Executive Bylaws of
Environment Protection Law
Issued under Ordinance Law No. (30) of 2002.

Introductory Chapter
Introductions

Article (1)

In the application of these bylaws the following works and expressions shall have the meaning given adjacent to each unless the context requires any other meaning.

- **Law**: Environment Protection Law Issued under Ordinance Law No. (30) of 2002.

- **Council**: The Supreme Council for the Environment and Natural Reserves.

- **Secretariat General**: The Secretariat General of the Council.

- **Secretary General**: The Secretary General of the Council.

- **Treatment**: The operations carried out on the wastes to alter its chemical or physical or biological features or composition or to reduce its size or to make these wastes non-hazardous or less dangerous or safe when transported or stored or finally disposed of.

- **Operator**: The person who is responsible for all operations in the site where the wastes are disposed of.

- **Environmental Quality Parameters**: The parameters that indicate to the level of the pollution or the interruption to be overtaken.

- **Discharge**: Inconstant and non-routine discharge that occurs due to mistake or emergency through air holes.

- **Transport through Boarders**: Transport of hazardous wastes from a national authority area of a particular nation to or through the national authority region of another country or through the area which is not under the national authority of any state, provided that there should be minimum two states participating in the transport process.

- **Transit**: Continued transport from boundaries to other through the international lands without storing therein, except the temporary storing for transport.

- **Exporter**: Any person who arranges the transport or shipping of the hazardous wastes to abroad for the purpose disposing in accordance with the provisions of the Law and these bylaws.

- **Producer**: Any person whose activity causes for producing hazardous wastes.

- **Disposer**: Any person who undertakes the disposal of hazardous wastes inside or by transporting or shipping to abroad.

- **Exporting Country**: The state in which the transport of hazardous wastes is planned or started through the boarders.
- **Importing Country**: The state which plans to transport the hazardous wastes through the boarders to it for the purpose of disposal to fill the wastes to be disposed of in the areas not under the national authority of any nation.

- **Reception Facilities**: Equipment, instruments and basins allotted for the purpose of reception, sedimentation, treatment and discharge of polluting materials or composure waters in addition to the equipment arranged by the Company operating in the field of shipping and unloading petroleum and other materials form the admin departments supervising on the ports and waterways.

Chapter One
Protection of Environment from Pollution

Section One
Environment and Pursing Development

Article (2)

The concerned admin departments, in collaboration with the Council, will undertake adopting necessary procedures and plans to achieve the objectives mentioned in the articles (3), (4), (5), (6), (7), (8) and (9) of the Law, especially the following:

1. Define the national establishments and institutes and their eligibilities to participate in preparing and executing the environment protection programs.
2. Provide local and international information about the environmental status and changes introduced to them regularly, evaluate them, use them in the environmental administration and planning and publish them.
3. Suggest the economic mechanism to encourage different activities to take the procedures for preventing the pollution.

4. Suggest the experimental programs to keep the natural wealth and resources and put a mechanism of execution.

Article (3)

The work to be done in accordance with the standards and criteria of environment protection stipulated in the annex (3) attached to this bylaw.
The Council, in collaboration with the concerned departments, will verify, develop and modify them.

Section Two
Environmental Impact for the Projects

Article (4)
The public and private plans, whatsoever its kind and site, including the industrial, agricultural and constructional plans, will be submitted to the Council when planned and before execution, for verification, evaluation and confirmation of its compatibility with the scientific method for the suitable environmental planning, in accordance with the criteria, specifications, principles, terms, procedures and conditions stipulated in these bylaws.

Article (5)
The categories and divisions of the public and private development projects, which have the nature of damaging the environment, have been defined as shown in the annex (1) attached to these bylaws.

Article (6)
The areas and sites having environmental importance have been defined in accordance with the environment protection criteria, in the following areas and sites:

1. Areas having high environmental value as per the

environment protection standards such as valleys, coastal lands, islands, coral reefs, unique areas for a particular group of plants or animals, including the natural reserves.

2. Antique and historic places having scientific or beauty value.
3. Areas of utilizing or using the natural reserves especially the rare ones.
4. Areas related to particular type of development such industrial cities, industrial services areas and new outskirts.

