STATUTORY INSTRUMENTS
SUPPLEMENT No 3 **1st February, 2019**

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S T A T U T O R Y I N S T R U M E N T S

2019 No. 3

THE PETROLEUM (WASTE MANAGEMENT) REGULATIONS, 2019.

ARRANGEMENT OF REGULATIONS

SCHEDULES.

S T A T U T O R Y I N S T R U M E N T S

2019 No. 3
The Petroleum (Waste Management) Regulations, 2019

(Under section 3(8) of the Petroleum (Exploration, Development and Production) Act, 2013 and section 3 (8) of the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013)

In Exercise of the powers conferred upon the National Environment Management Authority by section 3(8) of the Petroleum (Exploration, Development and Production) Act, 2013 and section 3(8) of the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013, these Regulations are made this 7th day of November, 2018.

Part I – Preliminary

1. Title.

These Regulations may be cited as the Petroleum (Waste Management) Regulations, 2019.

2. Application.

(1) These Regulations apply to a person involved in-

(a) the production, importation, exportation, transportation, storage, treatment or disposal of petroleum waste; and

(b) the construction and operation of petroleum waste management facilities.

(2) A person responsible for the production, importation, exportation, transportation, storage, treatment or disposal of petroleum waste or the construction or operation of facilities that manage petroleum waste shall, in addition, as applicable, comply with-

(a) the National Environment Act;

(b) the Petroleum (Exploration, Development and Production) Act, 2013;

(c) the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013;

(d) the National Environment (Waste Management) Regulations;

(e) the Occupational Safety and Health Act, 2006;

(f) the Petroleum (Exploration, Development and Production) (Health, Safety and Environment) Regulations, 2016;

(g) the Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016;

(h) environmental standards and best petroleum industry practices; and

(i) any other applicable law.

(3) For the avoidance of doubt, the licensee and the petroleum waste handler shall manage waste which is not classified and characterised as petroleum waste in accordance with the National Environment (Waste Management) Regulations:

3. Interpretation.

In these Regulations, unless the context otherwise requires-

"Authority" means the Petroleum Authority of Uganda established under section 9 of the Petroleum (Exploration, Development and Production) Act, 2013;

"authorised officer" means an officer of the National Environment Management Authority or any other person authorised to act on behalf of the National Environment Management Authority under the National Environment Act;

"best petroleum industry practices" means the use of what is accepted to be the best available practices that are generally accepted as good, safe, transparent and efficient in the management of petroleum waste and that can be applied globally under similar circumstances;

"currency point" has the value assigned to it in Schedule 1 to these Regulations;

"disposal" means any operation related to petroleum waste management which is not a recovery operation even

where the operation has as a secondary consequence the reclamation of substances or energy;

"environmental and social assessment" means a procedure that ensures that the environmental impacts, risks or other related concerns of a given project are taken into account in approving a project for implementation;

"environmental standards" means standards produced or adopted by the National Environment Management Authority in consultation with the Uganda National Bureau of Standards for use in Uganda;

"facility" means-

(a) any plant, structure, device or other associated installations or infrastructure including pipelines, valve stations, pump stations, compressor stations and equipment constructed, placed or used in order to carry out petroleum activities or midstream operations; and

(b) any vessel, vehicle or craft when stationary and used for drilling or support of ongoing petroleum activities or midstream operations or transportation or transmission of petroleum commodities or petroleum products;

"incineration" means thermal treatment of waste with or without recovery of the combustion heat generated including through oxidisation of carbon or materials containing carbon into carbon dioxide and water, as well as other thermal treatment processes such as pyrolysis, gasification or plasma processes when the substances resulting from this treatment are subsequently oxidized;

"landfill" means an engineered site for the disposal of petroleum waste onto or into land, lined with impervious plastic sheeting to prevent leakage or leaching of dangerous substances into soil or water;

"lead agency" means a ministry, department, agency, local government or public officer in which or in whom the functions of control or management of any segment of the environment is vested;

"licensee" means a person to whom a licence is granted under the Petroleum (Exploration, Development and Production) Act, 2013 or the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013;

"midstream operations" means planning, preparation, installation and execution of operations related to refining, conversion, transmission or storage of petroleum products, including cessation of operations and decommissioning of facilities under the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013;

"National Authority" means the National Environment Management Authority or an authority in another country designated to receive the notification of the transboundary movement of hazardous waste and information related to the hazardous waste and responding to the notification;

"petroleum activity" means planning, preparation, installation or execution of activities related to petroleum including reconnaissance, exploration, development, production, transportation, storage, and cessation of activities or decommissioning of facilities under the Petroleum (Exploration, Development and Production) Act, 2013;

"petroleum waste" includes any substance or object arising from petroleum activities or midstream operations or similar waste imported into Uganda, which is dumped, abandoned, discarded or disposed of or intended or required by law to be disposed of, including substances listed in Schedule 2 to these Regulations, but excludes general waste not contaminated by petroleum commodities or products;

"petroleum waste handler" means an entity contracted by the licensee and licensed by the National Environment Management Authority to import, export, transport, store, treat or dispose of petroleum waste in accordance with these Regulations;

"petroleum waste management" means the activities relating to import, export, collection, transportation, storage, treatment

and disposal of petroleum waste, including the management of waste at source and during decommissioning of waste management facilities;

"vessel" means motor vehicle, motor cycle, bicycle, ship, aircraft or other mode of transport;

"waste management facility" means any plant, site, structure and associated facilities or infrastructure used in the management of petroleum waste.

Part II - General Provisions Relating to Petroleum Waste Management

4. Compliance with environmental principles.

The licensee and the petroleum waste handler shall, in compliance with the environmental principles set out in the National Environment Act, apply measures in the management of petroleum waste –

(a) to prevent harm to human health and ensure safety of human beings;

(b) to prevent pollution, harm to biological diversity and contamination of the wider environment by petroleum waste;

(c) to use the best available technologies and best environmental practices; and

(d) to ensure resource efficiency-

(i) by the implementation of the waste management hierarchy and the control or minimization of the generation of waste to the greatest extent possible, arising from petroleum activities and midstream operations;

(ii) by promoting proper cyclical use of petroleum commodities and petroleum products as circulative resources; and

(iii) by ensuring proper disposal of circulative resources not put into cyclical use.

5. General responsibility of licensee.

(1) The licensee shall contract a separate entity as a petroleum waste handler to manage the transportation, storage, treatment or disposal of petroleum waste.

(2) The separate entity referred to in subregulation (1) shall not include any affiliate or subsidiary of the licensee.

(3) For the purpose of subregulation (2)-

(a) "affiliate" means any entity directly or indirectly effectively controlling, or effectively controlled by, or under direct or indirect effective common control with the licensee;

(b) "control", when used with respect to any specified entity, means the power to direct, administer and dictate policies of such entity (it being understood and agreed that it is not necessary to own directly or indirectly fifty percent (50%) or more of such entity's voting securities to have control over such entity, but ownership, direct or indirect, of fifty percent (50%) or more of such entity's voting securities shall automatically indicate control), the power to appoint, or prevent the appointment of half, or more than half, of the directors of the body corporate or the power to exercise, or control the exercise of, the right to cast votes in respect of not less than two fifths of the total number of votes in respect of issued equity shares in the body corporate; and

(c) the terms "controlling" and "controlled" have meanings corresponding to the foregoing;

(4) The licensee shall, before contracting the separate entity referred to in subregulation (1), ensure that the entity has undertaken an environmental and social assessment and obtained a certificate of approval in accordance with the National Environment Act.

(5) The entity contracted by the licensee under subregulation (1) shall not import, export, transport, store, treat or dispose petroleum waste without a licence granted by the National Environment Management Authority under these Regulations.

(6) The licensee shall ensure that the Petroleum (Exploration, Development and Production) Act, 2013, the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013, the National Environment Act, these Regulations and any other applicable laws are complied with.

(7) The licensee shall ensure that a person performing work for the licensee, either personally, through employees, contractors or subcontractors, complies with subregulation (6).

(8) For the avoidance of doubt, the licensee shall remain responsible for the petroleum waste managed by the petroleum waste handler, including ensuring that-

(a) a contract with a petroleum waste handler contains appropriate provisions on health, safety and environmental protection;

(b) petroleum waste transferred is packaged and labelled in accordance with regulation 26;

(c) the vehicle or vessel used for transportation of petroleum waste is technically fit for the type of petroleum waste to be transported, including by-

(i) carriage capacity of the vessel;

(ii) adequate covering of the vessel to prevent littering of petroleum waste;

(i) labelling of the vessel to indicate the type of petroleum waste being transported; and

(ii) ensuring that the vessel, including its cargo used for the transportation of petroleum waste, is insured for the benefit of third parties affected by accidents or loss of cargo in accordance with the Insurance Act;

(d) transportation notification and documentation is completed in accordance with procedures prescribe under these Regulations or issued by the National Environment Management Authority; and

(e) petroleum waste consignments reach the specified final disposal site and are managed in accordance with the National Environment Act, these Regulations, environmental standards, any other applicable law and best petroleum industry practices.

(9) For the avoidance of doubt, the licensee shall remain liable for future pollution costs resulting from the petroleum waste managed under these Regulations.

6. Responsibility for petroleum waste management.

(1) The licensee and petroleum waste handler have a duty of care and shall take measures-

(a) to ensure that petroleum waste is managed appropriately and securely in accordance with the National Environment Act, these Regulations and any other applicable law, environmental standards and conditions in a licence;

(b) to ensure that any leakage or spillage of petroleum waste is quickly and reliably detected and handled; and

(c) ensure that spillages which may cause pollution are notified to the National Environment Management Authority, the Authority and any other relevant government ministry, department or agency in accordance with regulation 50.

(2) The petroleum waste handler shall, within a period of 30 days of grant of a licence under regulation 16, provide a financial security required under regulation 7.

(3) The National Environment Management Authority, the Authority, a licensee and a waste handler shall create awareness and promote change in attitudes and practices regarding the management of petroleum waste.

7. Financial security for petroleum waste handling.

(1) The petroleum waste handler shall provide a financial security in the form of an on-demand bank guarantee in the format set out in Schedule 3 to these Regulations, insurance, performance bonds, escrow agreements or any other form of security as the National Environment Management Authority may determine.

(2) The purpose of the financial security is to guarantee environmental remediation of a petroleum waste management facility or vessel where –

(a) there is need for immediate response action to an emergency occasioned by the waste management facility, vessel or activity of the petroleum waste handler;

(b) decommissioning, restoration and after-care procedures of the petroleum waste management facility has not been carried out to the satisfaction of the National Environment Management Authority; or

(c) the waste handler is declared insolvent.

(3) In determining the financial security to be provided by the licensee under subregulation (1), the National Environment Management Authority shall take into consideration-

(a) the type and quantity of petroleum waste produced by the licensee;

(b) the amount of waste handled by the petroleum waste handler on behalf of the licensee;

(c) the potential cost of clean-up operations for the petroleum waste that may not be handled by the petroleum waste handler, given the quantities of petroleum waste permitted to be stored by the petroleum waste handler or transported for safe handling elsewhere; and

(d) the risks associated with the petroleum waste management activity.

(4) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

8. Petroleum waste management hierarchy.

(1) The licensee and the petroleum waste handler shall manage waste in accordance with these Regulations through the application of the following hierarchical waste management practices-

(a) prevention;

(b) reduction and recovery at source;

(c) reuse;

(d) recycling;

(e) other recovery;

(f) treatment; and

(g) responsible disposal.

(2) When applying the waste management hierarchy referred to in subregulation (1), the licensee and petroleum waste handler shall apply the options that deliver the least negative impact to the environment and human health, taking into consideration best available technologies and best environmental practices.

9. Intractable petroleum waste.

The licensee and the petroleum waste handler shall, where the production of intractable petroleum waste is not preventable under regulation 8(1)(a) and where there are no recycling, treatment or disposal options within Uganda, ensure that the waste is exported for proper disposal in accordance with the National Environment Act, these Regulations and the National Environment (Waste Management) Regulations.

10. Use of good environmental management practices.

(1) The licensee and the petroleum waste handler shall –

(a) ensure that the different types of petroleum waste are segregated at source and at the petroleum waste management facility by way of waste stream and classification, to facilitate their appropriate handling and traceability;

(b) ensure that the classification of waste and the further handling and treatment of petroleum waste is not distorted by mixing or dilution of waste; and

(c) continuously improve the petroleum waste management practices as technology advances.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

11. Waste management system.

(1) The licensee and the petroleum waste handler shall develop and implement a waste management system designed to ensure compliance with the requirements of these Regulations, the Petroleum (Exploration, Development and Production) Act, 2013 and the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013, as applicable, the National Environment Act, any other applicable laws, environmental standards and best petroleum industry practices.

(2) The waste management system referred to under subregulation (1) shall-

(a) identify measures for compliance with the petroleum waste management hierarchy specified in regulation 8;

(b) document operating procedures for petroleum waste handling and the equipment available for petroleum waste management;

(c) take into account health, safety, social and environmental safeguards;

(d) include waste management plans which shall consider the choice of petroleum waste management options and their impacts on human health or the environment, including the ecological sensitive areas;

(e) ensure traceability of petroleum waste and petroleum waste streams from the point of waste production to its final disposal;

(f) include and implement a programme at the waste management facility for accepting petroleum waste, including routine and random inspections of incoming loads, visual inspection of all petroleum waste as it is delivered, inspection of suspicious loads and records of inspections;

(g) include a toxics release inventory of the chemicals used in the production process;

(h) include a provision or training of personnel; and

(i) include procedures for notification of relevant authorities.

(3) The waste management plans referred to in subregulation (2)(d) shall –

(a) describe the geographical area and specific activities addressed;

(b) identify the petroleum waste streams and categories produced or handled;

(c) evaluate the petroleum waste management options;

(d) explore petroleum waste minimization strategies, taking into consideration the petroleum waste management hierarchy in accordance with these Regulations; and

(e) select environmentally and socially suitable petroleum waste management practices in accordance with a licence issued under these Regulations.

(4) The licensee and petroleum waste handler shall ensure that the personnel managing the petroleum waste are qualified, trained and comply with the waste management system and waste management plans referred to in subregulation (2).

(5) The waste management system and waste management plans shall be documented, implemented, regularly updated and made available to the National Environment Management Authority and other relevant lead agencies on request.

(6) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding two thousand currency points or imprisonment not exceeding four years or both.

12. Petroleum waste streams.

(1) The licensee and the petroleum waste handler shall identify all petroleum waste streams with respect to volumes and any significant risks that they may pose to human health and the environment.

(2) The waste streams identified under subregulation (1) shall be quantified, characterized and documented in order to develop the best petroleum waste management options.

(3) The licensee and the petroleum waste handler shall continuously monitor and evaluate the processes that generate petroleum waste streams from source through to recovery, recycling and disposal to ensure compliance with these Regulations.

Part III- Licence for Petroleum Waste Management

13. Application for licence to manage petroleum waste.

(1) A person or entity shall not manage petroleum waste without a licence issued by the National Environment Management Authority under these Regulations.

(2) A person or entity contracted by the licensee under section 3(3) of the Petroleum (Exploration, Development and Production) Act, 2013 or section 3(3) of the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013 to manage petroleum waste shall apply to the National Environment Management Authority for a licence under subregulation (1).

(3) An application for a licence to manage petroleum waste shall be made to the National Environment Management Authority in the form set out in Schedule 4 to these Regulations, and shall be accompanied by-

(a) a copy of a certificate of approval of environmental and social impact assessment granted for the activity in accordance with the National Environment Act; and
(b) proof of payment of the fee prescribed in Schedule 5 to these Regulations.

(4) An application under this regulation shall-
(a) contain general provisions regarding-
(i) the legal status of the applicant;
(ii) a description of the technical competence and experience of the applicant including the personnel; and
(iii) financial capacity of the applicant;

(b) contain, in respect to transportation-
(i) the nature and type of vessel and equipment to be used;
(ii) proof of safety checks of the transportation vehicles for road worthiness and suitability;
(iii) carriage capacity of the vessel;
(iv) quantity of petroleum waste to be transported per vessel;
(v) collection schedule for the transportation of the petroleum waste; and
(vi) site or plant to which the petroleum waste is to be transported.

