regulations coming into operation-

Waste Prohibited or Restricted in terms of Disposal	Compliance Timeframe
(a) Waste, which, in the conditions of a landfill, is explosive, corrosive, oxidizing (according to the First Schedule).	Immediate

(b)	Waste with a pH value of <6 or >12.		Immediate
(c)	Flammable waste with a closed cup flashpoint lower than 61° Celsius.		Immediate
(d)	Reactive waste that may react with water, air, acids or components of the waste, or that could generate unacceptable amounts of toxic gases within the landfill.		Immediate
(e)	Waste compressed gases (according to the First Schedule).		Immediate
(f)	Untreated Healthcare Risk Waste (HCRW).		Immediate
(g)	(i)	POPs pesticides listed under the Stockholm Convention.	Eight years
	(ii)	Other waste pesticides.	Four years
(h)	Lead acid batteries.		Immediate
(i)	Other batteries.		Eight years
(j)	Re-usable, recoverable or recyclable used lubricating mineral oils, as well as oil filters, but excluding other oil containing wastes.		Four years
(k)	Re-usable, recoverable or recyclable used or spent solvents.		Five years
(l)	PCB containing wastes (>50 mg/kg or 50 ppm).		Five years
(m)	Hazardous Waste Electric and Electronic Equipment (WEEE) - Lamps.		Three years
(n)	Hazardous Waste Electric and Electronic Equipment (WEEE) - Other.		Eight years
(o)	Waste tyres: Whole.		Immediate
(p)	Waste tyres: Quartered.		Five years

(q)	Liquid waste-		
	(i)	Waste which has an angle of repose of less than 5 degrees, or becomes free-flowing at or below 60 °C or when it is transported, or is not generally capable of being picked up by a spade or shovel; or	Six years
	(ii)	Waste with a moisture content of >40% or that liberates moisture under pressure in landfill conditions, and which has not been stabilised by treatment.	
(r)		Hazardous wastes with a calorific value of:	
	(i)	> 25 MJ/kg.	Four years
	(ii)	> 20 MJ/kg	Six years
	(iii)	> 10 MJ/kg	Twelve years
	(iv)	> 6% TOC.	Fifteen years
(s)		Brine or waste with a high salt content (TDS > 5%), and a leachable concentration for TDS of more than 100 000 mg/l.	Eight years
(t)		Disposal of garden waste:	
	(i)	25% diversion from the baseline at a particular landfill of separated garden waste.	Five years
	(ii)	50% diversion from the baseline at a particular landfill of separated garden waste	Ten years
(u)		Infectious animal carcasses and animal waste.	Immediate

(2) The following prohibitions and restrictions on activities related to the disposal of waste to landfill comes into effect after the timeframes indicated for each activity from the date of the

Regulations taking effect-

Prohibited or Restricted Waste Disposal Activities			Timeframe
(a)	Disposal of-		
	(i)	Type 1 Waste that has been treated, with waste listed in paragraph (2)(a) of the Second Schedule;	Five years
	(ii)	Waste classified as hazardous in terms of regulation 3(1), or waste listed in paragraph (2)(b) of Schedule 2 to the Regulations, with waste listed in paragraph (2)(a) of the Second Schedule; and	Five years
	(iii)	Type 4 Waste with any waste other than Type 4, unless part of treatment.	Five years
(b)	Macro-encapsulation of waste, meaning the isolation (or long-term storage) of waste through containment in containers within a sealed or reinforced cell in a specifically prepared and engineered area within a permitted hazardous wastes landfill. Eight years		Eight years

FOURTH SCHEDULE
(Regulation 7 (2) and (3))

CRITERIA FOR THE CONTROL AND MANAGEMENT OF INCINERATION FACILITIES

Registration and control

1. When waste is accepted at an incineration plant, the operator shall ensure that each type of waste is weighed and registered.

2. When hazardous or infectious waste is accepted, the operator shall, as far as appropriate, ensure that the waste corresponds with the description in the documentation produced by the waste holder.

3. The operator shall inspect, as far as possible, the waste before it is unloaded. The inspection shall include the taking of representative samples, which must be kept for at least one month after the waste has been incinerated.

Conditions for incineration

4. Incineration plants shall be designed, built and operated in such a way as to ensure compliance with the requirements concerning temperature, time, additional burners and feeding of waste.

Incineration residue

5. Incineration plants shall be designed, built and operated so that the quantity of incineration residue from the operation of the plant is limited as much as possible. The content of hazardous substances in the incineration residue must be further limited as much as possible.

6. Slag and bottom ash from incineration plants shall be sufficiently burnt out and cooled before further treatment. Slag and bottom ash shall have a TOC content of less than 3 % or a loss on ignition of less than 5 % of the dry weight of the material.

7. Incineration residue classified as hazardous wastes shall be treated in accordance with the provisions on hazardous wastes.

8. Incineration residue shall be recycled, where appropriate, or transported for final processing. Prior to determining where the incineration residue shall be delivered, appropriate tests shall be carried out as far as justified in order to establish the physical and chemical characteristics and the pollution potential of the different incineration residues.

Conversion into energy

9. Incineration plants shall be designed, built and operated in such a way that all thermal energy generated by the incineration process is recovered as far as practically possible.

Noise, odours and other complaints

10. Incineration plants shall be designed, built and operated in such a way that odours from incineration plants are not nuisances or hazards to the public.