Article (7)

The parties who are authorized to issue licenses are not allowed to issue licences for the projects defined in the annex (1) attached to these bylaws or for their expansions or upgrades, before conducting an environmental study for such projects and obtain permission from the Council for the project execution or expansion or upgrading.
No project will be executed or expanded or upgraded until the licence from the Secretariat General is obtained.

Article (8)

The licence applicant for a project or expansion or renewal should obtain from the licensing authority a form for obtaining the environmental licence, fill it up in accordance with the sample given in the annex No. (2/2) attached to these bylaws and submit it to the licensing authority enclosed with the detailed plans, documents and the details defined in the sample, in addition to a study to

evaluate the environmental impact for the projects mentioned in the annex (1) attached to these bylaws.
The licensing authority, before issuing the licence for the project or its expansion or upgrading, should send a copy of the above application and its enclosures to the General Secretariat to express their opinion and submit the same to the Council in order to issue a decree in this regard, in accordance with the procedures shown in the plan for obtaining an environmental licence, given in the annex (2/3) attached to these bylaws.

Article (9)

The Secretariat General will undertake seeking help of the experts and the private and private parties to inspect the studies made to evaluate the environmental impacts of the projects in accordance with the criteria, specifications, principles and terms stipulated in these bylaws and its attached annexes; and the result of inspection will be submitted to the Secretary General.

Article (10)

The Secretariat General will undertake the study of the project environmental licence application in the light of the documents attached to the application, the documents and complementary details required by it, in accordance with the criteria, specifications, principles and terms stipulated in these bylaws; and express its opinion in the application based on the result of the study, with any of the following recommendations.

1. Approve the project or activity or expansion or modification, as required.
2. Approve the issuance of the environmental licence after executing some environmental procedures and planning.
3. Disapprove issuing the environmental licence.

Article (11)

The Secretariat General will submit the report to the Council along with the result of study made on the environmental licence application including its recommendations and reasons within ten days from receiving the application, so that the Council can issue its decision regarding the environmental licence within the next ten days. The decision to reject the application should include the reason for rejection. The Secretariat General will inform the licensing authority of the decision of the Council within ten days from its issuance, without exceeding thirty days from receiving the application, study and complete information, under a registered mail.

Article (12)

The following should be met to obtain the operational licence stipulated in the Article (7) of these bylaws:

1. Obtain environmental licence if the project is among the projects mentioned in the annex (1) attached to these bylaws.
2. Obtain the necessary licence from the authorized party.
3. Fill up the operational licence application as per the form given in the annex (2-4) attached to these bylaws.

4. Complete the requirements of operation prescribed in the environmental licence and operational licence forms.

Article (13)

The Secretariat General will undertake the study of the operational licence application. It may demand completion of the information and data seem to it necessary under the study made by it.
The Secretariat General will issue the operational licence within thirty days from the date of submission of the application, enclosures and complete information. The expiry of the time without reply is considered as rejection. The Secretariat General will inform the concerned department and applicant about the decision of rejection with reason under a registered mail within ten days from the date of issue of the decision in accordance with the procedures shown in the operational licence application procedures shown in the annex (2-5) attached to these bylaws.

Article (14)

The concerned party can raise complaint against the decision to reject the environmental licence or operational licence within thirty days from the date of notification of the rejection or expiry of the period mentioned in the foregoing paragraph.
The complaint to be submitted to the Secretariat General in writing including the reasons for complaint and supporting documents. The Secretary General will refer it

to the Complaints Committee, which is formed under a decree from the Council Chairman, to undertake its studies and issue the suggestions of the committee within ten days from the receipt of the completed complaint; and these suggestions will be forwarded to the secretary general to be taken to the Council and conclude the matter.

Article (15)

The study for evaluating the environmental impact should include the following principles and factors in accordance with the nature of the project:

1. Compete and strict description of the project.
2. Justifications for the establishment of the project in the economic and social perspective.
3. The expected objectives of the project.
4. Project execution stages.
5. The results from the execution of the project in general and its impact on the natural resources and safety in particular.
6. Procedures taken to protect the environment.
7. Program for monitoring the discharge and emissions issued by the project.
8. Complete description about the environmental status that may affect the project, explaining the extent of their interaction in all aspects with this status and analysis for the environmental interactions resulted from these stages.