(c) contain, in respect to storage-
(i) proposed location of the storage facility;
(ii) specifications regarding layout, design and construction of the facility;
(iii) source, type and quantity of petroleum waste to be stored;
(iv) type and labels of containers;
(v) proposed safety measures at the facility;
(vi) measures for the containment and treatment of leakage and leachate, if applicable; and
(vii) preliminary plan for decommissioning.

(d) contain, in respect to treatment and disposal-

(i) proposed location of the treatment or disposal site;

(ii) approval of physical planning by the relevant lead agency;

(iii) specifications regarding the layout, design and construction of the site;

(iv) type and quantity of petroleum waste to be treated or disposed of;

(v) type of treatment or disposal technique to be used;

(vi) estimated life-span of the site; and

(vii) measures for the containment and treatment of leakage and leachate; and

(viii) preliminary plan for decommissioning.

14. Consultations.

(1) The National Environment Management Authority shall, before making a decision on an application under regulation 13, consult the Authority.

(2) The National Environment Management Authority may consult any other relevant lead agency before making a decision on the application for a licence to manage petroleum waste.

(3) The Authority or a lead agency consulted under subregulations (1) and (2) shall review the application and submit its comments and recommendations on the application within twenty one days of receipt of the application.

15. Publication of notice of intention to issue licence.

(1) The National Environment Management Authority shall, at the cost of the applicant, publish its intention to issue a licence to manage petroleum waste in a newspaper of national circulation at least fifteen days before the issuance of the licence.

(2) The notice under subregulation (1) shall contain-

(a) the name and address of the applicant to be granted a licence;

(b) the proposed site or activity, where appropriate;
(c) requirement for the public to make comments within the period specified in the notice; and
(d) any other information the National Environment Management Authority deems necessary.

16. Processing of application and grant of licence.
(1) The National Environment Management Authority shall, in processing an application under this Part, take into account comments and recommendations received from the Authority or lead agency under regulation 14, and comments received from the public under regulation 15.

(2) The National Environment Management Authority may, before issuing a licence under subregulation (1)-

(a) conduct inspections as are necessary to enable it make an informed decision regarding-
  (i) the adequacy of the applicant's technical capacity to manage the petroleum waste;
  (ii) the availability of adequate and appropriate facilities and equipment to transport, store, treat or dispose of petroleum waste for which the application is made; and
  (iii) measures for the protection of human health and the environment;

(b) verify that the applicant has adequate financial capacity and has provided the requisite financial security referred to in regulation 7; and

(c) verify that the applicant meets any other relevant requirements of these Regulations, the Petroleum (Exploration, Development and Production) Act, 2013, the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013 and the National Environment Act.

(3) The National Environment Management Authority shall inform the Authority within seven days prior to the grant of the licence.

(4) An application for a licence to manage petroleum waste shall be processed expeditiously but, in any case, not later than ninety days from the date of receipt of the complete application.

(5) The National Environment Management Authority may, after being satisfied that the applicant meets the requirements of this regulation, grant a licence to manage petroleum waste.

17. Conditions in licence.

(1) The National Environment Management Authority may, in granting a licence under regulation 16 (5), impose conditions in a licence, including requirements relating to-

(a) compliance with the certificate of approval of environmental and social impact assessment;
(b) the fitness for purpose of facility or vessel;
(c) the qualifications and experience of the personnel;
(d) the handling, transportation, storage, treatment or disposal of the petroleum waste;
(e) the need to obtain a financial security in accordance with regulation 7(1);
(f) the requirement for inspection or clearance by the National Environment Management Authority or relevant lead agency of each stage or phase of the construction of the petroleum waste treatment or disposal facility before commencement of the next phase of construction;
(g) pollution abatement, risk reduction and environmental standards, including control of air emissions, noise and vibration, and effluent;
(h) decommissioning, restoration and after-care of the petroleum waste management facility;
(i) the total amount of petroleum waste permitted to be managed at any time;

(j) area specific measures;
(k) additional measures for the protection of human health and the environment; and
(l) any other measure as the National Environment Management Authority may deem necessary.

(2) A licence granted under this regulation shall not be transferable.

(3) The National Environment Management Authority may, where it deems it necessary to protect public health or the environment, vary the conditions of the licence.

18. Duration of licence.
(1) A licence for the transportation of petroleum waste shall be valid for a period of one year.

(2) A licence for the storage, treatment or disposal of petroleum waste shall be valid for a period of three years.

19. Suspension or revocation of licence.
(1) The National Environment Management Authority may suspend or revoke a licence issued under regulation 16(5) where–
(a) information or data given by the applicant in the application or during consultations was false, substantially incorrect or intended to mislead;
(b) information relating to the conduct of the applicant which could have precluded the approval of the application if it had been made available to the National Environment Management Authority, is brought to the attention of the National Environment Management Authority;
(c) there is non-compliance with these Regulations or the conditions set out in the licence;
(d) it is necessary to protect human health or to prevent harm or further harm to the environment, due to a situation that was not foreseen during the process for grant of the licence;
(e) there is a substantial change or modification of the petroleum

waste management activity for which the licence was granted, which may lead to adverse environmental impacts or endanger human health or safety; or

(f) there is a substantial undesirable effect on human health or the environment not contemplated during the approval of the application for grant of the licence.

(2) Where the National Environment Management Authority intends to suspend or revoke a licence, it shall-

(a) notify the Authority, the petroleum waste handler and the licensee contracting the petroleum waste handler of such intention within fourteen days before the decision; and

(b) inform the petroleum waste handler of his or her right to show cause why the licence should not be suspended or revoked.

(3) A petroleum waste handler given notice under subregulation (2) may give written response to the National Environment Management Authority within seven days from the date of receipt of the notice, stating reasons why the licence should not be suspended or revoked.

(4) The National Environment Management Authority may, after the expiration of the fourteen days referred to in subregulation (2), proceed to suspend or revoke the licence where-

(a) it is not satisfied with the reasons given by the petroleum waste handler; or

(b) it has not received a response from the petroleum waste handler.

(5) Notwithstanding subregulation (4), the National Environment Management Authority may, where it needs to protect human health or the environment, suspend a licence and stop operations immediately without prior notice.

(6) Where a licence is suspended or revoked under subregulation (5), the petroleum waste handler shall stop any further operations and undertake necessary remediation measures in a manner determined by National Environment Management Authority.

(7) Where a licence has been suspended and a petroleum waste handler has undertaken remediation measures under subregulation (6) to the satisfaction of the National Environment Management Authority, the waste handler may apply to the National Environment Management Authority for reconsideration.

20. Renewal of licence.

(1) A person granted a licence under these Regulations may apply to the National Environment Management Authority for renewal of the licence within sixty days before the expiration of the licence.

(2) An application under subregulation (1) shall contain-

(a) a copy of the current licence;
(b) evidence of compliance with the conditions of a licence to be renewed, including where applicable, the most recent environmental compliance audit report or self-monitoring reports;
(c) a copy of the most recent annual report;
(d) a copy of the contract with the licensee;
(e) a confirmation of the financial security;
(f) proof of payment of the fees prescribed in Schedule 5 to these Regulations; and
(g) any other information that may be required by the National Environment Management Authority.

(3) The National Environment Management Authority shall, before renewing a licence under this regulation, notify the Authority within twenty one days prior to the proposed renewal.

(4) The National Environment Management Authority shall process the application for renewal of a licence in accordance with this Part.

21. Transfer of petroleum waste management facility.

(1) Where a petroleum waste handler wishes to transfer a waste management facility, the petroleum waste handler shall notify the National Environment Management Authority within 90 days of the intention to do so.

(2) The proposed transferee under subregulation (1) shall apply to the National Environment Management Authority for a licence in accordance with these Regulations.

(3) The application under subregulation (2) shall in addition to the requirements of regulation 13, state-

(a) the name and address of the proposed transferee;
(b) the technical and financial capacity of the proposed transferee to carry on with the management of the petroleum waste management facility and the petroleum waste;
(c) that the transferee shall be responsible for all the liabilities of the petroleum waste management activity; and
(c) any other information the National Environment Management Authority may deem necessary.

(4) The National Environment Management Authority may, in accordance with regulations 16 and 17, approve an application under this regulation.

Part Iv – Classification and Characterisation of Petroleum Waste

22. Petroleum waste classification and characterisation.

(1) The licensee and the petroleum waste handler shall classify petroleum waste streams in accordance with Schedule 6 to these Regulations, using test methods contained in the guidelines setout in Schedule 7 to these Regulations.

(2) The licensee and petroleum waste handler shall use laboratories which are designated by the National Environment Management Authority or certified for provision of laboratory services for the characterisation of petroleum waste under subregulation (1).

(3) The licensee and the petroleum waste handler shall, in characterizing petroleum waste under subregulation (1), take into account-

(a) the source of the petroleum waste;

(b) information about the process producing the petroleum waste, and any hazardous chemicals or substances used in the process or that may have contaminated the waste;
(c) data on the composition of the petroleum waste and the leaching behaviour;
(d) the smell, colour and physical form of the petroleum waste;
(e) whether the petroleum waste consists of a mixture of different substances, and if so, the composition of the mixture and the extent to which the composition may vary; and
(f) possible variation and changes in-between the petroleum waste stream during production of the petroleum waste.

(4) The licensee shall not hand over to a petroleum waste handler petroleum waste that is not classified and characterized in accordance with this regulation.

(5) The licensee and the petroleum waste handler shall use the information on classification and characterisation of petroleum waste under this regulation together with the waste manifest to guide the subsequent management of the petroleum waste.

(6) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

Part V – Handling, Labelling and Storage of Petroleum Waste

23. Petroleum waste manifest.

(1) For the purpose of traceability and proper documentation of petroleum waste, the licensee shall provide the petroleum waste handler with a waste manifest in the format set out in Schedule 8 to these Regulations.

(2) The licensee and petroleum waste handler shall each enter details in the relevant part of the waste manifest referred to in subregulation (1).

(3) The waste manifest shall be kept by the licensee and petroleum waste handler in hard copy and in electronic form for a period of at least five years from the date of first movement of the petroleum waste, thereafter the waste manifest shall be kept and be available in electronic form.

(4) The waste manifest shall be made available to the National Environment Management Authority, the Authority, environmental inspectors and any other authorised officers, upon request.

(5) The petroleum waste handler shall not accept petroleum waste that-

(a) is not accompanied by a waste manifest; or

(b) does not match the description on the accompanying waste manifest.

(6) Where any person attempts to transport or deliver petroleum waste to a petroleum waste management facility contrary to subregulation (5), the petroleum waste handler shall-

(a) reject the waste;

(b) immediately notify the licensee, the National Environment Management Authority, the Authority and any other relevant government ministry, department or agency; and

(c) direct the transporter to return the waste to the licensee, unless otherwise instructed by the National Environment Management Authority.

24. Identification of hazards associated with petroleum waste.

(1) A petroleum waste handler shall not manage petroleum waste at a waste management facility without taking reasonable measures to identify all hazards associated with the petroleum waste through –

(a) physical, chemical or biological analyses;

(b) published scientific documentation;

(c) consultation with the licensee; and

(d) waste manifests and material safety data sheets in case of chemicals and additives used in petroleum activities or midstream operations.

(2) Without limiting the general effect of subregulation (1), the petroleum waste handler shall inquire into and ascertain the composition of petroleum waste wherever the petroleum waste handler has reason to believe that –

(a) a process or operation producing the petroleum waste delivered to the waste management facility has changed; or

(b) the description of a petroleum waste received at the facility does not match the description of the petroleum waste on the accompanying waste manifest.

25. Petroleum waste handling containers.

(1) The licensee or petroleum waste handler shall not store or transport in the same container –

(a) two or more types of petroleum waste which are not compatible; or

(b) a petroleum waste which is not compatible with any substance placed in the container.

(2) The licensee or petroleum waste handler who uses a container to store or transport petroleum waste shall-

(a) ensure that the container is suitable for the purpose and conforms to the standards approved by the National Environment Management Authority;

(b) ensure that the container is not reactive to the petroleum waste;

(c) keep the container closed at all times during storage or transportation;

(d) not open, handle, store or transport the container in a manner which may cause it to leak or rupture;

(e) ensure that the outside of the container is clearly labelled in accordance with regulation 26;

(f) ensure that the container is sufficiently durable to contain the petroleum waste safely;

(g) ensure that the packaging and fastenings are strong and solid throughout to ensure that the container does not loosen and that the container meets the normal stresses and strains of handling;

(h) ensure that the container does not cause harm to persons

involved in handling the petroleum waste, the neighbouring community and the environment in general; and

(i) ensure that any replaceable fastening fitted to the container holding the petroleum waste is designed so that the container can be repeatedly refastened without its contents escaping.

(3) A person shall not-

(a) place petroleum waste in container that previously held a material which is incompatible with that petroleum waste, unless the container has been properly cleaned and disinfected; or

(b) use a container previously used for petroleum waste, to store, hold or transport food, animal feed or a product which may directly or indirectly become part of food for human consumption or animal feed.

(4) For the avoidance of doubt, containers used to carry petroleum waste which cannot be reused for similar purposes, are considered hazardous waste to be handled in accordance with the National Environment (Waste Management) Regulations.

(5) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

26. Labelling of petroleum waste management facilities, containers and vessels.

(1) A container or package containing petroleum waste shall have attached to it a label, written in English in easily legible characters as determined by the National Environment Management Authority.

(2) The English label shall be permanently fixed to the container or package and may, where the National Environment Management Authority deems necessary, have a translation in a relevant local language.

(3) The label referred to under subregulation (2) shall include the following information, as appropriate–

(a) the identity of the petroleum waste, including name, classification and characteristic of the petroleum waste;
(b) the name, address and telephone number of the licensee and the petroleum waste handler;
(c) the net contents;
(d) precautions and action required in the event of a spillage;
(e) information detailing the nature and degree of hazard inherent in the petroleum waste, including all or some of the following as appropriate-
    (i) the words "warning" or "caution";
    (ii) the words "PETROLEUM WASTE";
    (iii) the words "danger! Unauthorised persons keep away";
    (iv) the word "poison", marked indelibly in blue or a contrasting background; and
    (v) pictogram of a skull and crossbones or symbol indicating whether the waste is "Oxidizing" or "Explosive" or "Corrosive" or "Highly inflammable" or "Toxic" or "Irritant";
(f) a statement directing the user to read the label before handling of the petroleum waste;
(g) emergency contact information; and
(h) any other information that the National Environment Management Authority may deem necessary.

(4) All primary containers for petroleum waste containing hazardous chemicals and substances shall be packaged with up-to-date material safety data sheets with directions for handling of the petroleum waste, including safety precautions in accordance with environmental standards and best petroleum industry practices.

(5) A vessel carrying petroleum waste shall be labelled-

(a) in accordance with subregulation (3) and the label shall not contain any warranties, guarantees or liability exclusion

clauses inconsistent with the National Environment Act or these Regulations;

(b) with the words "PETROLEUM WASTE" in permanent, fluorescent and legible characters and placed on both sides of the vehicle or vessel in a colour contrasting with the background.

(6) A licensee or a petroleum waste handler shall ensure that petroleum waste containment areas are appropriately marked in accordance with subregulation (3).

(7) The National Environment Management Authority may determine the size and font of the pictogram, symbols and words referred to in subregulation (3)(e).

(8) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding four thousand currency points or imprisonment not exceeding eight years or both.

27. Protection against exposure to noxious fumes.

(1) The licensee or petroleum waste handler shall ensure that vapours emitted during filling, cleaning or storage of petroleum waste containers or operation of petroleum waste management facilities do not –

(a) expose a person at the vicinity of the waste management facility to offensive odours; or

(b) cause the concentration of the vapours to exceed permissible levels of exposure in accordance with the air quality standards made under the National Environment Act.

(2) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding three thousand currency points or imprisonment not exceeding six years or both.

Storage of Petroleum Waste.

28. Storage of petroleum waste generated on-site.

(1) The licensee may, with the approval of the National Environment

Management Authority in consultation with the Authority, store petroleum waste generated on-site for a period not exceeding three months to accumulate quantities of waste material that can be transported for recycling, treatment or disposal where the petroleum activity or midstream operation is undertaken intermittently.