Infectious waste

11. At incineration plants with a permit to treat infectious waste, the waste should be placed straight in the furnace without direct handling so as to prevent the waste being mixed with other categories of waste before incineration.

Operating conditions

Mode of operation

12. For incineration plants not in continuous operation, the maximum number of planned plant startups and shutdowns per year in order to limit the potential negative environmental effects of this mode of operation shall be determined by the Agency.

Maintenance duties

13. In order to keep the ordinary emissions from incineration plants at the lowest possible level, and in order to prevent other emissions, the operator shall ensure sufficient maintenance of equipment, which may affect the emission levels. Maintenance systems and procedures for such equipment shall be documented.

Emissions to air

Emission limit values

14. Waste incineration plants and co-incineration plants shall be designed, built and operated in such a way that the emission concentrations in the flue gas do not exceed the limit values for emissions to air as prescribed by the Agency.

15. If in a co-incineration plant more than 40 % of the resulting heat release comes from the incineration of hazardous or infectious wastes, the emission limit values set out by the Agency shall apply.

Stack height

16. Flue gas from incineration plants shall be raised in a controlled fashion through a stack. The stack height shall be calculated so that concentration of air pollution at ground level or at any nearby air inlet does not exceed the recommended air quality criteria. These calculations shall be based on the permitted emission levels, existing background concentrations and the most adverse dispersal conditions that may arise. The Agency may require that the calculations be carried out with competent external aid.

Discharge to water

Discharge limit values

17. Incineration plants shall be designed, built and operated so that the discharge concentrations in wastewater from the cleansing of flue gas do not exceed the limit values for discharges to water as prescribed by the Agency.

Treatment of run-offs

18. Sufficient storage capacity for the collection and proper handling of all run-offs from accepted waste and from incineration residue at the incineration plant shall be provided.

Measurements

Monitoring and control of processes

19. Incineration plants shall be equipped with measuring instruments to monitor operation and control parameters relevant to the incineration process. The following measurements shall at least be carried out:
    (a) continuous measurements of concentration of oxygen, pressure, temperature and water vapour content of the flue gas,
    (b) continuous measurements of pH, temperature and flow of waste water from the cleansing of flue gas,
    (c) continuous measurements of temperature after the last injection of combustion air, as measured near the inner wall or at another representative point of the combustion chamber as authorised by the Agency, and
    (d) measurements of the quantity of waste incinerated.

20. Measurements of water vapour content shall not be required if the sampled flue gas is dried before the emissions are analysed.

21. The flue gas residence time and minimum temperature shall be controlled at least once when the incineration plant is brought into service and under the most unfavourable operating conditions anticipated.

Measuring emissions to air

22. The following measurements of emissions to air at an incineration plant shall be carried out:
    (a) continuous measurements of total dust, TOC, HCl, HF, SO2, NOX and CO, and
    (b) at least one measurement each six months of heavy metals and dioxins. However, one measurement at least every three months shall be carried out for the first 12 months of operation.

Compliance with emission limits to air

23. The limit values for emissions to air shall be regarded as being met if
    (a) none of the daily average values for total dust, TOC, HCl, HF, SO2 and NOX exceed the emission limit values prescribed by the Agency,
    (b) either 100 % or at least 97 % of the half-hourly average values for total dust, TOC, HCl, HF, SO2 and NOX, over 12 consecutive months, do not exceed the respective emission limit values prescribed by the Agency,
    (c) at least 97 % of the daily mean values for CO, over 12 consecutive months, do not exceed the emission limit values prescribed by the Agency,
    (d) none of the average values for CO exceed the emission limit values prescribed by the Agency, and
    (e) none of the average values for heavy metals and dioxins exceed the emission limit values prescribed by the Agency.

Measuring discharge to water

24. The following measurements of discharge to water shall be carried out at incineration plants:
    (a) daily measurements of total dissolved solids,
    (b) at least monthly measurements of heavy metals,
    (c) at least every six months, measurements of dioxins and however, one measurement at least every three months shall be carried out for the first 12 months of operation.

Compliance with discharge limits to water

25. The discharge limits to water shall be regarded as met if
    (a) 100 % and at least 95 % of the daily measurements of total dissolved solids, over 12 consecutive months, do not exceed the discharge limit values prescribed by the Agency,
    (b) for heavy metals, no more than one measurement per year exceeds the discharge limit values prescribed by the Agency, and
    (c) none of the measurements of dioxins exceed the emission limit values prescribed by the Agency.

Measuring noise and non-incinerated material in slag and ash

26. At least one measurement of noise shall be carried out the first year an incineration plant is in operation.

27. At least one measurement shall be carried out every three months of the share of non-incinerated material in slag and bottom ash at the incineration plant.

Measurement methods and equipment

28. All measurements to be carried out at an incineration plant shall be carried out pursuant to the requirements concerning measurement methods and equipment prescribed by the Agency.

Abnormal operating conditions and warning

Exceeding emission limits

29. The operator of an incineration plant shall, as far as possible, prevent that abnormal operating conditions occur, which could cause the exceedance of set emission limit values. If the emission limit values are still exceeded as a result of inevitable technical disturbances or failures in the treatment plants or measurement equipment, the incineration of waste must not continue for more than 4 hours uninterrupted. The total operating time under such conditions shall be less than 60 hours over 12 consecutive months.

30. Under operating conditions emissions of dust to air from a waste incineration plant shall not exceed 150 mg/Nm3 as a half-hourly average. The emission limit values for CO and TOC to air and the requirements in "Operation of the plant" must otherwise be met.