Article (16)

The details of the environmental status which is affected by the project should include the following impacts and factors:

1. Impact on the human or health or inhabitant groups.
2. Impact on the ecological system in the area where the project is established or other ecological system affected by the project.
3. Impact on any area or place or building which have beauty, archeological recreational, architectural, cultural, historical, scientific, social or any other importance at present or for the future generation.
4. Threat to any group of plants or animals.
5. Long range impact on the environment.
6. Change in the quality of the environment in a particular area.
7. Deterioration in the quality of environment.
8. Pollution to the environment.
9. Threat to the safety of the environment.
10. Decrease in the extent of usages for the environment.
11. Environmental problems related with the disposal of the wastes.
12. Increase in demand for natural resources and other rare sources.
13. Accumulation of environmental impacts due to the current and possible future activities.

Article (17)

All the concerned admin departments, private projects and individuals should submit the details and information which seem to the Council necessary to practice its authorities to declare the development projects and plans and to issued the related environmental permits.

Article (18)

The project owners should keep a ledger to describe the impact of the activity of the establishment on the environment in accordance with the form given in the annex No. (6/first) attached to these bylaws, in which the following particulars, particularly, should be registered:

1. Emissions issued by the enterprise and the average of their discharge.
2. Specifications of the outlets after the treating operation and the efficiency of the used treatment units.
3. Procedures of compliance and environmental security applied in the enterprise.
4. Routine tests and measurements and their results
5. In-charge responsible for compliance.

The owner of the project or enterprise or his representative should inform the Secretariat General and the concerned department of any violations in the standards and specifications of the pollutants and the measures taken to rectify them.

Article (19)

The Secretariat General follows up the details of the ledger stipulated in the foregoing article to confirm its compliance with the reality, to take the necessary samples, conduct the tests suitable to explore the impact of the activity of the enterprise on the environment and to define the extent of its adherence to the standards adopted to protect the environment.
Such follow up is conducted regularly and if any violation is found, the Secretariat General will inform the concerned department as well as the project owners under a

registered mail to rectify such violations very fast as required by the principles of the industry. If it is not done within sixty days, the Council, based on the recommendations of the Secretariat General, will take necessary actions to stop the defaulting activity in accordance with the procedures shown in the article (20) of these bylaws and to claim suitable compensations to treat the damages resulted form the violations.
The enterprise should keep this ledger as long as the enterprise exists.

Article (20)

The Council may, after the coordination with the concerned admin department, suspend or terminate the operation permit in the following cases:

1. If the permit is issued based on incorrect information.
2. If the operator violates the terms of operation permit.
3. If the activity causes for environmental impact which was not expected at the time of issuing the permit.

The Council before suspending or terminating the operation permit will inform the owner of the project or the establishment about the violation and assign him to remove the reasons within the suitable period defined by the Council as per the size and nature of the violation without prejudicing the provision of the above article.
The Council and the concerned department will remove the reasons of violations, if required, on account of the defaulter.
The concerned part can submit the complaint against the decision of termination or suspension within the period as per the procedures shown in the Article (14) of these bylaws.

Second Division
Emergency Plan to Face the Environmental Catastrophes

Article (21)

The Council, Permanent Emergency Committee and the concerned department will co-ordinate to adopt a general plan for emergency to face the environmental catastrophes and this plan will not be effective until passed by the Ministers Council.

The General Emergency Plan will depend mainly on the following states:

1- Stage before occurring the catastrophe:

a. Collect the local and international available information and systems to face the environmental catastrophes and the method for minimizing its impacts.
b. Define the possibilities available on the local, regional and international level and define the method of seeking help of them to guarantee the speed of facing

the tragedy.

c. Conduct the training and tests to know the extent of readiness of the emergency team, weakness in the performance and method of improving the procedures suitable for facing each type.
d. Define the types of environmental catastrophes, areas which are influenced more and knowing the impact expected for each type and adopt the suitable procedures to face each type.
e. Define the parties responsible for informing about the catastrophe or the possibility of its occurrence.
f. Establish a central operations room to receive the information about the environmental catastrophe, follow up, receive and send the information about such catastrophes aiming to gather the necessary possibilities to face them.
g. Form a work team to follow up the environmental catastrophe when occurred. The Chairman of the work team will have all the necessary authorities to face the catastrophe in collaboration and coordination with the concerned administration department.
h. Supervise, train and follow up the catastrophe on all levels.
I Ease the system and methods for exchanging information between different departments with the respect to the catastrophe and guarantee the achievement of its efficiency.
j Define the method for exchanging and requesting the assistance between different departments and establish suitable database.