(2) The quantities referred to under subregulation (1) shall not exceed one thousand kilogrammes.

(3) The National Environment Management Authority may in consultation with the Authority, in exceptional circumstances, upon application by the licensee extend the period specified in subregulation (1) or increase the quantity specified in subregulation (2).

(4) For avoidance of doubt, the quantity of hazardous waste that can be stored by a licensee at any given time shall be prescribed in the licence.

(5) Notwithstanding subregulation (1), the Authority may, before the expiration of the three months stated in subregulation (1) and in the interest of human health or the environment, require the licensee to remove the waste stored within a period specified by the Authority.

(6) The licensee shall keep logs of the waste stored under this regulation.

29. Short term storage of untreated waste by petroleum waste handler.

(1) The petroleum waste handler shall not store untreated petroleum waste for more than three months from the date of receipt or such other period as the National Environment Management Authority may approve.

(2) Short-term storage referred to in subregulation (1) shall be done in appropriate facilities in accordance with these Regulations.

30. Requirements for short term storage areas.

(1) The licensee or petroleum waste handler shall designate and manage waste storage areas referred to in this regulation in accordance with Schedule 9 to these Regulations.

(2) A storage area for petroleum waste referred to in subregulation (1) shall –

(a) be established based on an environmental risk assessment undertaken in accordance with the National Environment Act and any other applicable law;
(b) be located in an area that does not inconvenience the neighbouring communities or pose a risk of pollution to fragile ecosystems;
(c) have impermeable surface to prevent leakage to the ground, water and surrounding environment;
(d) contain appropriate storage containers that can be easily moved where applicable;
(e) be secured to prevent unauthorised access;
(f) be indicated on the facility layout drawing, including the storage the capacity, the petroleum waste types to be stored, and operating practices;
(g) allow for proper inspections and handling of the petroleum waste; and
(h) comply with any other requirements the National Environment Management Authority or the Authority may deem necessary.

(3) Access to petroleum waste storage areas shall be controlled and documented to the extent that is necessary-

(a) to allow for an inventory of petroleum waste to be completed as required;
(b) to avoid uncontrolled accumulation of petroleum waste; and
(c) to avoid tampering and unnecessary human or environmental exposure to the petroleum waste.

(4) The licensee and the petroleum waste handler shall establish adequate measures to the satisfaction of the National Environment Management

Authority for storage facilities so that corrective actions can be taken in the event of accidents or leakages.

Petroleum Waste Containing Radioactive Material.

31. Special requirements for handling of petroleum waste containing radioactive material.

(1) The licensee and petroleum waste handler shall ensure that any petroleum waste containing radioactive materials is managed in accordance with the Atomic Energy Act, 2008.

(2) The licensee and the petroleum waste handler shall, in accordance with these Regulations and a permit or licence obtained from the Atomic Energy Council, control the use of radioactive materials, to prevent exposure or contamination and accumulation of petroleum waste containing radioactive material and to provide for safe disposal of the petroleum waste.

(3) For the avoidance of doubt, the licensee shall be liable for any exposure of persons to petroleum waste containing radioactive material and related waste in the licensee's control during a petroleum activity or midstream operation.

Part VI – Transportation, Treatment and Disposal of Petroleum Waste

Transportation of Petroleum Waste.

32. Requirements relating to transportation of petroleum waste.

(1) A petroleum waste handler holding a licence to transport petroleum waste shall ensure that-

(a) the collection and transportation of petroleum waste is conducted in a manner that does not cause leakage, scattering or littering of the waste or the emitting of noxious smells or harmful odours;

(b) the vessel used for transportation of petroleum waste is labelled in accordance with regulation 26 (5);

(c) the vessels for transportation of petroleum waste and other

means of conveyance of petroleum waste follow the approved desgnated routes from the point of collection to the disposal site or plant;

(d) a waste manifest and a material safety data sheet for petroleum waste containing hazardous chemicals, accompany the waste to enable the tracking of each batch of petroleum waste from its source to its final disposal; and

(e) the personnel involved in the collection and transportation of petroleum waste are, in accordance with the Occupational Safety and Health Act, 2006 and other applicable law, provided with-

(i) appropriate personal protective equipment and safety clothing;

(ii) appropriate equipment or facilities for handling the petroleum waste;

(iii) safe and secure sitting facilities in the vehicles used for transporting the petroleum waste; and

(iv) proper training, information and instructions, including on how to handle emergency situations.

(2) The desginated routes referred in subregulation (1)(c) shall be approved by the National Environment Management Authority in consultation with the Authority and any other relevant lead agency.

(3) A petroleum waste handler shall not permit unauthorised access to the vehicle or vessel used for the transportation of the petroleum waste.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

33. Transportation journey management plan.

(1) The petroleum waste handler with a licence to transport petroleum waste shall develop a journey management plan before commencement of operations for the transportation of petroleum

waste and shall make it available to the Authority, the National Environment Management Authority and any other relevant lead agency, upon request.

(2) The journey management plan referred to under subregulation (1) shall include-

(a) the designated routes;
(b) route specific speed limits;
(c) designated driving period;
(d) health, safety and environment requirements; and
(e) any other information that the Authority and National Environment Management Authority may require.

(3) A copy of the journey management plan referred to in subregulation (1) shall at all times be present in the vessel transporting the petroleum waste.

(4) The petroleum waste handler shall install electronic tracking systems for vehicles used in the transportation of petroleum waste.

(5) The petroleum waste handler shall provide access to real time vehicle tracking information to the Authority and the National Environment Management Authority.

Approval of Petroleum Waste Treatment Methods.

34. Approval of treatment methods of petroleum waste.

(1) The petroleum waste handler may treat petroleum waste by methods proposed by the petroleum waste handler and approved by the National Environment Management Authority in consultation with the Authority and any other relevant lead agency.

(2) Once the method proposed under subregulation (1) is approved, the petroleum waste handler shall treat the petroleum waste in accordance with environmental standards approved by the National Environment Management Authority in consultation with the Authority.

(3) Where there are no environmental standards, the National Environment Management Authority may, in consultation with the Authority, approve the use of internationally recognised standards and best petroleum industry practices by the petroleum waste handler.

(4) The petroleum waste handler shall have quality control and quality assurance protocols to ensure that the treatment of petroleum waste is in compliance with this regulation.

(5) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

35. Utilisation of non-hazardous treated petroleum waste.

(1) A person who wishes to utilise treated petroleum waste which is not classified or characterised as hazardous shall apply to the National Environment Management Authority.

(2) The National Environment Management Authority may, in consultation with the Authority and any other relevant lead agency, the waste handler and the licensee approve the utilisation of treated petroleum waste referred to in subregulation (1) where the National Environment Management Authority is satisfied that –

(a) the hazardous properties of the treated petroleum waste have been remediated;
(b) the purpose is not primarily to get rid of the waste;
(c) there is sufficient evidence to show that the activity for which the treated petroleum waste is to be utilized would have taken place even without access to the waste;
(d) the utilization of the treated petroleum waste does not cause harm to human health or the environment;
(e) the properties of the petroleum waste make it suitable for the purpose; and
(f) the amount of treated petroleum waste applied for is proportionate to the need for the material.

(3) The petroleum waste handler and the person utilising the treated petroleum waste under this regulation shall be responsible for any pollution or health impacts that may arise from the utilisation of treated petroleum waste.

Approval of Petroleum Waste Disposal Methods.

36. Approval of petroleum waste disposal methods.

(1) The petroleum waste handler may dispose of petroleum waste by methods proposed by the petroleum waste handler and approved by the National Environment Management Authority in consultation with the Authority and any other relevant lead agency.

(2) The disposal methods referred to under subregulation (1) may include landfilling and incineration prescribed in regulations 37 and 38.

(3) Where the Authority has approved the method proposed under subregulation (1), the petroleum waste handler shall in disposing the petroleum waste comply with environmental standards approved by the National Environment Management Authority in consultation with the Authority.

(4) Where there are no environmental standards, the National Environment Management Authority may, in consultation with the Authority, approve the use of internationally recognised standards and best petroleum industry practices by the petroleum waste handler.

(5) The petroleum waste handler shall have quality control and quality assurance protocols to ensure that the disposal of petroleum waste is in compliance with this regulation.

(6) Where secondary waste is generated by any of the methods approved in subregulation (1), the petroleum waste handler shall ensure that the secondary waste is disposed of at designated waste sites licensed by the National Environment Management Authority.

(7) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

37. Petroleum waste landfill.

(1) The petroleum waste handler authorised to landfill petroleum waste under a licence, shall –

(a) construct an engineered landfill in accordance with the National Environment Act, these Regulations, environmental standards and landfill guidelines issued by the National Environment Management Authority, best available practices and best available technologies;

(b) ensure, in accordance with regulation 39, that the engineered landfill is located in an area which –

(i) has been identified after undertaking research and studies, and found to be suitable for the purpose; and

(ii) has been subjected to environmental and social impact assessment.

(c) provide an approved secure buffer zone surrounding the active area of the engineered landfill in accordance with environmental standards;

(d) apply appropriate and effective practices and techniques that prevent leakage of hazardous elements into the groundwater systems and soil, so as to prevent the risk of environmental pollution; and

(e) conduct quarterly monitoring of air, water and soil quality in the surrounding environment to establish the levels of contaminants arising from the landfill operations and submit monitoring reports to the National Environment Management Authority on a half yearly basis.

(2) Where there are no environmental standards, the National Environment Management Authority may, in consultation with the

Authority, approve the use of internationally recognised standards and best petroleum industry practices by the petroleum waste handler.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

38. Petroleum waste incineration.

(1) A petroleum waste handler authorised to incinerate petroleum waste under a licence shall ensure that the incinerator-

(a) conforms to approved standards;
(b) is designed to control air pollution and monitor the performance of the combustion process;
(c) is adopted to the specific type of petroleum waste to be incinerated;
(d) is designed to ensure that its operation is in compliance with environmental standards; and
(e) where feasible, is designed to provide for energy recovery.

(2) Where there are no environmental standards, the National Environment Management Authority may, in consultation with the Authority, approve the use of internationally recognised standards and best petroleum industry practices by the petroleum waste handler.

(3) A petroleum waste handler shall ensure that any residual material arising from the incineration process under this regulation is handled in accordance with the National Environment (Waste Management) Regulations.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

Siting of Petroleum Waste Management Facilities

39. Siting of petroleum waste management facilities.

(1) A person shall not establish, construct or operate any petroleum waste management facility-

(a) in a floodplain;
(b) within 500 metres of a mapped out geological fractured zone;
(c) in a place which is prone to natural disasters, including earthquakes, floods and landslides, unless the waste management facility is designed, constructed, operated and maintained to prevent collapse or washout;
(d) within 200 meters of any land which may be prone to or impacted by slope failure;
(e) on a hilly or mountainous area with a gradient of more than 60 degrees;
(f) in a water source area, including the surface and subsurface water catchment area, through which pollutants are likely to move toward and reach water sources;
(g) within 200 meters from the boundaries of a protected area, bird sanctuary, wildlife management area or land acquired and administered under the Uganda Wildlife Act, the National Forestry and Tree Planting Act, 2003 or other law on conservation areas;
(h) within a wetland or within 500 meters of a riverbank or lakeshore or area immediately adjacent to fragile ecosystems;
(i) within areas suitable for agriculture except with the approval of the National Environment Management Authority; or
(j) within a distance of 500 meters from human settlements or commercial areas.

(2) Without prejudice to subregulation (1) (j), the petroleum waste handler shall conduct scientific studies on the climatological and hydro-geological characteristics of the area proposed for siting of a petroleum waste management facility to determine any further distance being more than 500 meters as may be necessary for the protection of human settlements and commercial areas from the impacts arising from the petroleum waste management facility.

(3) A petroleum waste handler shall ensure that the petroleum waste management facility-

(a) is enclosed and secure from access by unauthorised persons or wildlife;
(b) has an approved site layout plan;
(c) maintains other buffer or protection zone distances in accordance with the National Environment Act, these Regulations and any other applicable law.

(4) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

Environmental Health and Safety Measures.

40. Control of emissions, effluent discharge and contamination of the environment.

(1) The licensee and the petroleum waste handler shall take measures to ensure that the petroleum waste management methods used do not cause adverse effects to human health or the environment through emissions, effluent discharge or other contamination.

(2) A licensee and the petroleum waste handler shall ensure that their employees handling petroleum waste are medically examined regularly, but in any case, at least once every quarter of the year.

(3) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding three thousand currency points or imprisonment not exceeding six years or both.

41. Emergency preparedness and response.

(1) The licensee and petroleum waste handler shall establish an emergency preparedness and response system based on an environmental risk assessment undertaken in accordance with the National Environment Act.

(2) The emergency preparedness and response system established under subregulation (1) shall be documented in an emergency preparedness and response plan.

(3) The licensee and the petroleum waste handler shall ensure that the emergency preparedness and response plan made under subregulation (2) contains –

(a) the location of the petroleum waste management facility in sufficient detail;
(b) the site lay out;
(c) a description of the available emergency response equipment, actions and vessels;
(c) a description of the petroleum waste managed at the facility or transported;
(d) the maximum number of persons likely to be present at the facility on a normal working day;
(e) the emergency planning assumptions, including emergency measures planned for identified incidents and areas likely to be affected;
(f) the response resources available or that can be called for, to control an incident, hazard or accident;
(g) the emergency response procedures and command structures; and
(h) notification procedures.

(4) The licensee and the petroleum waste handler shall ensure that employees are equipped with skills and are regularly trained and instructed on how to handle emergency situations.

(5) The emergency preparedness and response plan prepared in accordance with subregulation (2) shall be reviewed on an annual basis or such other shorter period as may be deemed necessary, to ensure that the measures put in place are effective during an emergency.

(6) The licensee and the petroleum waste handler shall keep a record of each review carried out under subregulation (5), including –

(a) the measures, systems, procedures, equipment or other factors reviewed;
(b) a description of the review methods;

(c) the date of the review on each component;
(d) the results of the review; and
(e) description and date of any corrective action.

(7) The record referred to in subregulation (6) shall be available for inspection by the National Environment Management Authority, the Authority or an authorized officer.

42. Precautionary measures.
A petroleum waste handler shall, in accordance with Schedule 10 to these Regulations and the Occupational Safety and Health Act, 2006, put in place and maintain at a petroleum waste management facility-

(a) warning and safety systems appropriate to the nature of operations at the facility; and
(b) measures to prevent fire or explosions, or accidental reactions of the petroleum waste with other substances, or uncontrolled releases of hazardous substances or damage to the structural integrity of the petroleum waste management facility.

Part VII –Decommissioning of Petroleum Waste Management Facility and Handling of Petroleum Waste During Decommissioning

43. Decommissioning plan.
(1) The petroleum waste handler shall prepare and submit to the National Environment Management Authority for approval, a comprehensive decommissioning plan for the petroleum waste management facility at least twenty four months prior to the commencement of the decommissioning.

(2) Notwithstanding subregulation (1), the waste handler may apply to the National Environment Management Authority to extend the commencement of the decommissioning referred to in subregulation (1).

(2) The decommissioning plan referred to in subregulation (1) shall as a minimum contain –

(a) details of how the petroleum waste management facility will be decommissioned and disposed of or closed when operations cease;
(b) details of how the waste generated during decommissioning will be managed;
(c) procedures for the restoration of the affected sections of the petroleum waste management site against the baseline of the area immediately before the facility was constructed or the immediate surrounding environment;
(d) environmental monitoring measures during and after decommissioning;
(e) the occupational health and safety measures to be undertaken during decommissioning;
(f) proposals on further use of the decommissioned site or facilities, other use, complete or partial removal and disposal of the facilities;
(g) an indication of resources required for the decommissioning, restoration and after care;
(h) the proposed duration of the decommissioning process;
(i) evidence of consultation with the relevant stakeholders on the proposed decommissioning;
(j) the most recent environmental compliance audit report; and
(k) any other information the National Environment Management Authority may require.

(3) The National Environment Management Authority shall, on receipt of the decommissioning plan, review it and may require further information and evaluation to be carried out by the petroleum waste handler or may require a new or amended plan to be submitted.