Notification

31. If the set emission limit values for an incineration plant are exceeded, or if other abnormal conditions occur which have or may have pollution-related consequences, the Agency shall be notified without undue delay.

32. Notification shall be given of acute pollution or the risk of acute pollution.

Alternative disposal of waste

33. The operator shall ensure that a plan is prepared for the alternative disposal of waste in the case of shutdowns.

Measurement results and reporting

Storage of measurement results

34. All measurement results from an incineration plant shall be registered, adapted and presented in a manner prescribed by the Agency to enable the Agency check that the provisions in these Regulations are met. The measurement results shall be kept for at least three years.

FIFTH SCHEDULE

(Regulation 9 (1) and (3))

CRITERIA FOR ESTABLISHMENT AND APPROVAL OF A TAKE-BACK SYSTEM

5-1. Scope

The provisions in this Schedule apply to

(a) take-back systems for beverage packaging;

(b) take-back systems for packaging and that are used in the distribution of beverages all the way to the consumer.

5-2. Purpose

The purpose of the provisions in this Schedule is to facilitate effective take-back systems with a high recovery rate for beverage packaging such that the take-back systems help to prevent litter and to reduce the amount of waste produced by this kind of packaging.

5-3. Definitions

For the purposes of this Schedule

(a) "take-back system" means the scheme of returning or repossessing used products or used packaging from the market to the producer or to the representative of the producer;

(b) "beverages" include liquid beverages and liquid concentrates intended for mixing;

(c) "recovery" means reuse, materials recycling and energy recovery;

(d) "deposit scheme" means a scheme where the consumer and the point of sale pay a certain amount (deposit) for the packaging of an article under the condition that the amount is refunded to the purchaser upon the return of the empty packaging;

(e) "primary packaging" means the packaging unit (bottle, box or similar container) that the beverage is poured into; and

(f) "secondary packaging" means the packaging unit that contains several primary packaging units.

5-4. Establishment and approval of a take-back system
The individual manufacturer or importer of beverages can set up and manage or join a take-back system for primary packaging. The Agency shall determine whether the take-back system is to be approved.

A precondition for approval is that the take-back system is expected to achieve a minimum recovery rate to be determined by the Agency, and that the packaging is made available for environmentally sound recycling. Take-back systems based on energy recovery will only be approved if reuse or materials recycling is not technically, environmentally or financially feasible.

Conditions relating to approval may be imposed.

5-5. Determination of the return rate
The Agency shall set the return rate that the take-back system can be expected to achieve.

The recovery rate shall be set in advance for a maximum of one year.

5-6. Labelling
Upon the establishment of a deposit scheme for packaging types and product categories that have not previously been incorporated in a deposit scheme, the packaging itself or the label shall bear clear marking that indicates that the packaging can be returned for a refund of the deposit.

5-7. Return of packaging that is incorporated in a deposit scheme to points of sale
Points of sale of beverages in packaging that is incorporated in a deposit scheme have a duty to accept equivalent quantities of empty packaging that they themselves retail. Upon delivery of the packaging to the points of sale, the consumer can claim a cash refund of the deposit.

Primary packaging in the deposit system based on reuse shall be delivered by the manufacturer to the points of sale in or together with secondary packaging that is suitable to be used several times.

5-8. Deposit rates

The deposit rates to be determined by the Agency in collaboration with key stakeholders shall apply to the following:

(a) Primary packaging (per piece): Units with a filling volume of up to and including 50 cl

(i) for trade between the manufacturer/importer and the reseller,

(ii) for trade between the reseller and the consumer: Units with a filling volume exceeding 50 cl a) for trade between the manufacturer/importer and the reseller,

(iii) for trade between the reseller and the consumer.

(b) Secondary packaging (per piece): - for secondary packaging that is used in the distribution from the manufacturer/ importer.

The refund of the deposits can be claimed in cash.

5-9. Prohibition on particular forms of packaging

The Agency may prohibit the use of primary packaging that prevents the appropriate implementation of established deposit schemes.

SIXTH SCHEDULE

(Regulations 12 (1) (a) and (b), (4) (a), (6) and 31 (3))

WASTE MANIFEST SYSTEM INFORMATION REQUIREMENTS

1. The information specified in paragraph 2 of this Schedule must be reflected in the waste manifest in quadruplicates.

2. *(a)* Information to be supplied by the Waste Generator (Consignor):
   - (i) Unique consignment identification number;
   - (ii) If applicable, the Ghana National Waste Information System (GNWIS) Registration number in terms of the National Waste Information, once these Regulations come into effect;
   - (iii) Generator's contact details (contact person, physical and postal address, phone, fax, email);
   - (iv) Physical address of the site where the waste was generated (if different from (iii));
   - (v) Emergency contact number;
   - (vi) Origin/source of the waste (activity);
   - (vii) Classification of the waste and Safety Data Sheet;
   - (viii) Quantity of waste by volume (m3) or weight (tonnes);
   - (ix) Date of collection/despatch;
   - (x) Intended receiver (waste manager); and
   - (xi) Declaration (content of the consignment is fully and accurately described, classified, packed, marked and labelled, and in all respects in proper condition for transportation in accordance with the applicable laws and regulations).

   (b) Information to be supplied by the Waste Transporter:
   - (i) Name of transporter;
   - (ii) Address and telephone number of transporter; and

(iii) Declaration acknowledging receipt of the waste.