2- Catastrophe Overtaking Stage:

a. Execute the adopted plans in coordination and

cooperation with the local, regional and international levels to guarantee the continued flow of supply with equipment and arrangements to the catastrophe site.

b. Achieve the best use of available actual possibilities with different departments to deal with the catastrophe.
c. Define the method of informing the citizens about the catastrophe, its developments and method of treating its impacts.

3- Catastrophe Impacts Removing Stage:

a. Define the method of participation of different departments in removing the impacts of the catastrophe.
b. Develop the plans aiming to improve the performance.
c. Improve the level of general awareness about the method of dealing with the catastrophes.

4- Method of Registration for the Results of the Catastrophes and their Lessons:

a. Register the economic and social impacts resulted from the catastrophe.
b. Register the lessons taken from dealing with every catastrophe.
c. Suggestions to avoid the defects appeared during the treatment.

Fourth Division
Hazardous Wastes and Materials

Article (22)

The administrative department which is concerned with licensing for hazardous wastes and materials is defined in the tables shown in the annex (5) of these bylaws, as per the type and use of each and suitability of the site for the concerned activity.
Also the Council in coordination with the above referred concerned department, issue table describing the hazardous wastes and materials, particularly defining the following:

1. Type of the hazardous wastes and materials which come under the competence of each and degree of

the danger of each.
2. Terms to be followed when dealt with each.
3. Method to dispose of the empty packets for such materials after used.

First: Hazardous Wastes

Article (23)

The import of hazardous wastes or to allow its entry or transit or burial or injection or discharge or storing in the state.

Article (24)

The transit of the ships that bear the hazardous wastes is not allowed in the regional sea or the exclusive economic area of the state except after obtaining the permit from the concerned administrative department and Council as per the following terms and conditions:

1. Provide necessary details about the contents of the ship from the hazardous wastes, quality, quantity, sources and destination.
2. Provide the approvals from the exporting and importing parties.
3. Provide the documents showing that the ship is equipped with all safety measures.
4. Provide the documents showing that the ship has qualified personnel who can deal the load smoothly in case of any accident.
5. Undertaking to take all the necessary precautions as stipulated in the international agreements.
6. Provide the financial guarantee certificate stipulated in the article (49) of the Law, whatever is its total loads.

Article (25)

The establishment of any project or enterprise or facility to treat the hazardous wastes is not allowed except after obtaining the permit from the concerned administrative department and Council as per the following terms and conditions:

1. Apply to the concerned department prescribed in the table attached to the annex No. (5) of these bylaws in

the form given in the annex (2/2) of these bylaws.

2. The concerned department will send the form and necessary documents as shown in the second section of the chapter one of these bylaws, to the secretariat general to express its views. The Secretariat General will inform the concerned department about the decision of the Council maximum by thirty days from receiving the application. The expiry of this period without any reply from the Secretariat General is considered as rejection for the application.
3. The sites selected for establishing any projects or enterprises or facilities to treat the hazardous wastes should meet the terms prescribed in the article (36) of these bylaws.

Article (26)

The handling or management or treating or recycling or disposal of the hazardous wastes is not allowed inside or outside the country except after obtaining the permit from the concerned administrative department and Council as per the following terms and conditions:

First: Terms and Conditions:

1. Complete all information and documents defined by this regulation.
2. Provide the means, possibilities and systems to store, handle, manage, recycle and dispose of the hazardous wastes.

3. Provide a trained cadre responsible for the operations, subject of licensing.
4. Provide the requirements to meet the risks resulted from accidents of dealing with the hazardous wastes.
5. Not to damage the environment and public health.