(4) The National Environment Management Authority shall, before approving the decommissioning plan, consult the relevant lead agency.

(5) The National Environment Management Authority may, when satisfied with the decommissioning plan and taking into account any

comments from the lead agency referred to under subregulation (4), approve the plan with conditions where necessary.

(6) The National Environment Authority shall review and make a decision on the plan submitted under this regulation within 6 months from the date of receipt of a complete plan.

44. Decommissioning of petroleum waste management facilities.
(1) The petroleum waste handler shall undertake the decommissioning process in accordance with the approved decommissioning plan, these Regulations, any other applicable law, environmental standards, landfill guidelines issued by the National Environment Management Authority and international environmental best practices.

(2) Where there are no environmental standards, the decommissioning shall be undertaken in accordance with internationally recognised standards approved by the National Environment Management Authority and best petroleum industry practices.

(3) The National Environment Management Authority may, during the decommissioning process, impose additional requirements on the petroleum waste handler.

(4) The petroleum waste handler shall, during decommissioning –
- (a) remove all roads and other access roads and make them inaccessible, where applicable;
- (b) remove all foundations of buildings, structures, equipment and debris from the decommissioned site;
- (c) geo-reference the decommissioned site and include a landmark approved by the National Environment Management Authority;
- (d) remove any contaminated soil to avoid further pollution of the area;
- (e) restore the decommissioned site as near as possible to its original state;
- (f) vegetate or re-vegetate the decommissioned site with indigenous species compatible with surrounding ecosystem;

(g) record and monitor the restoration of the decommissioned site after decommissioning for a period required by the National Environment Management Authority; and
(h) carry out any other activity related to decommissioning as the National Environment Management Authority or the Authority may require.

45. Handling of petroleum waste during decommissioning activities.

A petroleum waste handler shall handle all remaining petroleum waste and other waste produced during decommissioning in accordance with the National Environment Act, these Regulations and the National Environment (Waste Management) Regulations.

46. Post decommissioning.

(1) On completion of the decommissioning, the petroleum waste handler shall submit a report to the National Environment Management Authority.

(2) The report referred to under subregulation (1) shall state-–
(a) the end of the decommissioning process;
(b) achievements and lessons learnt;
(c) issues for follow up; and
(d) any other relevant information.

(3) The report submitted under subregulation (1) shall be accompanied by-
(a) the post decommissioning audit report undertaken by an independent auditor contracted by the petroleum waste handler; and
(b) a site verification report by the relevant local government.

(4) Notwithstanding subregulation (2), the petroleum waste handler shall submit to the Authority an annual report on the condition of the decommissioned site in accordance with regulation 49.

(5) The National Environment Management Authority shall, where it receives the report under subregulation (1)-

(a) consult the Authority and any other relevant lead agency; and

(b) carry out an independent verification of the decommissioned site.

(6) The National Environment Management Authority shall, where it is not satisfied with the decommissioning process, require the petroleum waste handler to undertake further remediation or may undertake the remediation at the expense of the petroleum waste handler.

(7) For avoidance of doubt, the licensee and the petroleum waste handler shall remain liable for the post care and future pollution costs resulting from the petroleum waste management activities.

(8) A person who contravenes this regulation commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

Part XI – Transboundary Movement of Petroleum Waste

47. Export and import of petroleum waste.

(1) A person who intends to export petroleum waste from Uganda or to import petroleum waste into Uganda shall apply, in writing, to the National Environment Management Authority for a licence.

(2) An application under subregulation (1) shall be accompanied by the fee prescribed in Schedule 5 to these Regulations and a movement document in Form I set out in Schedule 11 to these Regulations.

(3) The National Environment Management Authority may issue a licence to an applicant to export petroleum waste from Uganda -

(a) where it is satisfied with the completed movement document submitted under subregulation (2); and

(b) after obtaining the consent of the Designated National Authority of the state to which the waste is to be exported and, where applicable, the country through which the applicant intends to move the petroleum waste.

(4) The National Environment Management Authority may issue a licence to an applicant and give consent to import petroleum waste into Uganda where–

(a) the National Environment Management Authority has received a movement document from the Designated National Authority of the country where the petroleum waste is being imported from;
(b) the National Environment Management Authority is satisfied with the information in the completed movement document submitted under subregulation (2);
(c) after receiving comments from the international body designated under any agreement or arrangement to which Uganda is a party or participant, where applicable; and
(d) the importer is a petroleum waste handler licensed to handle the waste and has the facilities and the capacity to safely transport, treat or dispose of the petoleum waste to be imported in accordance with these Regulations.

(5) A licence for export or import of petoleum waste shall be as prescribed in Form II set out in Schedule 11 to these Regulations and on payment of the fees prescribed in Schedule 5 to these Regulations.

(6) A person shall not transport petroleum waste by water within Uganda, except petroleum waste generated from islands or operations on water bodies within the territorial jurisdiction of Uganda.

(7) Petroleum waste shall only be exported out of Uganda or imported into Uganda through the customs points of entry designated in Schedule 12 to these Regulations.

48. Petroleum waste in transit through Uganda.

(1) A person transporting petroleum waste through Uganda shall ensure that-

(a) the petroleum waste transported conforms to the accompanying documents;

(b) there is evidence of consent from the National Authority of the state of final destination of the petroleum waste;

(c) the National Environment Management Authority has been notified about the transportation and has consented to it;

(d) the transportation within Uganda is carried out in compliance with the laws of Uganda; and

(e) the petroleum waste is not disposed of or abandoned in Uganda.

(2) A person transporting petroleum waste through Uganda shall ensure that the petroleum waste is accompanied by a notification document in the Form set out in Schedule 13 to these Regulations.

Part VIII – Records, Reports and Notifications

49. Petroleum waste record and annual report.

(1) A petroleum waste handler shall, in respect of the petroleum waste handled and in accordance with these Regulations, maintain at the waste management facility-

(a) the record of the pertroleum waste handled, including a chain of custody transfer of waste and copies of the waste manifests;

(b) an operating record, including measurement and monitoring records of pollutants; and

(c) incident reports.

(2) The records kept under subregulation (1) including electronic records, shall be made available to the National Environment Management Authority, the Authority or an authorised person, upon request.

(3) The licensee and petroleum waste handler shall by the 31st of January of each year, submit to the National Environment Management Authority and the Authority an annual report in the format set out in Schedule 14 to these Regulations, including, where applicable information on-

(a) the type and amount of petroleum waste managed;
(b) emission and discharges from the petroleum waste management activity;
(c) health and safety statistics; and
(d) any other information that the National Environment Management Authority may deem necessary.

(4) The licensee and petroleum waste handler shall submit to the National Environment Management Authority and the Authority environmental compliance audit reports in accordance with the National Environment (Audit) Regulations.

(5) The records and documents generated under this regulation shall be kept for a minimum of ten years.

(6) The National Environment Management Authority and the Authority may develop an electronic tracking system for the records and reports required under these Regulations.

50. Notifications.
The licensee and petroleum waste handler shall immediately and in any case not later than twenty four hours, notify the National Environment Management Authority, the Authority and any other relevant lead agency where-

(a) there is an incident or accident leading to spillage or harm to human health or the environment;
(b) radioactivity has been detected in the petroleum waste;
(c) the petroleum waste delivered does not meet the description in the petroleum waste manifest;
(d) the petroleum waste cannot be traced or has not reached its destination; or
(e) the petroleum waste has been mixed up or otherwise tampered with.

51. Monitoring and inspection.
The National Environment Management Authority, the Authority or other authorised officer may conduct regular inspections and monitoring of the petroleum waste management facilities -

(a) to assess the compliance by the petroleum waste handler with the requirements of the National Environment Act, the Petroleum (Exploration, Development and Production) Act, 2013, the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013, the National Environment (Waste Management) Regulations, the Occupational Safety and Health Act, 2006, any other applicable law and approved standards;

(b) to ascertain that appropriate measures are in place for avoiding and minimising the consequences of incidents or accidents arising from the petroleum waste management activity on human health and the environment; or

(c) to ensure that information contained in reports sent to the National Environment Management Authority by the petroleum waste handler reflects the conditions in the petroleum waste management facility.

52. Independent laboratory analysis.

The National Environment Management Authority, the Authority or an authorised officer may subject samples taken from the petroleum waste management facility to independent laboratory analysis to verify waste characterisation and the hazards associated with the petroleum waste.

Part Ix– Offences, Penalties and Administrative Measures

53. **Offence and penalties.**

(1) A person who-

(a) imports, exports, transports, treats, stores, disposes or otherwise manages petroleum waste without a licence issued under these Regulations;

(b) fails to comply with any direction given under these Regulations;

(c) fails to permit any inspection or monitoring authorised under these Regulations;
(a) fails to submit any report, data or documentation required under these Regulations;
(b) wilfully or recklessly makes a report required under these Regulations, or furnishes information which is in any respect false; or
(c) refuses to grant the National Environment Management Authority or authorised officer access to the waste management facility for purposes of taking samples,

commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

(2) A person who-
(a) disposes petroleum waste from vessels including lorries and boats to an un approved disposal site or into the water;
(b) dumps petroleum waste that is rejected by the petroleum waste handler under regulation 23(6)(a),

commits an offence and is liable, on conviction, to a fine not exceeding five thousand currency points or imprisonment not exceeding ten years or both.

54. Order of forfeiture.
Where a person is convicted of an offence under these Regulations, the court may, in addition to any other penalty imposed, make an order for the forfeiture of any funds, money instruments, documents, facilities, vehicles, crafts, vessels or equipment used in the commission of the offence.

55. Coercive fine.
A person who handles petroleum waste contrary to these Regulations may be required to pay a coercive fine in accordance with the National Environment Act.

56. Administrative measures.
(1) The National Environment Management Authority an environmental inspector or an authorised officer may, in accordance with the National

Environment Act –

(a) give a warning to the petroleum waste handler or the licensee;
(b) issue orders to protect human health and the environment;
(c) stop and inspect any vehicle used for the transportation of petroleum waste;
(d) enter upon any premises or waste management facility;
(e) order a petroleum waste handler to immediately suspend or terminate an activity where there is acute risk of harm to human health or the environment;
(f) close a waste management facility that does not comply with the requirements of a licence issued under these Regulations;
(g) impose an administrative penalty on a licensee or a petroleum waste handler;
(h) impose a surcharge of five percent of the amount required to be paid which is in default for each day of default;
(i) confiscate property or equipment; or
(j) order the petroleum waste handler to take samples and analyse them as the National Environment Management Authority may direct.

(2) Where the licensee or petroleum waste handler does not comply with the duties and obligations in accordance with these Regulations, the National Environment Act and the National Environment (Waste Management) Regulations, or any other applicable law, the National Environment Management Authority may take necessary measures to clean up or rectify the breach or manage the petroleum waste at the expense of the licensee and petroleum waste handler.

(3) Measures taken in accordance with subregulation (1) may be financed using the financial security given in accordance with regulation 7.

Part X –Transitional

57. Transition.

(1) A person who, before the commencement of these Regulations was carrying on the business of petroleum waste management shall apply

to the National Environment Management Authority for a licence in accordance with these Regulations within twelve months after the commencement of these Regulations or at the expiration of an existing licence, where the remaining licence period is less than twelve months.

(2) Within the period referred to under subregulation (1) and until the grant of the licence, the operations of the existing waste handler shall continue, subject to such conditions as the National Environment Management Authority shall stipulate in consultation with the Authority.

SCHEDULES.

SCHEDULE 1

Regulation 3.

CURRENCY POINT

One currency point is equivalent to twenty thousand shillings.

SCHEDULE 2

Regulation 3.

TYPES OF PETROLEUM WASTE.

1. **FROM UPSTREAM FACILITIES AND PETROLEUM ACTIVITIES**

Type of waste	Main Sources	Possible environmentally significant constituents
Contaminated soil/hydro carbon bearing soil	Spill/leaks	Hydrocarbons, heavy metals, salts, treating chemicals
Dehydration and sweetening waste	Dehydration processes Sweetening processes including gas plant sweetening waste for sulfur removal, including amines, amine filters, amine filter media, backwash, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber liquid and sludge	Amines, glycols, filter sludges, metal sulphides, H_2S, metals, benzene, carbonyl sulphide (COS), hydrocarbons, mineral spirits.
Drilling fluid Chemicals	Chemical containers, drilling fluids, drill cuttings, rig wash	Biocides, surfactants, salts, metals, emulsifiers, viscosifiers, organics, Ph
Hydro test fluids	Pipe system or pressure vessel hydro testing activities	BOD, solids, biocides, corrosion inhibitors, oxygen scavengers, dyes

Type of waste	Main Sources	Possible environmentally significant constituents
Synthetic/ Oil based muds and cuttings	Drilling operations	Hydrocarbons, inorganic salts, heavy metals, solids/ cuttings, drilling fluid chemicals
Pigging sludges	Pipeline cleaning operations	Inorganic salts, heavy metals, solids, production chemicals, NORM, hydrocarbons, phenols, aromatics
Pit sludges and contaminated bottoms from storage or disposal containers Sludge from jet water pump circuit purification	Chemical storage and disposal containers Jet water	Inorganic salts, chemicals, phenols, hydrocarbons
Activated carbon filters and oily sludge from oil or water separators used in petroleum activities	Crude oil processing	Inorganic salts, heavy metals, solids, production, chemicals, hydrocarbons, benzene, PAHs
Production chemicals	Chemicals containers Spent fluids Sludges Contaminated chemicals	Demulsifiers, corrosion inhibitors, wax inhibitors, scale inhibitors, defoamers, oxygen, scavengers, biocides, coagulants, flocculants.
Produced water	Production of oil and gas	Inorganic salts, heavy metals, solids, production, chemicals, hydrocarbons, benzene, PAHs

Type of waste	Main Sources	Possible environmentally significant constituents
Constituents removed from produced water before it is injected or otherwise disposed of. Liquid hydrocarbons removed from the production stream	Produced water treatment Production stream	Brine, salts, hydrocarbons, NORM
Produced sand	Drilling/production operations	Hydrocarbons, heavy metals, NORM
Absorbents	Spill clean up	Hydrocarbons, production chemicals, solvents
Spent catalysts	Catalyst beds Molecular sieve	Heavy metals, hydrocarbons, inorganic salts
Spent completion fluid	Production well completion activities	Inorganic salts, hydrocarbons, corrosion inhibitors
Spent stimulation or fracturing fluids and workover waste	Production well workover activities	Inorganic acids (HCL, HF), hydrocarbons, methanol, corrosion inhibitors, oxygen scavengers, formation fluids, NORM, gelling agents
Water based (include brine) muds and cuttings	Drilling activities	High Ph, inorganic salts, hydrocarbons, solids/cuttings, drilling fluid chemicals, heavy metals

Type of waste	Main Sources	Possible environmentally significant constituents
Pipe scale, hydrocarbon solids, hydrates, and other deposits	Piping and equipment	Hydrocarbons Excess chemicals Heavy metals
Contaminated ballast water used at the rig sites	Tankers with non-segregated Ballast	Hydrocarbons
Oil used in boiler/ cooling tower blow down scrubber fluids, sludges	Steam generation facilities, heat exchangers and cooling towers	Scale inhibitors, biocides, corrosion inhibitors, heavy metals, solids
Waste crude oil from primary field operations	Spill/leaks	Hydrocarbons, heavy metals, salts, treating chemicals
Consolidation materials	Carrier fluids Epoxy resins	Hydrocarbons Excess chemicals
Incinerator ash from petroleum waste	Incinerators	Heavy metals, salts, ash
Exhausted molecular sieves and exhausted alumina from hydrofluoric (HF) alkylation generated from crude oil storage tanks	Crude oil storage tanks	Hydrocarbons Excess chemicals Heavy metals

Type of waste	Main Sources	Possible environmentally significant constituents
Contaminated drainage water from petroleum activities	Rainwater run-off Rig wash Process water Wash water	Inorganic salts, heavy metals, solids, production chemicals, detergent, hydrocarbons foam from firefighting systems
Process water	Engine cooling water Brake cooling water Wash water Rig wash	Hydrocarbons treatment chemicals
Drilling cement	Cement slurries Cement mix water Cement returns	Heavy metals, thinners, viscosifiers, Ph, salts
Maintenance waste from rigs	Sandblast (grits) Greases, Fuel oils Filters	Heavy metals Hydrocarbons Solids solvents
Spacers	Drilling operations	Hydrocarbon, alcohol, aromatics, detergents, surfactants
Accumulated materials from process equipment	Production separators, fluid treating vessels and production impoundments.	Sand, solids, emulsions