(c) Information to be supplied by the Waste Manager (Consignee):

(i) Name, address and contact details;

(ii) Receiving waste management facility name, address and contact details (where different);

(iii) Waste management facility licence number;

(iv) Date of receipt;

(v) Quantity of waste received by weight (tonnes), and volume (m3) if applicable.

(vi) Type of waste management applied (re-use, recycling, recovery, treatment, disposal);

(vii) Any discrepancies in information between the different holders of the waste (related to waste quantity, type, classification, physical and chemical properties);

(viii) Waste management reporting description and code in terms of the National Waste Information Regulations, once these Regulations come into effect.

(ix) Details on any waste diverted to another waste management facility, and details of the facility.

(x) Certification and declaration of receipt and final management of the waste.

SEVENTH SCHEDULE

Form A

(Regulation 14 (1))

Application for environmental permit for hazardous wastes or other wastes

ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL PERMIT REGISTRATION FORM FOR HAZARDOUS WASTES AND OTHER WASTES

(To be completed in duplicate by proposed storage, transporters and treatment facility operators)

FEE GH₵ **FORM HCW**

Applicant: _____

Address for correspondence

Contact person_____ Position _____
Phone No_____
Email_____

Environmental Protection Agency (Head Office)
P.O. Box M 326
Accra, Ghana
Tel: 6646718, 664223, 662465
Email: info@epa.gov.gh
Website: www.epa.gov.gh

This form shall be submitted to the relevant EPA Head office, Regional, District and Zonal Offices.

1. **PROPOSED ACTIVITY**

Title of activity (general classification of undertaking)
.....Description of proposed activity including unit processes (flow diagram), raw materials, list of chemicals (source, types and quantities), storage facilities, waste by-products (soil, liquid and gaseous)
.....
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Scope of proposal (size of labor force, equipment and machinery, installed production capacity, product type, area covered by facility/proposal, market)
.....
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2. **PROJECT SITE**

(Location attach a site plan/map)
Plot/House No.....Street/Area Name.....
Town.....District.....Region.....
Major Landmarks (if any).....
Current Zoning.....
Geographical Coordinates.....

Distance to the nearest residential and/or other facilities (in meters) provide coordinates (where possible)
.....
.....
Adjacent land uses (existing and proposed) – (Describe in details and attach pictures)
.....
.....
.....
Site description (immediate activities and adjacent land uses should be described)
.....
.....
.....
.....
.....
.....

3. **INFRACTRUCTURE AND UTILITIES**

Structures (building and other facilities proposed or existing on site)
.....
.....
Access to water (source, quantity)
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.....
Access to power (type, source and quantity)
.....
.....
Draining provision in the project area
.....
.....
Nearness to water body
.....
.....
Access road to project site
.....
.....
Other major utilities proposed or existing on site (eg. sewerage, etc)
.....
.....

4. **ENVIRONMENTAL IMPACTS**

Potential environmental impacts of proposed undertaking (both constructional and operational phases)

CONSTRUCTION PHASE	OPERATION PHASE

.....
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5. CONCERNS

Views of immediate adjourning neighbours and relevant stakeholders (if applicable provide evidence of consultation to facilitate identification of key issues/impacts)

INDICATE PERSONS / INSTITUTIONS CONSULTED AND THEIR VIEWS AND CONCERNS IN THE TABLE BELOW				
No	Name	Contact Tel/ Email	Location In Relation To (North South East West) Project Site	Concerns / Issues
1				
2				
3				
4				
5				

6. MANAGEMENT OF IMPACTS AND ENVIRONMENTAL ENHANCEMENT MEASURES

CONSTRUCTION PHASE	OPERATION PHASE

.....
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7 ATTACHMENTS

☐ Tick appropriate box indicating that the following required documents have been attached.

☐ Authentic site plan signed by a licensed surveyor and certified by Survey Separtment

☐ Copy of certificate of incorporation for a corporate body/ Statutory declaration of partnership agreement in the case of a partnership/Copy of proof of proprietorship for an unlimited Company

☐ Block plan of the site

☐ Photographs of the site

☐ Zoning letter from Town and Country Planning Department (TCPD)

8. DECLARATION

I, ...hereby declare that the information provided on this form is true to the best of my knowledge and shall provide any additional information that shall come to my notice in the course of processing the application.

....

Signature Date

Use additional sheets where the spaces provided are inadequate.

Hazardous, Electronic and Other Wastes (Classification), Control and Management Regulations, 2016

Form B

(Regulations 19 (10), (11), (12) and (13)

Hazardous Wastes Declaration Form

DECLARATION NUMBER: xxxx

1. Name and Address of Waste Generator	
2. Designation and Composition of Waste per weight or Volume (See guide below[1])	
3. Total Quantity in Kilogrammes/ Tonnes , Liters or Cubic metres (please specify) 3b. Number of Containers	
4. Physical Characteristics of Waste[2]	
5. Means of Transport	
6. Name Address and Registration Number of Transporter 6b Signature or seal of Transporter	
7. Packaging Type[3]: Special Handling Requirement: Yes ☐ No ☐ Please Specify:	
8. Contact of Disposal Facility	
9. Waste Accepted by Disposal Facility: Yes ☐ No ☐ Please give reasons	

I certify that the containers are accurately labeled as to the content declared
Signed: Date:

Hazardous, Electronic and Other Wastes (Classification), Control and Management Regulations, 2016

Form C

(Regulations 21 (3) (a) and 22 (3) (a))