First: Procedures:

1. Apply to the concerned department prescribed in the table attached to the annex No. (5) of these bylaws in the form given in the annex (2/7,8,9,10 and 11) of these bylaws. The application should be supported with the following documents.
2. Party that produces the hazardous wastes (full name, address, telephone and fax).
3. Full description for the hazardous wastes to be dealt with and the method of concentrating the hazardous factors.
4. Define the quantity of the wastes to be dealt yearly and description about the packing (barrel, tank, loose).
5. Description of the methods used to store the hazardous wastes, period of storing and undertaking to write on the packing about its contents, extent of danger and method of disposal in case of emergency.
6. Explain the available transport means (land, sea, air) and define the travel line and schedule.
7. Comprehensive description about the method followed in treating and disposing the hazardous wastes to be licensed for handling.
8. Undertaking not to mix the hazardous materials with other wastes resulted from the production activities and others.
9. Undertaking to keep the records containing full details

of the hazardous quantities and qualities, sources, ratios and periods of collection and storing, and method of transporting and treating, applying these particulars at every request. These records must be kept permanently.

10. Undertaking to take all procedures to guarantee the good filling of the hazardous wastes during the states of collection, transport and storing.
11. Detailed specification of emergency plan to face all the unexpected circumstances guaranteeing the protection of the public and environment.
12. Certificate of previous experience in the field of handling hazardous wastes.
13. Undertaking regarding the authenticity of the particulars given in the application, form and documents.

The concerned department should demand from the applicant to fulfill other necessary information and data to guarantee the licensed activity, in collaboration with the Council

Article (27)

The concerned department will undertake to refer the copy of the licence application and documents to the secretariat general to express its opinion and submit the same to the Council to issue its decision in this regard. The Secretariat General must advise those parties about the decision of the Council maximum by thirty days from receiving the application, form and attachment fulfilling the requirements of law and regulations. The expiry of this period without any reply from the secretariat general is considered as rejection to the application.

The licence is issued by the concerned admin department, after the approval of the Council, to handle, manage, treat, recycle and dispose the hazardous materials inside or outside the country including the full or some of the activities mentioned above for a period not exceeding two years.
The admin department or the council may review the licence during the validity to confirm the continued adherence to the terms and conditions.
In all cases, the licencee is not allowed to practice any activity related to the hazardous wastes before obtaining the licence in the form prescribed for this purpose.

Article (29)

The concerned department, after taking the opinion of the Council, may cancel or suspend the licence as per a reasoned decision in the following cases:

1. If the permit is issued based on incorrect information.
2. If the operator violates the terms of operation permit.
3. If the activity causes for environmental impact which was not expected at the time of issuing the permit.
4. If the Council sees that the handling of those hazardous wastes is unsafe.

Article (30)

Both the Council and the concerned admin department will undertake, each in its turn, the works to monitor the handling of the hazardous wastes shown in the table mentioned in the second paragraph of the article (22) of these bylaws, considering the items of the wastes to be monitored in accordance with its sources and contents and those need special consideration as shown in the annex No. (7/4 and 5) attached to these bylaws and also

considering the features of the hazardous wastes risks shown in the annex No. (7/6) attached to these bylaws.

Article (31)

The management of the hazardous wastes are subject to the terms, conditions, and procedures stipulated in the following stages.

1. Hazardous wastes generating stage
2. Hazardous wastes collection and storing stage
3. Hazardous wastes local transporting stage.
4. Hazardous wastes treating and disposing stage.
5. The stage of hazardous wastes transportation or shipment out of the state.

Article (32)

The hazardous wastes generating stage is subject to the principles and procedures stipulated in this bylaw. The party who generates the hazardous wastes will undertake all the necessary procedures to control and minimize the generation of the hazardous wastes, through suitable measures, especially:

1. Work to reduce the average of generating these wastes in quantity and quality, by developing the technology and following clean technology having less impacts on the environment and public health.
2. Develop suitable systems to manage the dangerous wastes.
3. Expand in reusing and recycling the hazardous wastes after being treated, if possible.
4. Describe the quantity and quality of the wastes and

register them.

5. Establish and operate the treating units at the source, provided that the Council should approve the method of treatment and the specifications of these treatment units.

If the treatment or disposal is not possible at the source of generation the party who generates these wastes will undertake their collection and transportation to the places allotted for this purpose, as defined by the concerned department after the approval of the Secretariat General. The handling of wastes is subject to all the terms and conditions stipulated in these bylaws.