Type of waste	Main Sources	Possible environmentally significant constituents
Scrap metals contaminated with petroleum	Abandoned platforms Used pipelines Used process equipment Used tanks Electrical cables Empty drums Used sulphates Used casing	Heavy metals, NORM scales
Primary-processing waste	Desalting and topping; Coking; Propane; Propylene; butanes streams dryers	Heavy metals, hydrocarbons, sand, emulsions
Light organics volatilized from exempt waste	Reserve pits, impoundments, production equipment	Organics oils
Liquid and solid waste generated by crude oil and tank bottom reclaimers	Separation tank sediments Storage tank sediments Water drain tank sediments from storage facilities that hold petroleum products	Inorganic salts heavy metals solids production chemicals NORM Hydrocarbons PAHs

Type of waste	Main Sources	Possible environmentally significant constituents
Spent or used operational and maintenance fluids including oils and test liquids Packing fluids	Equipment lube oil changes, cleaning, maintenance and tests	Organics, heavy metals, lube oils, cut oils, transformer oils, recovered oils, engine oils, caustic acid cleaners
Waste compressor oil, filters, and blowdown.	Compressors, filters	Waste oil, wastewater
Waste lubricants from petroleum activities	Equipment lube oil changes	Organics, heavy metals
Used drums, drum rinsate and containers	metal, glass, plastic,	Chemicals, organics, hydrocarbons, salts
Spilled chemicals and waste acids	Drains, process equipment	Acids, chemicals, salts
Unused fracturing fluids or acids		Mineral acids, hydrocarbons
Laboratory waste	Laboratories and testing equipment	Amines, salts, hydrocarbons

2. FROM FACILITIES AND MIDSTREAM OPERATIONS

Types of waste	Main sources	Possible environmentally significant constituents
Oiled materials	Interceptors ,desalters, tank bottoms, waste water treatment plants	Oily sludges
Solid oiled materials	Oil spills, filter clays/ materials	contaminated soils, oil spill debris, filter clay acid, tar rags, filter materials, packing, lagging, activated carbon
Non-oiled materials	Boilers, alkylation plants , flue gas desulphurization unit	Resins, boiler feed water sludges , desiccants and absorbents neutral sludges ,FGD waste
Used drums and containers	Buildings ,offices	Metal ,glass ,plastic ,paint
Spent catalyst	Process units like fluidized catalytic cracking, hydrodesulphurization/ hydro treatment, polymerization unit, residue conversion, reformers and polymerization units.	Metals such as lead, arsenic, nickel and vanadium. Nonmetals like sulphur, carbon. Significant quantities of hydrocarbon products. Acids.
Spent chemicals from the facilities and operations	Laboratories. Process units like Merox units.	Caustic, acid, additives, sodium carbonate, solvents, MEA/DEA (mono/di-ethanol amine), TML/TEL (tetra methyl/ethyl lead)
Pyrophoric waste	Tanks. Process units. Cooling columns.	Scales

Types of waste	Main sources	Possible environmentally significant constituents
Scales from pipelines and refinery	Pipelines and refinery	Leaded/unleaded scales, rust
Pigging sludges	Pipeline cleaning operations	Inorganic salts, heavy metals, solids, production chemicals, NORM, hydrocarbons, phenols, aromatics
Radioactive waste	Laboratories. Process units.	Catalysts, laboratory waste
Construction/ demolition debris contaminated with hydrocarbons	Buildings Roads	scrap metal, concrete, asphalt, soil, asbestos, mineral fibers, plastic/wood
Waste oils	Lubricants, transformers ,car engines	lubricating oils, cut oils, transformer oils, recovered oils engine oils
Mixed waste	Offices, residential places	domestic refuse, vegetation

SCHEDULE 3.

ON-DEMAND BANK GUARANTEE

Regulation 7(1).

On-demand bank guarantee for petroleum waste handler

[*The Guarantee Bank's headed paper*]

The National Environment Management Agency (NEMA)

[*Date*]
ON DEMAND BANK GUARANTEE
BANK GUARANTEE NO.: [XX-XX] IN THE AMOUNT OF [USD/ UGX] [*insert amount*] (THE "GUARANTEED AMOUNT")

BENEFICIARY: THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)
(REPRESENTING THE REPUBLIC OF UGANDA) (THE "BENEFICIARY")

[***Name of Guarantee Bank***], [business/company/etc.] registration no. … as applicable [●], a [commercial bank] incorporated under the laws of [●] with its registered address at [●] (the "**Guarantor**") hereby guarantees to the Beneficiary the obligations of [*Name of company*] ([*nationality*] [business/company/etc.] no. [●].) (the "**Company**") with respect to certain responsibilities of the Company as a licensee under the [Petroleum (Exploration, Development and Production) Act, 2013] / the [Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013] and as set out under the Petroleum (Waste Management) Regulations, 2018 as amended from time to time (the "**Regulations**") as security for the [*insert name of petroleum waste handler* ([*nationality] [business/company/etc*.] no.) (the "**Petroleum Waste Handler**"')] in compliance with the Regulations and the terms of the licence to manage petroleum waste no. [*Insert reference or references*] granted by the Beneficiary under the Regulations and subject to the National Environment Act.

This Guarantee is given for the purpose of fulfilling the requirements set out in the National Environment Act and regulation 7 of the Petroleum (Waste Management) Regulations.

Other terms of this Guarantee:

1. The Guarantor's maximum liability hereunder is limited to the Guaranteed Amount. The Guaranteed Amount may only be reduced with the prior written consent of the Beneficiary. Any payments by the Guarantor under this Guarantee will reduce the Guaranteed Amount with a corresponding amount.

2. This guarantee is an irrevocable and unconditional on-demand guarantee. Set-off, counter-claim and other deductions are not permitted and the Guaranteed Amount shall be paid to the Beneficiary in accordance with the provisions of Clause 4 below without any deductions whatsoever.

3. A claim for payment under this Guarantee by the Beneficiary shall be in writing, setting out the amounts to be paid together with a statement from the Beneficiary that the amount is due for payment.

4. The claim for payment must be presented by the close of regular business hours on the expiry date set out in Clause 6 below.

5. The Guaranteed Amount, or such lower amount as may be claimed by the Beneficiary, shall be paid within three business days of demand for payment.

6. The Beneficiary may make multiple demands hereunder, limited upwards to the Guaranteed Amount.

7. This Guarantee will expire on [*Date*] and will automatically be renewed, on an annual basis, until [20…] or [● *state event*] when the Guarantee will lapse without further notice.

8. The Guarantor may terminate the Guarantee by giving six months' notice to the Beneficiary prior to the date of its annual renewal. [*The notice period may be less than 6 months depending on the activity guaranteed*].

9. If the Guarantee is terminated by the Guarantor, the Guarantee shall nevertheless remain in full force and effect until the ensuing annual renewal date.

10. All notices, requests, demands and other communication required or permitted under this Guarantee shall be in writing and shall be deemed to have been received when (i) delivered by hand or courier to the recipient; (ii) when received via electronic mail (provided that such electronic mail is actually delivered and receipt thereof is acknowledged); or (iii) [*insert number of days*] after the date when posted by [registered / air] mail, with postage prepaid, to all addresses as ascribed below:
    In case of the Beneficiary:
    [*insert address*]
    In case of the Guarantor:
    [*insert address*]

11. If the Guarantee has been terminated in accordance with Clause 8 above, the Beneficiary may present a demand under the Guarantee for the full Guaranteed Amount, irrespective of whether the Company fulfils its obligations. The Beneficiary may retain the Guaranteed Amount paid by the Guarantor as security for future obligations for as long as the Company shall provide security to the Beneficiary under the terms of the Licence.

12. This Guarantee and any non-contractual obligations arising out of or in connection with it shall be governed by, and construed in accordance with the laws of […].

13. The Guarantor hereby submits to the jurisdiction of [..].

    [Date/Place]

    [**BANK**]

    _____
    Signature
    Name with block letters:

SCHEDULE 4

Regulation 13(3).

APPLICATION FOR A LICENCE TO MANAGE PETROLEUM WASTE.

(To be completed in Triplicate)

Part A: General

1. Name, address and legal status of the applicant (*whether individual, partnership or company*)

_____

_____

2. Technical competence and experience of applicant *(attach supporting documents)*

_____

_____

3. Financial capacity of the applicant

Provide documents demonstrating the financial capacity of the applicant including, a detailed statement of the applicant's assets and liabilities signed by the applicant, or in the case of an applicant which is a body corporate, accompanied by—

(i) certified copies of the last balance sheet and of the last profit and loss account, if any, incorporating the results of the last financial year, and which have been audited by the company's auditors, including every document required by law to be annexed or attached to the certified copies;

(ii) a certified copy of the report of the auditors;

(iii) a detailed statement of the financial resources available to the applicant to undertake the business under the licence;

(iv) Nature of financial security (insurance and any other form of security)

_____

_____

Part B: Where the application is for transportation of petroleum waste;

1. A description of the nature and type of vessels and equipment to be used for transportation of the petroleum waste (*include registration number and model as appropriate*)

   _____
   _____
   _____
   _____

2. Proof of safety checks of the transportation vehicles for road worthiness and suitability to transport the petroleum waste from a competent government ministry, department or agency *(attach additional information if necessary)*

   _____
   _____

3. Carriage capacity of the vessel to be used in transportation of petroleum waste

   _____
   _____

4. Quantity of petroleum waste per vessel to be transported (tonnes/kg per annum) and source of waste

   _____
   _____

5. Collection schedule for the transportation of the category of petroleum waste for which the licence is sought

   _____
   _____

6. Licensed sites/plant to which petroleum waste is to be transported (attach additional information if necessary*)*

   _____
   _____

Part C: Where the application is for storage of petroleum waste;

1. Proposed location of the storage facility (*Block No*. *Plot No. village, parish, sub-county, county, district/municipality*)

   _____
   _____

2. Description of the layout and design of the facility, including ventilation or other measures, and suitability for storage of the specified waste *(describe and attach proposed structural plans, including site layout and decommissioning plans)*

   _____
   _____

3. Source of the petroleum waste (*i.e. where the waste is to be collected from to the point of storage*).

   _____
   _____

4. Type of waste to be stored and describe whether liquid, solid or gaseous and their possible impacts.

   _____
   _____

5. Quantity of waste to be stored in kg or tons for solids; or in cm^3 if liquids or gases and capacity of disposal site

   _____
   _____

6. Type of containers in which the waste is to be packaged

   _____
   _____

7. Labels on the container (*describe and attach sample)*

   _____
   _____

8. Are there any other materials stored or to be stored in the facility? *(describe)*

   _____
   _____

9. Description of the surroundings of the facility (*whether industrial, residential, commercial and whether it is near schools or recreational areas)*

_____

_____

10. Duration of storage applied for

_____

_____

11. Final destination of the waste

_____

_____

12. Description of safety measures at the facility

_____

_____

13. Measures for containment and treatment of leakage or leachate, if applicable

_____

_____

Part D: Where the application is for a treatment or disposal facility;

1. Proposed location of the facility *(Block No., Plot No. village, parish, sub-county, county, district/municipality)*

_____

_____

2. Proof of approval by authority responsible for physical planning and building control

_____

_____

3. Specifications of the layout, design and construction of the facility *(describe and attach proposed structural plans, including site layout and decommissioning plans*

_____

_____

4. Type of waste to be treated or disposed and describe whether liquid, solid or gaseous and their possible impacts

_____
_____

5. Quantity of waste to be treated or disposed per annum: in kg or tons for solids; or in m^3 if liquids or gases and capacity of treatment or disposal facility

_____
_____

6. Type of treatment or disposal technique to be used at the facility
   (a) Treatment _____
   (b) Land fill_____
   (c) Compost_____
   (d) Incinerator_____
   (e) Other *(specify)*_____

7. Estimated life span of the facility (attach a preliminary plan for decommissioning),

_____
_____

8. Proposed acreage/area of the facility

_____
_____

9. Description of the surroundings of the facility (*describe whether industrial, residential, commercial and whether it is near schools or recreational areas)*

_____
_____

10. Measures for containment and treatment of leakage or leachate

_____
_____

11. The proposed methods for pollution prevention and abatement

_____
_____

12. The proposed operation, monitoring and control plan (attach)

_____
_____

13. Copy of certificate of approval of environment assessment

_____
_____

Part E: Final provisions

1. Any other information/approvals

_____
_____

Date: _____
Signature: _____
Name of applicant_____
Designation and title of applicant _____
Contact information (phone number, e-mail and other) _____
_____

(For Official Use Only)

Comments of the lead agency *(attach additional comment as necessary)*

_____
_____
_____
_____

Where applicable, comments from the public (attach additional comments as necessary)

_____
_____
_____
_____

Application received by _____on _____20_____
Fee paid Shs _____ (in words) _____

Inspections of the National Environment Management Authority

_____
_____

In respect of an application for storage, treatment or disposal of waste –
1. Type of facility

_____

2. Adequacy of the facility
The availability of adequate and appropriate facilities and equipment to transport, store, treat or dispose of waste for which the application is made.

_____
_____

In respect of an application for transportation of waste –
1. Registration number and model of vessels to transport waste

_____
_____

2. Proof of safety checks of the transportation vessels for road worthiness and suitability to transport the waste from a competent authority (attach additional information if necessary)

_____
_____

Comments of the Authority *(attach additional comment as necessary)*

_____
_____
_____
_____

Decision of the technical committee on pollution control

_____
_____
_____
_____

_____	_____
Date	Chairperson, Technical Committee on Pollution Control, National Environment Management Authority.

Date when decision was communicated to applicant *(attach communication to this form)*

_____	_____
Date	Signature

_____
Chairperson, Technical Committee on Pollution Control.

SCHEDULE 5

Regulation 13(3), 20(2)(g) and 47(2) and (5).

PRESCRIBED FEES*.

(a) Application for licence	Shs. 100,000.
(b) Licence fee	
(a) transport of waste	800,000
(b) to own/operate a waste disposal site/plant	1,000,000
(c) export of waste	500,000
(d) import of waste	800,000
(e) storage of waste	500,000
(c) Transboundary movement of waste:	
(a) movement document for transboundary movement	500,000
(b) Notification document for transboundary movement of waste	300,000

SCHEDULE 6

Regulation 22(1).

LIST OF HAZARDOUS CHARACTERISTICS.

UN	CODE	Characteristics Class[1]
1	HI.	Explosive. An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or waste) which is in itself capable by chemical reaction or producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.
2.1	H2.1	Flammable gases. Gases which at 20 °C and a standard pressure of 101.3 kPa are ignitable when in a mixture of 13 per cent or less by volume with air; or have a flammable range with air of at least 12 percentage points regardless of the lower flammable limit. Flammability shall be determined by tests or by calculation in accordance with methods adopted by ISO (see ISO 10156:1996). Where insufficient data is available to use these methods, tests by a comparable method recognized by a national competent National Environment Management Authority may be used.
2.3	H2.3	Toxic gases. Gases which are known to be so toxic or corrosive to humans as to pose a danger to health; or are presumed to be toxic or corrosive to humans because they have an LC50 value equal to or less than 5000 ml/m^3 (ppm).

1 Corresponds to the hazardous classification system included in the United Nations Recommendations on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rev. 5. United Nations, New York, 1988).