Notification Form for Hazardous Wastes or Other Wastes

TRANSBOUNDARY MOVEMENT OF WASTE-NOTIFICATION BASEL CONVENTION

1. **Exporter (name, address):** Contact person: Tel: Fax/ Telex Reason for export:	3. **Notification concerning** A (i) Single Movement ☐ (ii) General notification (multiple movements) ☐ B (i) Disposal (no recovery) ☐ (ii) Recovery operation ☐ C Pre-authorised Facility Registration Number (if Yes) Yes ☐ No ☐ (To be completed for a recovery facility located in an OECD State)
2. Importer (name, address): Contact person: Tel: Fax/ Telex:	4. **Total intended number of shipments** 5. Estimated quantity (3) _____ kg litres 6. Intended date(s) or period of time for shipment(s)
7. Intended carrier(s)* (name, address) (2): Contact person: Tel: Fax/ Telex:	8. Disposer (name, address) Contact person: Tel: Actual site of disposal: Fax/ Telex:
10. Waste generator(s) (name, address) (2): Contact person: Tel: Fax/ Telex: Site of generation & process:	9. Method(s) of disposal: D code / R code (4): Technology employed (Attach details if necessary): 11. Mode(s) of transport (4): 12. Packaging Type(s) (4):
13. (i) Designation and chemical composition of the waste	(ii) Special handling requirements 14. Physical characteristics
15. **Waste identification code**	17. Y-number (4):

in country of export:	IWI C:	
in country of import:	EW C:	18. H-number (4):
Customs Code H.S:	Other (specify):	
16. **OECD classification (2):** **amber** ☐ **red** ☐ and number: **other** ☐ **(attach details)**	19. (i) UN identification: UN Shipping name:	(ii) UN class (4):

20. **Concerned states, code number of Component authorities, and specific points of entry and exit:**

State of export	States of transit		State of Import

21. Customs offices of entry and/or departure (European Community): **Entry:** **Departure:**	23. **Exporter's/Generators declaration:** I certify that the above information is complete and correct to my best knowledge. I also certify that legally-enforceable written contractual obligations have been entered into and that any applicable insurance or other financial guarantees are or shall be in force covering the transboundary movement. Signature: Name:
22. Number of annexes **attached**	

For use by competent authorities

24. **To be completed by** - Import (EEC, OECD) Notification received on: - **transit (Basel)** Acknowledgment sent on Name of competent authority, stamp and/or signature	25. **Consent to the movement provided by the competent authority of (country):** Consent given on: Specific Consent expires on: ☐ Yes see block 26 overleaf/annex ☐ No Name of competent authority, stamp and/or signature:

(2) Enter X in appropriate box (1) Attach a list if more than one multiple shipment (3) Attach a list if

(4) See codes on the reverse

Hazardous, Electronic and Other Wastes (Classification), Control and Management Regulations, 2016

Form D

(Regulation 21 (3) (c))

Movement Document for Hazardous Wastes

Movement document for transboundary movements/shipments of waste

1. Corresponding to notification No:	**2. Serial/total number of shipments:**
3. Exporter - notifier Registration No: Name: Address: Contact person: Tel: Fax: E-mail:	**4. Importer - consignee** Registration No: Name: Address: Contact person: Tel: Fax: E-mail:
5. Actual quantity: Tonnes (Mg): m^3:	**6. Actual date of shipment:**
7. Packaging Type(s) *(1)*: Number of packages: **Special handling requirements:** *(2)* Yes: ☐ No: ☐	
8.(a) 1st Carrier *(3)*: Registration No: Name: Address: Tel: Fax: E-mail:	**8.(b) 2nd Carrier:** Registration No: Name: Address: Tel: Fax: E-mail:	**8.(c) Last Carrier:** Registration No: Name: Address: Tel: Fax: E-mail:
------- *To be completed by carrier's representative* ------- *More than 3 carriers (2)* ☐		
Means of transport *(1)*: Date of transfer: Signature:	Means of transport *(1)*: Date of transfer: Signature:	Means of transport *(1)*: Date of transfer: Signature:
9. Waste generator(s) - producer(s) *(4;5;6)*: Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Site of generation *(2)*:	**12. Designation and composition of the waste** *(2)*: **13.Physical characteristics** *(1)*: **14.Waste identification** *(fill in relevant codes)* (i) Basel Annex VIII (or IX if applicable): (ii) OECD code (if different from (i)): (iii) EC list of wastes: (iv) National code in country of export: (v) National code in country of import: (vi) Other (specify): (vii) Y-code: (viii) H-code *(1)*: (ix) UN class *(1)*: (x) UN Number: (xi) UN Shipping name: (xii) Customs code(s) (HS):	
10. Disposal facility ☐ **or recovery facility** ☐ Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Actual site of disposal/recovery *(2)*		
11. Disposal/recovery operation(s) D-code / R-code *(1)*:		

15. Exporter's - notifier's / generator's - producer's *(4)* **declaration:**

I certify that the above information is complete and correct to **the** best **of my** knowledge. I also certify that legally enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantee is in force covering the transboundary movement and that all necessary consents have been received from the competent authorities of the countries concerned.