Article (33)

The hazardous wastes collection and storing stage is subject to the principles and procedures stipulated in these bylaws. The party who generates the hazardous wastes will undertake all the necessary procedures to control and minimize the generation of the hazardous wastes, through suitable measures, especially:

1. Define the wastes storing places where the safety terms to prevent private or public damages, are available.
2. Store the hazardous wastes in containers specially manufactured from solid materials and free from holes allowing leakage of liquids and equipped with tight cover as per the principles of storing the wastes in accordance with its nature.
3. Put clear signs on the containers showing the contents of the containers and the risk resulted form the unsafe handling.
4. Adopt a time schedule to collect the hazardous

wastes so that it will not be left for long period in the storing containers.

5. Adherence of the producer of the hazardous wastes to providing the above referred containers and not to put them in public places.

Article (34)

The hazardous wastes local transportation stage is subject to the principles and procedures stipulated in these bylaws in addition to the following terms and conditions. :

1. Ban the transport of the hazardous wastes excepted through the means of transport of the parties licensed to manage the hazardous wastes. These means of transport should meet the following terms and conditions:
    a. It should be equipped with all means of safety and good for use.
    b. Its size should be suitable for the quantity of the wastes being transported.
    c. It should be driven by the trained drivers who can deal with the emergency cases.
    d. Clear signs to be placed on them showing the extent of danger and the method of dealing in the emergencies.
2. Define the destination and inform the civil defense and traffic immediately about any change in the route allowing them to deal speedily and smoothly at the time of emergency.

3. Ban the transport of wastes inside the residential areas and city centers during the day time.
4. Inform the concerned department about the place where it is directed and number and date of license.
5. Clean the hazardous waste transporting means after every use.

Article (35)

The hazardous wastes trading and disposing stage is subject to the principles and procedures stipulated in these bylaws in addition to the following terms and conditions.:

1. Terms of sites and facilities for treating and disposing the hazardous wastes.
2. The frame in which the reusable hazardous wastes are treated.
3. The frame in which the hazardous wastes which are not reusable recycled are treated.

Article (36)

The sites and facilities for treating and disposing the hazardous wastes should meet the following terms and conditions:

1. Distance from the residential areas should not be less than five meters.
2. The place should be suitable for the quantity of the wastes to avoid storing for a long period.

3. Make the boundary wall in the length not less than 2.5 meters.
4. Provide more than one door for the site allowing the smooth entry and exit of the vehicles transporting the wastes.
5. Provide the site with different services such as electricity, water and telephone line.
6. Provide the site with all requirements of protection and safety as prescribed by the labor law and professional health.
7. Provide the site with mechanical equipment easing the work therein.
8. Provide the site with equipped stores to keep the wastes until treated and disposed of.
9. Provide the site with necessary instrument and equipment.
10. Cover the site with different kinds of treating units.
11. Provide the site with a dig for healthy burial, It should be suitable to be used for a long period no less than twenty years and the wall of the dig should be slope to prevent the collision.

Article (37)

The sites and facilities for treating and disposing the hazardous wastes should meet the following terms and conditions:

1. Reuse of the hazardous wastes as fuel for generating power.
2. Recover the organic solvents and reuse them in the production.
3. Recycle and reuse the some organic wastes
4. Reuse the iron and non-iron metals and their components.
5. Recycle and reuse some inorganic wastes.
6. Recover or recycle the acids.

7. Recover the materials used for reducing the pollution.
8. Recover some components of incentive factors.
9. Recover the used oils and reuse them after cleaning.

Article (38)

The wastes which cannot be reused or recycled are treated in accordance with the treatment and disposal operations mentioned in the annex No. (7/7) part (a) attached to these bylaws. Theses operations shall be as follows:

1. Burial of the wastes in special and equipped pits separate from other environmental systems.
2. Treatment of the hazardous wastes biologically using some living creatures to dissolve them.
3. Treat the hazardous wastes physically or chemically by steaming, drying, calcification, neutralization, sedimentation, etc.
4. Burial in special crematory so that no gases or steams causing damages to the surrounding environment will not occur.