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 waste otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5oC, closed-cup test, or not more than 65.6oC, 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 difference would be within the spirit of this definition).
4.1	H4.1	Flammable solids Solids, or waste solids, other than those classed 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 waste liable to spontaneous combustion. Substances or waste 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 waste which, in contact with water emit flammable gases. Substances or waste 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 waste 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 waste which contain the bivalent-O-O-structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition.
6.1	H6.1	Toxic or Poisonous (Acute). Substances or waste 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 extremely hazardous to health. Substances or waste containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.
8.	H8	Corrosives. Substances or waste 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 waste which, by interaction with air or water, are liable to give off toxic gases in dangerous quantities.
	H11	Toxic (delayed or chronic). Substances or waste which, by intersection with air or water, are liable to give off toxic gases in dangerous quantities. Substances or waste which, if they are inhaled or ingested or if they penetrate the

	skin, may involve delayed or chronic effects, including carcinogenicity.
H12	Ecotoxic. Substances or waste which if released present or may present immediate or delayed adverse impacts to the environment by means of bio-accumulation and/ or toxic effects upon biotic systems.
H13	Capable, by any means, after disposal, of yielding another material, e.g. leachate, which possesses any of the characteristics listed above.

SCHEDULE 7

Regulation 22(1).

GUIDELINES FOR DETERMINATION OF SOME HAZARDOUS CHARACTERISTICS.

	Testing methods	Judging criteria
1.	Thermal analysis test using 2,4-dinitrotoluene and diben-zoyl peroxides as standard substances, as specified in Annex 1	The results of thermal analysis of test substance are placed on the rectangular coordinates, where the common logarithm of corrected initiation temperature (real-measured initiation temperature – 25°C) is on X axis (horizontal) and the common logarithm of calorific value is on Y axis (vertical). Then, a plot of the common logarithm of corrected initiation temperature and adjusted calorific value (real-measured calorific value multiplied by 0.7) of 2,4-dinitrotoluene and a plot of the common logarithms of corrected initiation temperature and adjusted calorific value (real-measured calorific value multiplied by 0.8) of dibenzoyl peroxide are placed in the same coordinate. The criterion is whether the plot of test substance in question is placed on or above the line to link the plots of 2, 4-dinitrotoluene and dibenzoyl peroxides.

	Testing methods	Judging criteria
2.	Flash point test by Tag closed cup apparatus, as specified in Annex 2.A (Flash point test by Seta closed cup apparatus as specified in Annex 2.B. should be utilized instead, in case that, flash point measured by Tag closed cup apparatus be between 0°C and 80°C and also kinetic viscosity of test substance in question at that flash point is of 10 cent-stokes or more.)	Flash point of 60.5°C or less.
3.	Small gas flash ignition test, as specified in Annex 3.A. and flash point test by Seta closed cup apparatus, as specified in Annex 3.B.	The criteria are: (a) whether test substance ignites within 10 seconds and burning continues by small gas flash ignition test, or (b) whether flash point is less than 40C by Seta closed cup flash point test.
4.	Spontaneous combustion test as specified in Annex 4	The criteria: (a) whether gas substance combusts; or (b) whether the filter paper becomes scorched.
5.	Reaction-to-water test, as specified in Annex 5	The criteria are: (a) whether gas generated by the reaction of test substance to water auto ignites or catches fire; or (b) whether gas generated per one kilogram of test substance is one litre or more and also has flammable component.

	Testing methods	Judging criteria
6.	Burning test using ammonium per as Standard substance, as specified in Annex 6.A.*(applicable only for test substance in solid form)*	The criterion is whether the burning time of test substance is equal to or shorter than that of the standard substance
7.	Burning test using 90% nitric acid solution as standard substance, as specified in Annex 6.B. *(applicable only for test substance in liquid form)*	The criterion is whether the burning time of test substance is equal to or shorter than that of standard substance.
8.	Oral toxicity test, as specified in Annex 7.A.	(a) LD_{50} of 200 mg/kg or less*(applicable for test substance in solid form)* (b) LD_{50} of 500 mg/kg or less*(applicable for test substance in liquid form)*
9.	Dermal toxicity test as specified in Annex 7.B	LD_{50} of 1,000 mg/kg. or less
10.	Inhalation toxicity test, as specified in Annex 7.C. *(applicable only for test substance in form of dust or mist.)*	LC_{50} of 10 mg/kg or less
11.	Corrosion test for metals, as specified in Annex 8.	Corrosion rate of Metal chip of 6.25 mm/year.

Remarks:

1. Test substances which are determined not to fall into the groups of class 1 *(explosives*) and class 5.2 (organic peroxides) based on the rules of the United Nations Recommendations on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rev. 7) adopted in New York by corresponding test given in the relevant middle row of the same item.

2. Test substances which are determined not to fall into the group of class 3 *(flammable liquids)* based on the rules of the United Nations Recommendations shall be recognized as not possessing the properties given in the lower row of item 2 for the corresponding test given in the relevant middle row of the same item.

3. Test substances which are determined not to fall into the group of class 4 *(flammable solids)* based on the rules of the United Nations Recommendations shall be recognized as not possessing the properties given in the lower row of item 3 for the corresponding test given in the relevant middle row of the same item.

4. Test substances which are determined not to fall into the group of class 5.1*(oxidizing substances)* based on the rules of the United Nations Recommendations shall be recognized as not possessing the properties given in the lower row of item 4 for the corresponding test given in the relevant middle row of the same item.

5. Test substances for which no death of laboratory animals are observed as a result of fixed dose toxicity test specified in Annex 7.D., shall be recognized as not possessing the properties given in the lower rows of item 7 for the corresponding tests given in the relevant middle rows of the same item.

6. Test substances which are determined not to fall into the group of class 8 *(corrosive substances)* based on the rules of the United Nations Recommendations shall be recognized as not possessing the properties given in the lower row of item 8 for the corresponding test given in the relevant middle row of the same item.

Annex 1.

The thermal analysis test with 2, 4-dinitrotoluene and dibenzoyl peroxides as standard substances uses the apparatus specified in item 1 to measure the starting heating temperature and the heating value of the waste in question and the standard substances when heated according to the testing methods specified in item 2.

1. Apparatus.

The apparatus shall be a differential scanning calorimetry (DSC) or a differential thermal analysis (DTA) apparatus using aluminium oxide (α) as standard substance.

2. Testing methods.

(1) Testing methods for 2, 4-dinitrotoluene.

(a) Encapsulate 1mg. of 2, 4-dinitrotoluene and 1mg of the standard substance in a pressure-proof stainless steel cell with a burst pressure of 50 kfg/cm^2 or more, and load it on the apparatus. Then, heat it so that the temperature of the 2, 4-dinitrotoluene and the standard substance rises at a rate of 10°C in 60 seconds.

(b) Determine the initiation temperature of heat generation and calorific value from the chart obtained.

(2) Test procedure for dibenzoyl peroxide.
Carry out the procedure from (1) (a) to (b), using 2 mg each of dibenzoyl peroxide and the standard substance.

(3) Testing methods for testing substance.
Carry out the procedure from (1) (a) to (b), using 2 mg. each of the test substance and the standard substance.

Annex 2.

A. Flash point test by Tag closed cup apparatus.

The flash point test by Tag closed cup apparatus uses the apparatus specified in item 1. The flash point of the waste in question is measured in the laboratory specified in item 2 according to the testing methods specified in item 3.

1. Apparatus.

The apparatus shall be a Tag closed cup apparatus.

2. Laboratory.
The laboratory shall be in a place under atmospheric pressure in almost windless conditions.

3. Testing methods.
(1) Put 50 cm^3 of a test substance in a test cup and then put the lid in place.

(2) Produce a test flame and adjust its size to a diameter of 4 mm.

(3) Adjust the heating condition of the bath so that the temperature of the test substance will rise by 1°C per 60 seconds. When the temperature of the test substance reaches the value of 5°C below the expected flash point (the temperature at which the test substance flash is to be confirmed, the same applying hereafter), open the shutter to make the test flame apply to the vapour space of the test cup for about one second and return it to the original position. In this case, do not rapidly adjust the test flame up and down.

(4) Where the test substance does not flash in (3), open the shutter every time the temperature of the test substance rises by 0.5°C, make the test flame apply to the vapour space of the cup for one second, and return it to the original position. Repeat this operation until the flash is observed.

(5) Where the test substance flashes at a temperature lower than 60°C in (4) and, in addition, the difference between that temperature and the expected flash point does not exceed 2°C, the temperature at which the test substance flashes shall be deemed the flash point of the test substance.

(6) When the test substance flashes in (3) or when there is a difference between the temperature at which the test substance flashes in (4) and the expected flash point exceeds 2°C, repeat the procedures from (1) to (4).

(7) Where the temperature at which the test substance flashes in (4) or (6) is not less than 60°C, carry out the following procedure.

(8) Carry out the procedure described in (1) and (2).

(9) Adjust the heating condition of the bath so that the temperature of the test substance rises by 3°C within 60 seconds. When the temperature of the test substance reaches a value 5°C below the expected flash point, open the shutter to make the test flame apply to the vapour space of the cup for about one second and then return it to the original position. In this case, do not rapidly adjust the test flame up and down.

(10) Where the test substance does not flash in (9), open the shutter every time the temperature of the test substance rises 1°C to make the test flame apply to the vapour space of the cup, and then return it to the original position. Repeat this operation until the test substance catches fire.

(11) Where the difference between the temperature at which the test substance flashes in (10) and the expected flash point does not exceed 2°C, the temperature at which the test substance flashes shall be deemed the flash point of that test substance.

(12) When the test substance flashes in (9) and/or when there is a difference between the temperature at which the test substance flashes in (10) and the expected flash point exceeds 2°C, repeat the procedure from (8) to (10).

Flash point test by Seta closed cup apparatus.
The flash point test by Seta closed cup apparatus shall measure the flash point of the waste in question by using the apparatus specified in item 1 at the laboratory specified in item 2 and according to the testing methods specified in item 3.

1. Apparatus.

The apparatus shall be a Seta flash closed cup apparatus.

(a) Testing methods.

(1) Heat or cool a sample cup to the expected flash point, keep the sample cup at that temperature, pour 2 cm^3 of the test substance (when the expected flash point is lower than the room temperature of the laboratory, the sample shall be cooled down to the expected flash point) in the cup, and then immediately place the lid and close the shutter.

(2) Retain the temperature of the sample cup at the expected flash point for one minute.

(3) Produce a test flame and adjust it to a diameter of 4 mm.

(4) After one minute, open the shutter to make the test flame apply to the sample cup for about 2.5 seconds, and then return it to the original position. In this case, do not rapidly adjust the test flame up and done.

(5) Where the sample flashes in (4), lower the expected flash point stepwise and perform the procedures from (1) to (4) until it does not flash anymore. Where the sample does not flash in (4), raise the expected flash point stepwise and perform the procedures from (1) to (4) until it flashes.

Annex 3.

A. Small gas flash ignition test.

The small gas flash ignition test measures the duration of time from when the waste in question makes contact with the flame to when a flame is ignited and observes whether burning continues or not. This test is conducted at the laboratory specified in item 1 and according to the testing methods specified in item 2.

1. Laboratory.

The laboratory shall be in a place under atmospheric pressure at a temperature of 20^0C and a humidity of 50% in almost windless conditions.

2. Testing methods.

(1) Put 3 cm^3 of the test substance (conditioned for 24 hours or more at a temperature of 20°C in a desiccator containing silica gel for drying) on an impervious low-heat conducting base plate with a thickness of 10 mm or more. In this case, a powdery or granular substance shall be put on the impervious low-heat conducting base plate in a hemispherical shape.

(2) Keep a flame of liquefied petroleum gas (a diffusion flame from an ignition device with a rod-like nozzle, and the flame length adjusted to 70 mm, with the nozzle of the ignition device held upward) in touch with the test specimen for 10 seconds. (The contact area of the flame and test substance shall be 2 cm^2 and the angle of contact shall be approximately 30°C).

(3) Measure the time after the flame makes contact with the test substance until it is ignited. Determine whether burning (including burning with no flame) continues. A test substance shall be judged to have undergone continuous burning in the case where it burns out completely during its contact with the flame, where it burns out completely within 10 seconds after the flame is detached, or where it continues to burn for 10 seconds or more after the flame is detached.

B. Flash point test by Seta closed cup apparatus.

The flashpoint test point test by Seta closed cup apparatus measures the flash point of the waste in question using the apparatus specified in item 1 at the laboratory specified in item 2 and according to the testing methods specified in item 3.

1. Apparatus.
The apparatus shall be a Seta flash closed cup apparatus.

2. Laboratory.
The laboratory shall be in a place under atmospheric pressure in almost windless conditions.

3. Testing methods.
   (1) Heat or cool a sample cup to the expected flash point, and while keeping the sample cup at that temperature, put 2 g of the test substance in the cup (where the expected flash point is lower than the room temperature in the laboratory, the sample shall be cooled down to the expected flash point), and immediately place the lid and close the shutter.

   (2) Retain the temperature of the sample cup at the expected flash point for five minutes.

   (3) Produce a test flame and adjust its diameter to 4 mm.

   (4) After five minutes, open the shutter to make the test flame apply to the vapour space of the sample cup for about 2.5 seconds and then return it to the original position. In this case, do not rapidly adjust the test flame up and down.

   (5) Where the sample flashes in (4), lower the expected flash point stepwise and perform the procedures from (1) to (4) until it does not flash anymore. Where the sample does not flash in (4), raise the expected flash point stepwise and perform the procedures from (1) to (4) until it flashes.

Annex 4.

The spontaneous combustion test is conducted at the laboratory specified in item 1 and according to the testing methods specified in item 2. This test examines whether or not the waste in question combusts and whether or not the filter paper becomes scorched when exposed to air.

1. Laboratory.
   The laboratory shall be in a place under atmospheric pressure at a temperature of 20°C and a humidity of 50% in almost windless conditions.

2. Testing methods.
   (1) Testing methods for solid substance.
   (a) Drop 2 cm^3 of the test substance onto an impervious low-heat conducting base plate (with a heat transfer coefficient 86 cal./

(m.hr.C) or less) from a height of 1 m and determine whether spontaneous combustion occurs during the fall or within 5 minutes after falling. In this case, when the test substance does not pass through a 0.3 mm sieve, the test substance should be pulverised to pass through the same sieve.

(b) Where spontaneous combustion does not occur, repeat the same procedure six times, and determine whether spontaneous combustion occurs once or more.

(2) Testing methods for liquid substance.

(a) Fill a porcelain cup with a diameter of approximately 70 mm with diatomaceous earth or silica gel to a height of 5 mm.

(b) Drop the entire 5 cm^3 of the test substance onto the porcelain cup from a height of 20 mm for 30 seconds at a constant speed using a syringe, and determine whether spontaneous combustion may occur within 5 minutes from first drop.

(c) Where spontaneous combustion does not occur in (b), repeat this operation six times using new samples of the waste in question. If spontaneous combustion does not occur for any of the six trails, conduct the test shown in (d).

(d) Drop the entire 0.5 cm^3 of the test substance onto filter paper (conditioned for 24 hours or more at a temperature of 20°C in a desiccators containing silica gel for drying) with a diameter of 90 mm placed on a porcelain cup with a diameter of approximately 70 mm from a height of 20 mm for 30 seconds at a constant speed using a syringe. Determine whether spontaneous combustion or scorching of the filter paper occurs within 5 minutes.

Annex 5.

The reaction to water test is conducted at the laboratory specified in item 1 and according to the testing methods specified in item 2. This test examines whether or not the gas generated by the reaction of the waste in question to demineralised water combusts or whether or not the generated gas ignites when in proximity to flames; measures the amount of gas generated when the waste in question is added to demineralised water; and analyses the composition of the generated gas.

1. Laboratory.
   The laboratory shall be in a place under atmospheric pressure at a temperature of 20°C and a humidity of 50% in almost windless conditions.

2. Testing methods.
   (1) Pour 20°C demineralised water into a beaker or an evaporating dish and put a 2 mm. diameter of test substance (5 millimetres for liquid substance) into the water, and then determine whether any gas is generated and whether the generated gas is auto-ignited. Where the generated gas is auto-ignited, the following procedures do not need to be implemented.

   (2) Make the test substance into a pile 20 mm high and 30 mm in diameter with a hollow in the top. Drop a few drops of 20°C demineralised water in the hollow and determine whether any gas is generated and whether the generated gas is auto-ignited. Where the generated gas is auto-ignited, the following procedures do not need to be implemented.