Name: Date: Signature:

16. For use by any person involved in the transboundary movement in case additional information is required

17. Shipment received by importer - consignee (if not facility): Date: Name: Signature:

TO BE COMPLETED BY DISPOSAL / RECOVERY FACILITY

18. Shipment received at disposal facility ☐ **or recovery facility** ☐ Date of reception: Accepted: ☐ Rejected*: ☐ Quantity received: Tonnes (Mg): m^3: **immediately contact*		**19. I certify that the disposal/recovery of the waste described above has been completed.** Name:

Approximate date of disposal/recovery: competent authorities Disposal/recovery operation (1): Name: Date: Signature:	Date: Signature and stamp:

(1) See list of abbreviations and codes on the next page
(2) Attach details if necessary
(3) If more than 3 carriers, attach information as required in blocks 8 (a,b,c).
(4) Required by the Basel Convention
(5) Attach list if more than one
(6) If required by national legislation

FOR USE BY CUSTOMS OFFICES (if required by national legislation)	
20. Country of export - dispatch or customs office of exit The waste described in this movement document left the country on: Signature: Stamp:	**21. Country of import - destination or customs office of entry** The waste described in this movement document entered the country on: Signature: Stamp:

22. Stamps of customs offices of transit countries

Name of country: Entry:	Exit:	Name of country: Entry:	Exit:
Name of country: Entry:	Exit:	Name of country: Entry:	Exit:

List of Abbreviations and Codes Used in the Movement Document

DISPOSAL OPERATIONS (block 11)

- D1 Deposit into or onto land, (e.g., landfill, etc.)
- D2 Land treatment, (e.g. biodegradation of liquid or sludgy discards in soils, etc.)
- D3 Deep injection, (e.g., injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.)
- D4 Surface impoundment, (e.g., placement of liquid or sludge discards into pits, ponds or lagoons, etc.)
- D5 Specially engineered landfill, (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment), etc.
- D6 Release into a water body except seas/oceans
- D7 Release into seas/oceans including sea-bed insertion
- D8 Biological treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this list
- D9 Physico-chemical treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this list (e.g., evaporation, drying, calcination, etc.)
- D10 Incineration on land
- D11 Incineration at sea
- D12 Permanent storage, (e.g., emplacement of containers in a mine, etc.)
- D13 Blending or mixing prior to submission to any of the operations in this list
- D14 Repackaging prior to submission to any of the operations in this list
- D15 Storage pending any of the operations in this list

RECOVERY OPERATIONS (block 11)

- R1 Use as a fuel (other than in direct incineration) or other means to generate energy (Basel/OECD) - Use principally as a fuel or other means to generate energy (EU)
- R2 Solvent reclamation/regeneration
- R3 Recycling/reclamation of organic substances which are not used as solvents
- R4 Recycling/reclamation of metals and metal compounds
- R5 Recycling/reclamation of other inorganic materials
- R6 Regeneration of acids or bases
- R7 Recovery of components used for pollution abatement
- R8 Recovery of components from catalysts
- R9 Used oil re-refining or other reuses of previously used oil
- R10 Land treatment resulting in benefit to agriculture or ecological improvement
- R11 Uses of residual materials obtained from any of the operations numbered R1-R10
- R12 Exchange of wastes for submission to any of the operations numbered R1-R11
- R13 Accumulation of material intended for any operation in this list

PACKAGING TYPES (block 7)

1. Drum
2. Wooden barrel
3. Jerrican
4. Box
5. Bag
6. Composite packaging
7. Pressure receptacle
8. Bulk
9. Other (specify)

MEANS OF TRANSPORT (block 8)

R = Road
A = Air
T = Train/rail
W = Inland waterways
S = Sea

PHYSICAL CHARACTERISTICS (block 13)

1. Powdery / powder
2. Solid
3. Viscous / paste
4. Sludgy
5. Liquid
6. Gaseous
7. Other (specify)

H-CODE AND UN CLASS (block 14)

UN class	H-code	Characteristics
1	H1	Explosive
3	H3	Flammable liquids
4.1	H4.1	Flammable solids
4.2	H4.2	Substances or wastes liable to spontaneous combustion
4.3	H4.3	Substances or wastes which, in contact with water, emit flammable gases
5.1	H5.1	Oxidizing
5.2	H5.2	Organic peroxides
6.1	H6.1	Poisonous (acute)
6.2	H6.2	Infectious substances
8	H8	Corrosives
9	H10	Liberation of toxic gases in contact with air or water
9	H11	Toxic (delayed or chronic)
9	H12	Ecoloxic
9	H13	Capable, by any means, after disposal of yielding another material, e. g., leachate, which possesses any of the characteristics listed above

Hazardous, Electronic and Other Wastes (Classification), Control and Management Regulations, 2016

Form E

(Regulation 25 (2))

APPLICATION FOR ENVIRONMENTAL PERMIT FOR HEALTHCARE WASTE

(To be completed in duplicate by proposed storage, transporters and treatment facility operators)

FEE GH₵ **FORM HCW**

Applicant: _____

Address for correspondence

Contact person _____ Position _____
Phone No _____
Email _____

Environmental Protection Agency (Head Office)
P.O. Box M 326
Accra, Ghana
Tel: 6646718, 664223, 662465
Email: info@epa.gov.gh
Website: www.epa.gov.gh

This form shall be submitted to the relevant EPA Head office, Regional, District and Zonal Offices.

1. PROPOSED ACTIVITY

Title of activity (general classification of undertaking)

.....description of proposed activity including unit processes (flow diagram), raw materials, list of chemicals (source, types and quantities), storage facilities, waste by-products (soil, liquid and gaseous)

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Scope of proposal (size of labor force, equipment and machinery, installed production capacity, product type, area covered by facility/proposal, market)

.....
.....
.....
.....
.....
.....