   (3) Put a filter paper supporting stand at the bottom of a beaker with a capacity of 500 cm^3, pour 20°C of demineralised water up to the top face of that stand, and put a piece of filter paper with a diameter of 70 mm on it. After adjusting the water volume so that the filter paper floats on the water surface, put 50 mm^3 of the test substance at the centre of the filter paper, and determine whether the generated gas is auto-ignited. Where spontaneous combustion of the generated gas occurs, the following procedures need not be implemented.

   (4) Where the generated gas is not auto-ignited in (3), apply a flame to the gas and determine whether the gas catches fire.

   (5) Where the generated gas is not auto-ignited or generation of gas is not recognized in test (3) or where the generated gas does not catch fire in test (4), put 2 g of the test substance in a round-bottomed flask with a capacity of 100 cm^3, immerse

it in a basin with a temperature kept at 40°C and promptly pour in 50 cm^3. Of demineralised water of 40°C. Shaking the contents of the flask with an agitating ball of 12 mm. in diameter and a stirrer agitator, measure the volume of generated gases for one hour.

(6) The maximum value of the generated gas measurement made every hour (converted into the generation volume per kilogram of test substance) shall be deemed the generated gas volume for one operation.

(7) Use a detecting tube, gas chromatography, etc., to determine whether the generated gas contains a flammable component.

Annex 6.

A. Burning test using ammonium per as the standard substance.

In a burning test using ammonium per as the standard substance, the burning time shall be measured for a mixture of a standard substance as specified in item 1, and wood powder as specified in item 2, and a mixture of a test substance and wood powder as specified in item 2, burned in a laboratory as specified in item 3, according to the test procedure for confirmation test specified in item 4.

1. Standard substance.
   The particle size of standard substance shall be such that it can pass through a 300 m (approximately 50 mesh) sieve but cannot pass through a 150 μm. (approximately 100 mesh) sieve.

2. Wood powder.
   (1) The wood powder shall be prepared from sapwood of Japanese cedar.

   (2) The particle size of wood powder shall be such that it can pass through a 500 μm. (approximately 30 mesh) sieve but cannot pass through a 250 μm. (approximately 60 mesh) sieve.
3. Laboratory.
   The laboratory shall be in a room under atmospheric pressure at a temperature of 20°C and a humidity of 50% in almost windless conditions.

4. Testing methods.

(1) Testing methods for standard substance.

(a) Make a uniform mix of the standard substance (conditioned for 24 hours or more at a temperature of 20°C in a desiccators containing silica gel for drying) and the wood powder (dried for 4 hours at a temperature of 105°C, and then conditioned for 24 hours or more at a temperature of 20°C in a desiccators containing silica gel for drying), the same applying to paragraphs (2)(a), B.1. (1)(a) and B.1(2) (a) to provide a 30 g. mixture with a weight ratio of 1:1.

(b) Put the mixture of (a) in a conical cup with a height to bottom diameter ratio of 1:1.75, then put it upside down on an impervious low-heat conducting base plate with a thickness of 10 mm or more (the heat transfer coefficient at a temperature of 0°C shall be 86 cal/(m.hr.C) or less, the same applying hereafter) to provide a conical pile, followed by shaping and conditioning for one hour.

(c) Gently press an ignition source (nichrome wire in the form of a circular loop with a diameter of 2 mm heated to a temperature of approximately 1,000°C by applying electricity) around the base part of the conical pile prepared in (b) above until the entire circumference of the base part is ignited. In this case, the duration for which the ignition source is kept in contact with the base part shall be up to 10 seconds.

(d) Measure the time required for burning (from the time when the entire circumference of the base part of the pile described in (b) is ignited to the time when no flame is observed or, where flaming occurs intermittently, to the time when the final flame is extinguished.

(2) Testing methods for test substance.

(a) Uniformly mix up the test substance (which can pass through a 1.18 mm sieve and has been conditioned for 24 hours or more at a temperature of 20°C in a desiccators containing silica gel for drying) and the wood powder to provide 30 g mixtures with a weight ratio of 1:1 and 4:1. In this case, if the test substance does not contain components that can pass through a 1.18 mm sieve, the test substance shall be

pulverized to become able to pass through the sieve for the purpose of this test.

(b) Carry out the same procedure as described in (1) (b) and (c) (d) for each of the mixtures with a weight ratio of 1:1 and 4:1.

(c) The shorter one of the burning time measures in (b) shall be taken as the burning time of the mixture of the test substance and wood powder.

B. Burning test using 90% nitric acid solution as the standard substance. In aborning test using nitric acid solution as the standard substance, the burning time shall be measured for a mixture of 90% nitric acid solution and wood powder and a mixture of a test substance and wood powder, which are burned in a laboratory as specified in item A.3 according to the testing methods specified in item 1.

1. Testing methods.

(1) Testing methods for 90% aqueous solution of nitric acid.

(a) Put 15 g of the wood powder in a conical cup with a height to bottom diameter ratio of 1:1.75, and then put it upside down on a flat-bottom evaporating dish with a diameter of 120 mm to provide a conical pile, followed by shaping and conditioning for one hour.

(b) Pour 15 g of the 90% aqueous solution of nitric acid uniformly over the conical pile prepared in (1) (a) using a syringe to ensure its mixing with the wood powder.

(c) Keep an ignition source (nichrome wire in the form of a circular loop with a diameter of 2 mm heated to a temperature of approximately 1,000°C by applying electricity) in contact with the base part of the conical pile prepared in (b) above until the entire circumference for the base part is ignited. In this case, the duration for which the ignition source is kept in contact with the base part shall be up to 10 seconds.

(d) Measure the time required for burning.

(2) Test procedure for test substance.

(a) Put 15 g and 6 g of the wood powder in a conical cup with a height to bottom diameter ratio of 1:1.75, and then put them upside down on flat-bottom evaporating dishes with an outer diameter of 20 mm and 80 mm respectively to

form a conical pile, followed by shaping and conditioning for one hour.

(b) Pour 15 g and 24 g of the test substance uniformly over the 15 g and 6 g conical piles prepared in (a) using a syringe to ensure their mixing with the wood powder.

(c) Carry out the procedure described in (1) (c) to (d) for each of the mixtures prepared in (b).

(d) The shorter one of the burning times measured in (c) shall be taken as the burning time of the mixture of the test substance and wood.

Annex 7.

A. Oral toxicity test.

The oral toxicity test measures the amount of substance orally administered to induce mortality in half of the laboratory animals. This test is conducted according to the testing methods specified in item 2 using the animal species specified in item 1.

1. Selection of animal species employed.

The animal employed for testing is a rat of commonly used laboratory strains with an age of approximately 6 weeks.

Ten rats (5 male and 5 female) should be used for each dose group. Healthy rats should be selected and acclimatized to the laboratory conditions in the testing cage for at least 5 days. The weight variation in rats used in testing should not exceed +20% of the mean weight.

2. Test methods.

(1) The test substance should be conditioned for the use in testing. Where the test substance is in solid form, the test substance should be dissolved in water or suspended in a suitable vehicle. When some agent for suspending the test substance is utilized, there should be a reference dose group which is dosed only with such an agent. The same procedure should be applied for test substances in liquid form with high kinematic viscosity.

(2) The test substance administered in a single dose to the rats by gavage using a stomach tube. Dose levels should have three levels or more and be selected so that it would produce evident toxicity and mortality.

(3) Rats should be observed for 14 days after dosing and the mortality of rats should be observed.

(4) By using statistical methods on the basis of the number of dead rats within 14 days after dosing, LD_{50} should be calculated.

B. Dermal toxicity test.

(a) The dermal toxicity test measures the amount of substance administered to induce mortality in half of the laboratory animals. This test is conducted according to the testing methods specified in item 2 using the animal species specified in item 1.

(b) Selection of animal species employed.

The animal employed for testing is a rat of commonly used laboratory strains with an age of approximately 6 weeks.

Ten rats (5 male and 5 female) should be used for each dose group. Healthy rats should be selected and acclimatized to the laboratory conditions in the testing cage for at least 5 days. The weight variation in rats used in testing should not exceed +20% of the mean weight.

2. Test procedure.

(1) The test substance should be conditioned for the use in testing. Where the test substance is in solid form, the test substance should be pulverized and moistened with water or other appropriate solvent etc in order to ensure good contact with the skin. When some solvent is utilized, there should be a reference dose group which is dosed only with such a solvent.

(2) Approximately 24 hours before the test, fur should be removed by close-clipping from the dorsal area of the trunk of rats. Care should be taken to avoid abrading the skin. Area for removal should be more than 10% of the total area of the surface of the body.

(3) The test substance should be uniformly applied to the area, where fur has been removed, and should be kept in contact

for 24 hours. Dose levels should have three levels or more and should be selected so that it produces evident toxicity and mortality. In this case, the part applied should be covered by a gauze patch which is to be held in place with non-irritating tape, or by other appropriate methods, in order to prevent the rats from coming in contact with it.

(4) Rats should be observed for 14 days after dosing and the mortality of rats should be observed.

(5) LD_{50} should be calculated by using statistical methods on the basis of the number of dead rats within 14 days after dosing.

C. Inhalation toxicity test.

The inhalation toxicity test measures the amount of substance administered to induce mortality in half of the laboratory animals. This test is conducted according to testing methods specified in item 3 using the animal species specified in item 1 and the apparatus specified in item 2.

1. Selection of animal species employed.

The animal employed for testing is a rat of commonly used laboratory strains with an age of approximately 6 weeks.

Ten rats (5 male and 5 female) should be used for each dose group. Healthy rats should be selected and acclimatized to the laboratory conditions in the testing cage for at least 5 days. The weight variation in rats used in testing should not exceed +20% of the mean weight.

2. Apparatus.

The apparatus should be the inhalation toxicity testing apparatus which is composed of (1) a device for conditioning the test substance in specific concentration and for supplying the conditioned test substance, (2) an inhalation room where the rats are kept, (3) a device which can measure continuously the concentration of the test substance, and other devices.

3. Testing methods.

(1) Rats should be kept in the inhalation room for one hour, where the concentration of the test substance is conditioned and kept at specified concentration. Dose levels should have three levels or more and should be selected so that it produces evident toxicity and mortality.

(2) Rats should be moved to the feeding cage and observed for 14 days after dosing and the mortality of rats should be observed.

(3) LD_{50} should be calculated by using statistical methods on the basis of the number of dead rats within 14 days after dosing.

D. Fixed dose toxicity test.

The fixed dose toxicity test is conducted according to the testing methods specified in item 2 using the animal species specified in item 1 and examines the presence of mortality among the species tested.

1. Selection of animal species employed.

The animals employed for testing include 3 males and 3 females each of rats and mice of commonly used laboratory strains with an age of approximately 6 weeks.

2. Test methods.

(1) The test substance is administered in a single dose to the rats by gavage using a stomach tube. When the test substance is in a solid form, the test substance should be dissolved in water or suspended in a suitable vehicle.

When some agent for suspending the test substance is utilized, there should be a reference dose group which is dosed only with such an agent. The same procedures should be applied for a test substance in liquid form with high kinematic viscosity. The dose level of the test substance administered should be 2,000 mg/1 kilogram body weight.

In case that the test substance is in the form of dust or mists, the animal employed should be kept for one hour in the inhalation room where the concentration should be conditioned and kept at 10mg/litre

(2) Rats should be observed for 14 days after dosing and the mortality of rats should be observed.

Remarks.
Half-death weight refers to the value in milligrams for one kilogram by weight of test species when the mortality of half of the species number has been confirmed.

Annex 8.
The corrosion test for metals uses the apparatuses specified in item 1 and, according to the testing methods specified in item 2, soaks the test metal chip into the test substance and measures the decrease in mass after soaking.

1. Apparatuses.

(1) Soaking devices.
A flat-bottom glass triangular flask with a capacity of 1,000 cm^3 which is attached with a glass vertical reverse condenser with enough capacity for cooling.

(2) Heating device.
A pyrostat and other necessary devices which can keep the test substance at 55°C (hereafter referred to as heating devices).

(3) Chemical balance.
A chemical balance which can measure at the level of 1 milligram.

(4) Polishing paper.
Polishing paper No. 600 specified by the JISR 6252 "Polishing Paper" (1976).

2. Testing methods.

(1) Polishing a test metal chip of 10 cm. long, 1 cm. wide and 1 cm. thick, which is specified in JISG 3101 (1987) with the

polishing paper. After washing the polished chip by water, remove the oil compound with an appropriate solvent such as ethanol.

(2) Measure the weight of the test chip by using a chemical balance.

(3) Pour the test substance in liquid form into the soaking device and keep the test metal chip with an appropriate holder so that one half of the test metal chip in the distance of length will be in the test substance.

(4) Use the heating device to heat the test substance and the test metal chip up to 55°C and keep the temperature for 120 hours.

(5) After 120 hours soaking, take out the test metal chip and wash it by water. Then remove the oil component as described in (1). Measure the weight by using a chemical balance.

(7) Calculate the corrosion rate by using the following formula –

$X = W \times 10 \times 365/d \times S \times T$
X = corrosion rate (unit: mm./year)
W = weight reduction after soaking (unit: grams)
d = density of the test metal chip (unit: g/cm^3)
S = surface area of the test metal chip soaked into the test substance (unit: cm^2)
T = time length for soaking (unit: days)

Remarks.
The conditions of the soaked portion and unsoaked portion (part in contact with the steam) of the test chip should be observed and recorded in as much detail as possible.

SCHEDULE 8

Regulation 23(1).

PETROLEUM WASTE MANIFEST.

Please print or type

<table>
<tr><td>Petroleum waste manifest</td><td>1.Licensee ID</td><td colspan="2">2. Page ….</td><td>3. Emergency Response Phone</td><td>4. Manifest tracking number</td></tr>
<tr><td colspan="6">5. Name of the licensee and mailing address (if different from mailing address)

Licensee’s phone

Licensee’s site address</td></tr>
<tr><td colspan="6">6. Transporter 1 company name
NEMA ID Number</td></tr>
<tr><td colspan="6">7. Transporter 2 company name
ID Number

NEMA</td></tr>
<tr><td colspan="6">8. Details of other transporter(s)
ID Number

NEMA</td></tr>
<tr><td colspan="6">9. Name of storage, treatment or disposal facility
ID Number
and site address

Facility’s phone

NEMA</td></tr>
<tr><td colspan="6">10. Specific site of origin of the petroleum waste</td></tr>
<tr><td rowspan="2">11. Petroleum waste description (including transportation proper name, hazard class, ID number and packaging group, if any)</td><td colspan="2">12.Containers</td><td rowspan="2">13.Total quantity</td><td rowspan="2">14. Unit Wt/ vol.</td><td rowspan="2">15.Waste codes</td></tr>
<tr><td>No.</td><td>Type</td></tr>
</table>

1.							
2.							
3.							
4.							

16. Chemical and physical composition of the petroleum waste

17. Any other special characteristics, requirements or knowledge related to the petroleum waste

18. Special handling instructions, and information on:

(i) any potential safety or environmental hazards;
(ii) normal storage stability and methods for safe storage;
(iii) the name and percentage of weight of active ingredients and names and percentages by weight of other ingredients;
(iv) flash point, if appropriate;
(v) address and telephone or fax number for specialist advice;
(vi) precautions and action required in the event of a spillage;
(vii) the name and percentage of weight of active ingredients and names and percentages by weight of other ingredients;
(viii) a statement of first aid measures and a direction that a physician must be contacted immediately;
(ix) directions for the disposal of the container and the petroleum waste in accordance with the National Environment Act, these Regulations and any other applicable law;
(x) a guarantee and any other information which may be in a material safety data sheets.