2. PROJECT SITE

(Location attach a site plan/map)
Plot/House No.....Street/Area Name.....
Town.....District.....Region.....
Major Landmarks (if any).....
Current Zoning.....
Geographical Coordinates.....

Distance to the nearest residential and/or other facilities (in meters) provide coordinates (where possible)
.....
.....
Adjacent land uses (existing and proposed) – (Describe in details and attach pictures)
.....
.....
.....
Site description (immediate activities and adjacent land uses should be described)
.....
.....
.....
.....
.....
.....

3. INFRASTRUCTURE AND UTILITIES

Structures (building and other facilities proposed or existing on site)
.....
.....
Access to water (source, quantity)
.....
.....
Access to power (type, source and quantity)
.....
.....
Draining provision in the project area
.....
.....
Nearness to water body
.....
.....
Access road to project site
.....
.....
Other major utilities proposed or existing on site (eg. sewerage, etc)
.....
.....

4. ENVIRONMENTAL IMPACTS

Potential environmental impacts of proposed undertaking (both constructional and operational phases)

CONSTRUCTION PHASE	OPERATION PHASE
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

5. CONCERNS

Views of immediate adjourning neighbors and relevant stakeholders (if applicable provide evidence of consultation to facilitate identification of key issues/impacts)

INDICATE PERSONS / INSTITUTIONS CONSULTED AND THEIR VIEWS AND CONCERNS IN THE TABLE BELOW

No	Name	Contact Tel/ Email	Location In Relation To (North South East West) Project Site	Concerns / Issues
1				
2				
3				
4				
5				

6. MANAGEMENT OF IMPACTS AND ENVIRONMENTAL ENHANCEMENT MEASURES

CONSTRUCTION PHASE	OPERATION PHASE
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

7. ATTACHMENTS

Tick appropriate box indicating that the following required documents have been attached.

☐ Authentic site plan (signed by a licensed surveyor and certified by Survey Department)

☐ Copy of certificate of incorporation for a corporate body/ Statutory declaration of partnership agreement in the case of a partnership/Copy of proof of proprietorship for an unlimited Company

☐ Block plan of the site

☐ Photographs of the site

☐ Zoning letter from Land Use and Spatial Planning Authority

9. DECLARATON

I,.....hereby declare that the information provided on this form is true to the best of my knowledge and shall provide any additional information that shall come to my notice in the course of Processing the application.

.....
Signature

.....
Date

Use additional sheets where the spaces provided are inadequate.

Hazardous, Electronic and Other Wastes (Classification), Control and Management Regulations, 2016

Form F

(Regulations 45 (1); 47 (f); 48 (2) (b); 49 (h); 50 (1) (f); 61 (1) (k); 62 (1) (f); 64 (1) (f) and 65 (1) (e))

FORM FOR FILING ANNUAL RETURNS

[To be submitted by producer or manufacturer or refurbisher or dismantler or recycler by 15th day of March of the following year to which that return relates].

Quantity in Metric Tonnes (MT) and numbers

1	Name and address of the producer or Manufacturer or refurbisher or dismantler or recycler			
2	Name of the authorised person and complete address with telephone and fax numbers and e-mail address			
3	Total quantity of e-waste collected or channelized to recyclers or dismantlers for processing during the year for each category of electrical and electronic equipment listed in the Schedule .... (Attach list) by PRODUCERS			
	Details of the above	TYPE	QUANTITY	NO
3(A)*	BULK CONSUMERS: Quantity of e-waste			
3(B)*	REFURBISHERS: Quantity of e-waste:			
3(C)*	DISMANTLERS:			
	i Quantity of e-waste processed (Code wise);			
	ii. Details of materials or components recovered and sold;			
	iii. Quantity of e-waste sent to recycler;			
	iv. Residual quantity of e-waste sent to Treatment, Storage and Disposal Facility.			
3(D)*	RECYCLERS:			
	i. Quantity of e-waste processed (Code wise);			
	ii. Details of materials recovered and sold in the market;			
	iii. Details of residue sent to Treatment, Storage and Disposal Facility.			
4	Name and full address of the destination with respect to 3(A)-3(D) above			
5	Type and quantity of materials segregated or recovered from e-waste of different codes as applicable to 3(A)-3(D)			
6				

Enclose the list of recyclers to whom e-waste have been sent for recycling.

Place and Date

Signature of the authorised person

Note:-

(1) *Strike off whichever is not applicable

(2) Provide any other information as stipulated in the conditions to the authoriser

(3) Incase filing on behalf of multiple regional offices, Bulk Consumers and Producers need to add extra rows to1&3(A) with respect to each office.

Form G

(Regulation 56 (3))

Incident Report Form

Use this form to report accidents, injuries, medical situations.

INFORMATION ABOUT PERSON INVOLVED IN THE INCIDENT			
Full Name			
Home Address			
Phone Numbers	Home	Cell	Work

INFORMATION ABOUT THE INCIDENT		
Date of Incident	Time	Police Notified ☐Yes ☐No
Location of Incident		
Description of Incident (what happened, how it happened, factors leading to the event, etc.)Be as specific as possible (attach additional sheets if necessary)		
Were there any witnesses to the incident? ☐Yes ☐No If yes, attach separate sheet with names, addresses, and phone numbers.		
Was the individual injured? If so, describe the injury (laceration, sprain, etc.), the part of body injured, and any other information known about the resulting injury (ies).		
Was medical treatment provided? ☐Yes ☐No ☐Refused If yes, where was treatment provided: ☐on site ☐Urgent Care ☐Emergency Room ☐Other		

REPORTER INFORMATION
Individual Submitting Report (print name)
Signature
Date Report Completed

FOR OFFICE USE ONLY

Report Received by _____ Date_____

Document any follow-up action taken after receipt of the incident report.

Date	Action Taken	By Whom

EIGHTH SCHEDULE

(Regulations 44 (1) (a), (b); 45; 46; 48 (1); 54 (1); 58 (2) (a), (b) and (c))

ELECTRICAL AND ELECTRONIC EQUIPMENT LIST

List of products which shall be taken into account for the purpose of these Regulations include

1. **Large household appliances**
   - *(a)* Large cooling appliances
   - *(b)* Refrigerators
   - *(c)* Freezers
   - *(d)* Other large appliances used for refrigeration, conservation and storage of food
   - *(e)* Washing machines
   - *(f)* Clothes dryers
   - *(g)* Dishwashing machines
   - *(h)* Electrical cooking equipment
   - *(i)* Electric stoves
   - *(j)* Electric hotplates
   - *(k)* Microwaves
   - *(l)* Other large appliances used for cooking and other processing of food
   - *(m)* Electric heating appliances
   - *(n)* Electric radiators
   - *(o)* Other large appliances for heating rooms, beds, seating furniture
   - *(p)* Electric fans
   - *(q)* Air conditioner appliances
   - *(r)* Other fanning, exhaust ventilation and conditioning equipment

2. **Small household appliances**
   - *(a)* Vacuum cleaners
   - *(b)* Carpet sweepers
   - *(c)* Other electrical appliances for cleaning
   - *(d)* Appliances used for sewing, knitting, weaving and other processing appliances for textiles

(e) Ironing, mangling and other clothing appliances
(f) Toasters
(g) Fryers
(h) Grinders, coffee machines and equipment for opening or sealing containers or packages
(i) Electric knives
(j) Appliances for barbering, hair drying, tooth brushing, shaving, massage and other body care
(k) Clocks, watches and equipment for the purpose of measuring, indicating or registering time
(l) Scales

3. IT and telecommunications equipment

(a) Centralised data processing:
(i) Mainframes
(ii) Mini computers
(iii)Servers
(b) Printer units
(c) Personal computing:
(i) Personal computers (CPU, mouse, screen and keyboard included)
(ii) Laptop computers (CPU, mouse, screen and keyboard included)
(iii) Notebook computers
(iv) Notepad computers
(d) Copying equipment
(e) Electrical and electronic typewriters
(f) Pocket and desk calculators and other products and equipment for the collection, storage, processing, presentation or communication of information by electronic means
(g) User terminals and systems
(h) Facsimile
(i) Telex
(j) Telephones
(k) Pay telephones

(l) Cordless telephones
(m) Cellular telephones
(n) Answering systems and other products
(o) Broadcasting equipment for transmitting sound, images or other information by telecommunications
(p) And other products or equipment for the purpose of recording or reproducing sound or images, including signals or other technologies for the distribution of sound and image than by telecommunications

4. Consumer equipment

(a) Radio sets
(b) Television sets
(c) Video cameras
(d) Video recorders
(e) Hi-fi recorders
(f) Audio amplifiers
(g) Musical instruments

5. Lighting equipment

(a) Luminaries for fluorescent lamps
(b) Straight fluorescent lamps
(c) Compact fluorescent lamps
(d) High intensity discharge lamps, including pressure sodium lamps and metal halide lamps
(e) Low pressure sodium lamps
(f) Other lighting or equipment for the purpose of spreading or controlling light

6. Electrical and electronic tools

(a) Drills
(b) Saws
(c) Sewing machines

(d) Equipment for turning, milling, sanding, grinding, sawing, cutting, shearing, drilling, making holes, punching, folding, bending or similar processing of wood, metal and other materials

(e) Tools for riveting, nailing or screwing or removing rivets, nails, screws or similar uses

(f) Tools for welding, soldering or similar use

(g) Equipment for spraying, spreading, dispersing or other treatment of liquid or gaseous substances by other means

(h) Tools for mowing or other gardening activities

7. Toys, leisure and sports equipment

(a) Electric trains or car racing sets

(b) Hand-held video game consoles

(c) Video games

(d) Computers for biking, diving, running, rowing, and other similar gadgets

(e) Sports equipment with electric or electronic components

(f) Coin slot machines

8. Medical devices (with the exception of all implanted and infected products)

(a) Radiotherapy equipment

(b) Cardiology

(c) Dialysis

(d) Pulmonary ventilators

(e) Nuclear medicine

(f) Laboratory equipment for in-vitro diagnosis

(g) Analysers

(h) Freezers

(i) Other appliances for detecting, preventing, monitoring, treating, alleviating illness, injury or disability

9. Monitoring and control instruments

(a) Smoke detector
(b) Heating regulators
(c) Thermostats
(d) Measuring, weighing or adjusting appliances for household or laboratory Equipment
(e) Other monitoring and control instruments used in industrial installations

10. Automatic dispensers

(a) Automatic dispensers for hot drinks
(b) Automatic dispensers for hot or cold bottles or cans
(c) Automatic dispensers for solid products
(d) Automatic dispensers for money

11. Batteries

12. Security and Military Equipment

13. Florescent tubes

HON. MAHAMA AYARIGA (M.P.)
Minister for Environment, Science, Technology and Innovation

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