19. Location of storage, final treatment or disposal site
20. Date of waste dispatch or transfer
21. Expected date and time of arrival at the storage, treatment or disposal site
22. **LICENSEE'S CERTIFICATION**. I hereby declare that the contents of this consignment are fully and accurately described above by the proper transportation name, and are classified, packaged, marked and labelled/packaged, and are in all respects in proper condition for transport according to applicable laws. If export transportation and I am the primary exporter, I certify that the contents of this consignment conform to the terms of NEMA provided in the consent attached hereto. I certify that the waste minimization statement contained herein is true- (a)Licensee; or (b) Petroleum waste handler .
23. Licensee/ Petroleum waste handler's printed/typed name. Signature Day Month Year
24. Petroleum waste minimisation statement (describe how the waste has been minimised)

25. Export transportation. Transporter's signature (for export only)	Export from Uganda (Name location)	Port of exit Date of leaving Uganda

26. Transporter acknowledgement of receipt of petroleum waste.
Transporter 1 Printed/types name Signature Day Month Year
Transporter 2 Printed/types name Signature Day Month Year
Other transporter(s) Printed/types name Signature Day Month Year
27. Discrepancy

28a. Discrepancy indication space	Quantity	Type	Residue	Partial rejection	Full rejection
	Manifest Reference Number				

28b. Alternate waste management facility NEMA ID Number Facility's Phone
28c. Signature of alternate waste management facility Day Month Year

29. Petroleum Waste Report Management Method Codes (i.e. codes for petroleum waste treatment, disposal and recycling systems)			
1.	2.	3.	4.
30. Designated waste management facility owner: Certification of receipt of petroleum waste covered by the manifest except as noted in item 28a.			
Printed/types name Signature Day Month Year			

SCHEDULE 9

Regulation 30(1).

REQUIREMENTS RELATING TO STORAGE OF UPSTREAM PETROLEUM WASTE.

(1) The waste storage area should include an effective drainage system to prevent the transfer of pollutants to sensitive ecosystems and shall be fitted with-
   (a) wide enough drainage channels;
   (b) filter barriers; and
   (c) settling basins.

(2) The licensee or petroleum waste handler managing a waste storage area should-
   (a) regularly clean the established drainage system;
   (b) adequately cover liquid and solid waste at the storage areas to control spillage and other environmental risks; and
   (c) control pollutants resulting from the stored waste both solid and liquid.

(3) The licensee or petroleum waste handler managing a waste storage area shall regularly carry out self-monitoring and submit self-monitoring reports to the National Environment Management Authority and other relevant lead agency in accordance with the terms of the licence (or on a quarterly basis).

(4) Pits shall have levees (walls or berms) that are built at least one foot higher than the 100-year flood level;

(5) The liquid level in the pits shall not come within two feet of the top of the levees;

(6) Pits shall be constructed with natural or synthetic liners;

(7) If natural liners are used, they shall provide for hydraulic conductivity of no greater than $1 \times 10 -7$ cm/sec;

(8) If synthetic liners are used, they shall meet the same hydraulic conductivity criteria as well as the following requirements –

(a) pits shall be constructed with side slopes of 3:1;

(b) a sufficient excess of liner must be used in the pit to prevent tearing when the waste is added;

(c) the thickness must be less than 10 mm;

(d) the breaking strength must be greater than or equal to 90 lb;

(e) the bursting strength must be greater than or equal to 140 lb;

(f) the tearing strength must be greater than or equal to 25 lb; and

(g) the seam strength must be greater than or equal to 50 lb.

(h) The buffer depth between the covering liner and the topography level should be between 1to 1.5 meters.

(i) Impermeable materials shall be used for the containment of drilling waste to prevent release of the waste into the environment.

SCHEDULE 10

Regulation 42.

PRECAUTIONARY MEASURES FOR SECURITY OF WASTE MANAGEMENT FACILITY

1. A waste handler shall not operate a waste management facility unless access to the facility by unauthorized persons or by wild life is prevented by –
   (a) a 24-hour surveillance system that continuously monitors and controls entry to the facility, and for this purpose television monitors or an approved system, or surveillance guards present at the facility shall be used, or;
   (b) a barrier such as -
      (i) a 2.13 m high chain link fence topped with 3 strands of barbed wire to prevent scaling of the fence, or equally effective approved barrier, and
      (ii) a means of controlled entry, at all times, through gates or other entrances;

   (c) locks or locked covers on all valves, pumps, electrical controls and other operational controls which would be accessible if the prevention measures referred to in paragraph (a) or (b) above were breached; and

   (d) a sign, legible from a distance of at least 10 m, reading -
      (i) "DANGER — UNAUTHORIZED PERSONNEL KEEP OUT";
      (ii) "DANGER — AUTHORIZED PERSONNEL ONLY";
      (iii) "RESTRICTED AREA — AUTHORIZED PERSONNEL ONLY"; or
      (iv) equivalent wording, posted at each entrance to the facility and at such other locations as the National Environment Management Authority may require.

2. The owner of any hazardous material facility which manages reactive or ignitable hazardous substances shall –
   (a) provide and maintain a continuous 24-hour fire alarm system with smoke sensing alarms and heat sensing alarms capable of

automatically stopping any forced air ventilation systems in the facility and summoning a 24-hour external emergency response through -

(i) a local fire department;
(ii) a local response team; or
(iii) on site security staff who have immediate communication access to a local response agency;

(b) provide and maintain a fire suppression system specified by the Uganda Police Fire Brigade or where not so specified provide and maintain -

(i) a permanent, automatic system which uses foam, inert gas or dry chemical; or
(ii) one portable ABC rated fire extinguisher with a minimum 10 kg capacity for every 250 m2 of the facility's space;

(c) provide and maintain sufficient aisle space between containers of hazardous waste to allow the unobstructed movement of persons, fire protection equipment, spill control equipment and decontamination equipment to any part of the facility;

(d) design and construct the facility so that the walls, doors and floor are non-combustible with a minimum fire rating of 2 hours; and

(e) ensure that any heat required for the facility is provided only by indirect means such as hot water, steam or electrical resistance and not by any device which uses an open flame within 10 m of where waste are located, nor by any other device prohibited by the Uganda Police Fire Brigade.

3. A licensee and petroleum waste handler shall in additional provide for any other restrictions or measures as may be necessary for the safe management of petroleum waste, including restrictions on eating and drinking at the facility and placement of first aid facilities.

SCHEDULE 11

Regulation 47(2).

Form I

MOVEMENT DOCUMENT FOR TRANSBOUNDARY MOVEMENTS OF PETROLEUM WASTE.

<table>
<tr><td colspan="2">1. Corresponding to notification No:</td><td>2. Serial/total number of consignments:/</td></tr>
<tr><td colspan="2">3. Exporter - notifier Registration No: Name:

Address:
Contact person:
Tel: Fax:
E-mail:</td><td>4. Importer - consignee
Registration No:
Name:

Address:

Contact person:
Tel:
Fax:
E-mail:</td></tr>
<tr><td colspan="2">5. Actual quantity: Tonnes (Mg): m3:</td><td>6. Actual date of shipment:</td></tr>
<tr><td colspan="3">7. Packaging Type(s) (1): Number of packages:
Special handling requirements: (2) Yes: ☐ No: ☐</td></tr>
<tr><td colspan="3">8. To be completed by carrier’s representative More than 3 carriers</td></tr>
<tr><td>8.(a) 1st Carrier):
Registration No:
Name:
Address:

Tel:
Fax:
E-mail:

Means of transport (1):
Date of transfer:
Signature:</td><td>8.(b) 2nd Carrier:
Registration No:
Name:
Address:

Tel:
Fax:
E-mail:

Means of transport (1):
Date of transfer:
Signature:</td><td>8.(c) Last Carrier:
Registration No:
Name:
Address:

Tel:
Fax:
E-mail:

Means of transport (1):
Date of transfer:
Signature:</td></tr>
</table>

9. Person(s) who generates waste (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):
10. Disposal facility or recovery facility Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Actual site of disposal/recovery (2)	13. Physical characteristics (1):
11. Disposal/recovery operation(s)D-code / R-code (1):	14.Waste identification (fill in relevant codes) (i) Schedule 7): (ii) OECD code (if different from (i)): (iii) EC list of waste: (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: Customs code(s) (HS):

15.Exporter's - notifier's / generator's - producer's (4) 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, 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. Consignment received by importer - consignee (if not facility):
Date:
Name:
Signature:

TO BE COMPLETED BY DISPOSAL / RECOVERY FACILITY

18. Consignment received at disposal facilityqor recovery facility Date of reception: Accepted: Rejected*: *immediately contact competent authorities Quantity received: Tonnes (Mg):m3: Approximate date of disposal/recovery: Disposal/recovery operation (1): Name: Date: Signature	19. I certify that the disposal/recovery of the waste described above has been completed. Name: Date: Signature and stamp:

(1) See list of abbreviations and codes below (2) Attach details if necessary If more than 3 carriers, attach information as required in blocks 8 (a,b,c).	

FOR USE BY CUSTOMS OFFICES	
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	RECOVERY OPERATIONS
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	R1 Use as a fuel (other than in direct incineration) or other means to generate energy R2 Solvent reclamation/ regeneration R3 Recycling/reclamation of organic substances which are not used as solvents R 4 Recycling/reclamation of metals and metal compounds R 5 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 waste for submission to any of the operations numbered R1-R11 R13 Accumulation of material intended for any operation in this list

<table>
<tr><td rowspan="14">PACKAGING TYPES
1. Drum
2. Wooden barrel
3. Jerrican
4. Box
5. Bag
6. Composite packaging
7. Pressure receptacle
8. Bulk
9. Other (specify)</td><td colspan="2">H-CODE AND UN CLASS</td></tr>
<tr><td>UN class</td><td>H-code</td></tr>
<tr><td colspan="2">Characteristics</td></tr>
<tr><td>1</td><td>H1 Explosives</td></tr>
<tr><td>3</td><td>H3 Flammable liquids</td></tr>
<tr><td>41</td><td>H41 Flammable solids</td></tr>
<tr><td>42</td><td>H42 Substances or waste liable to spontaneous combustion</td></tr>
<tr><td>43</td><td>H43 Substances or waste which, in contact with water, emit flammable gases</td></tr>
<tr><td>51</td><td>H51 Oxidizing</td></tr>
<tr><td>52</td><td>H52 Organic peroxides</td></tr>
<tr><td>61</td><td>H61 Poisonous (acute)</td></tr>
<tr><td>62</td><td>H62 Infectious substances</td></tr>
<tr><td>8</td><td>H8 Corrosives</td></tr>
<tr><td>9</td><td>H10 Liberation of toxic gases in contact with air or water</td></tr>
<tr><td>9</td><td>H11 Toxic (delayed or chronic)</td></tr>
<tr><td>9</td><td>H12 Ecotoxic</td></tr>
<tr><td>9</td><td>H13 Capable, by any means, after disposal of yielding another material, e. g., leachate, which possesses any of the characteristics listed above</td></tr>
<tr><td>MEANS OF TRANSPORT
R = Road W = Inland waterways
A = Air S = Sea
T= Train/rail</td><td colspan="2"></td></tr>
</table>

PHYSICAL CHARACTERISTICS 1. Powdery / powder 2. Solid 3. Viscous / paste 4. Liquid 5. Gaseous 6. Sludgy 7. Other (specify)	

Form II.

LICENCE TO IMPORT/EXPORT PETROLEUM WASTE.

Regulation 47(5)

Licence No. IM/EX/HW*_____

Name and Address of importer/exporter _____ *(Plot no. Village, parish, sub-county, county, district/municipality)*

Import or export (*specify*):

You are hereby licensed to import/export the following petroleum waste *(indicate by type, classification, characterization or categorization)*

_____

_____

_____

_____

If import of petroleum waste:

From *(name and address*)

_____

_____

_____

To *(name and address*)

_____

_____

Imported petroleum waste approved for

_____

_____

If export of petroleum **waste:**

To *(name and address*)

_____

_____

Import or export (*specify*):

This import/export shall be made through _____ border/ custom control post.

This licence is valid from _____20_____to _____20 _____

This licence is subject to the following conditions:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

_____

(Attach a copy of authorisation by the state from which the importation is to be made/to which the export is to be made.)

_____

Chairperson, Technical Committee on pollution Control

.

IM/EX/HW*

IM	-	Import
EX	-	Export
HW	-	Hazardous waste

SCHEDULE 12

Regulation 47(7).

DESIGNATED PORTS OF ENTRY.

1. Malaba
2. Busia
3. Mpondwe
4. Katuna
5. Entebbe International Airport
6. Mutukula
7. Port Bell
8. Mirama Hills
9. Elegu
10. Goli
11. Vurra
12. Kampala
13. Jinja
14. Mombasa

SCHEDULE 13

Regulation 48(2)

NOTIFICATION DOCUMENT FOR TRANSBOUNDARY MOVEMENT OF PETROLEUM WASTE.

(for transit purposes only)

(To be filled in triplicate)

1. Notifier.[2]

Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person *(name, address, telephone, e-mail)*	

2. Person who generates waste(s).

Name	
Address	
Telephone	
Telefax	
E-mail	
Contact person *(name, address, telephone, telefax, e-mail)*	
Process by which waste was generated	
Site of generation	Started __/__/____

2 The notifier is the exporter or importer of waste.

3. Reason for waste export/import.

Why the waste cannot be disposed in the country of origin	
Why the waste has to be exported/ imported through Uganda.	

4. Waste.

Description of the waste
Y Number H Number UN Class UN number UN Shipping name IWIC code
Physical state at 20^0C:
□ powder □solid □paste/viscous □ sludge □liquid □gaseous □other*(specify)*
Estimated quantity *(kg. or l.)* per shipment:
Type of Packaging _____ Number of packages _____
Special handling requirements, including emergency provisions in case of accidents
Method of disposal

5. Exporter/importer of the waste.

National Authority and details of approval	
Exporter/Importer of the waste in the country of origin/destination	
Name	
Address	
Telephone	
Telefax	
E-mail	

6. Disposer of the waste/ petroleum waste handler.

Contact person in case of emergency	
Name	
Address	
Telephone	
Telefax	
E-mail	
Approximate date of disposal	
Actual site of disposal	
Signature and official stamp of disposer/ petroleum waste handler	

7. Transit.

Projected length of time the petroleum waste consignment shall be in transit in Uganda	
Expected date of Entry	
Expected date of exit	
Means of Transport envisaged	
Information relating to insurance *(Guarantee that the person responsible shall fully compensate any damage caused to human health, property or to the environment by the waste in question during transit)*	

8. Declaration.

I/We _____ _____being the exporter/importer hereby declare that on _____I/we entered into a contract with the disposer of the waste/ petroleum waste handler and that I/we shall be bound by the terms of the said contract. (*attach a copy of contract)*

Signed _____
(*Exporter/Importer)*

I/We _____being the exporter/importer hereby guarantee/declare that the above information is correct and true.

Signed _____
(Exporter/Importer)

SCHEDULE 14

Regulation 49(3).

FORMAT AND CONTENT OF ANNUAL REPORT

FORM I REPORTING BY THE LICENSEE

Type of waste	Amount of waste produced	Storage of waste			Amount of waste transported to treatment or disposal	Amount of waste exported
		Maximum amount stored during the year	Amount stored on 1st January	Amount stored on 31st December		

FORM II REPORTING BY THE PETROLEUM WASTE HANDLER

General information

Name of company:

Type of license(s) held by the company:

Number of operational days in the reporting year:

…..…

Type of waste	Amount of waste transported	Amount of waste received	Storage of waste			Amount of waste treated	Amount of waste exported	Amount of waste disposed	Waste rejected
			Maximum amount stored during the year	Amount stored on 1st January	Amount stored on 31st December				

Discharges			
Compound	Average concentration	Maximum concentration	Total amount
Water	N.a.	N.a.	
TOC			
Oil			
Pb			
Cd			
Ni			
Hg			
…			

Emissions			
Compound	Average concentration	Maximum concentration	Total amount
Dust/ particles			

Areas of improvement:

Incidents/near misses including response measures:

Any other information:

Cross References

Atomic Energy Act, 2008, Act 24 of 2008.
Insurance Act, Cap 213.
National Environment Act, Cap 153.
National Forestry and Tree Planting Act, 2003, Act 8 of 2003.
Petroleum (Exploration, Development and Production) Act, 2013, Act No. 3 of 2013.
Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013), Act No. 4 of 2013.
Uganda Wildlife Act, Cap 200.
National Environment (Waste Management) Regulations, S.I 153-2.
Occupational Safety and Health Act, 2006, Act 9 of 2006.
Petroleum (Exploration, Development and Production) (Health, Safety and Environment) Regulations, 2016; S.I 47 of 2016.
Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016, S.I 36 of 2016.

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PROF. SANDY STEVENS TICKODRI-TOGBOA
Chairman of the Board,
National Environment Management Authority