Article (39)

The disposal of the hazardous materials with transport or shipment to out of the State is subject to the principles and procedures stipulated in the international agreements joined by the State, which are specified in these bylaws, in addition to the following terms and conditions:

1) The transport and shipment are not allowed through the boarders in the following cases:

a. If the transport is to a party which lies on the latitude of 60^0 south.
b. If the transport is to a state which is subject to ban for importing such materials.
c. If the transport is to the states which cannot provide guarantees for its ability on the safe disposal of the wastes in a technical way with respect to the environmental aspect.
d. If the transport is to the states which are not members in the Basel agreement excluding the state which is a member in the bilateral agreement or agreement between different parities or regional agreement

2) Procedures to obtain the approval of the Council to transport and ship through boarders:

a. The waste producer should take all practical procedures to confirm that the hazardous materials have been dealt with and disposed of in a proper way and without any negative impacts. He shall be responsible for collecting, treating, storing and disposing of the wastes in a proper way by himself or through an operator of the particular facilities.

The producer should submit the two parts (a) and (b) of the short report to the Council for the wastes produced by him in pursuant to the annex (7-2) attached to these bylaws. The producer should try to minimize the quantity of the wastes and conduct yearly evaluation for this minimization to submit the same to the Council. In this case, there won't be any justification to transport or ship through boarders.

b. The Secretariat General will undertake the inspection as to the suitability of the method used for the disposal of wastes in the wastes treating facilities in the State. If shown that the condition of the facility or the method of disposal is not suitable for a particular type of waste, it will assign the producer to search for other method in the facilities available in other countries.
c. The producer will inform the Council minimum by seven days from starting the contacts with the foreign facilities. In case of non-receipt of the objection within this period, he shall send the wastes treating application attached with the short report for the wastes in the parts (a) and (b), sample for the wastes to be analyzed by the foreign facility, provided that the sample representing the wastes shown in the short report mentioned above should be approved in accordance with the sample approval form shown in the annex No. (7-3) attached to these bylaws.
d. In case of approval by the foreign facility to treat the hazardous materials, the approval from the concerned departments should be obtained form the importing state including the requirements of packing, marks and transport. The point of entry should also be defined.
e. The Council will study the status to issue its approval

on transporting through boarders subject to the approval of the transit states, in accordance with the provisions and requirements of the international agreements joined by the State.

3. Obligations of the Licensee Regarding the Safe Transport and Shipping through the Boarders.

The party which is licensed to ship and transport the wastes safely through boarders should follow the procedures shown in the diagram for shipping and transporting the hazardous wastes through the boarders detailed in the annex No. (7-1) attached to these bylaws, as follows:

a. The licencee should provide the concerned departments in the importing states and transiting states with the information to be filled up in the notice of shipping or transportation of the hazardous materials, defined in the annex No. (7-8) attached to these bylaws, provided that the information should be submitted in English and Arabic or any other language required by the importing or transiting state. The form for noticing the shipment or transportation of the hazardous materials through boarders shown in the annex No. (2-10) attached to these bylaws should be filled up.

b. The transporter should make the insurance to cover any accidents that may occur due to the transportation through boarders.

c. The transporting company utilized by the producer should guarantee the packing and put the approved marks as per the international practices and standards. It should keep the copies of clearing papers and insurance documents to cover the fire, accidents, environmental damages and other risks.

d. The transport should have six copies of the

particulars to be fulfilled in the hazardous wastes shipping or transporting documents as shown in the annex No. (7-9) attached to these bylaws, as per the hazardous wastes shipping or transporting through the boarders shown in the annex (2-11) attached to these bylaws.

e. All the transport documents should be signed by the disposer or the operator for the external facility and two copies to be returned to the transporter to keep one copy with him and to submit another copy to the producer or the export to confirm the transport operation. The disposer will keep four copies of the transport documents.

f. After completing the treatment and disposal operations satisfactorily, the disposer / owner of the external facilities will keep one copy out of four copies for the transport documents and return each copy after signature to the producer and concerned departments both in the importing and exporting countries.

The Council will inform the departments of the international agreements joined by the state that the shipment and disposal of the wastes have been executed.

Article (40)

The licencee shall handle and manage the hazardous wastes by adopting a routine program for the monitoring of the environmental systems, in the waste treating and disposing areas as well as the surrounding areas.

He will be responsible for the damages incurred to others due to the non-compliance to the provisions of the law and these bylaws. The Council will take the necessary

procedures to invalidate or suspend the operation licence immediately after the confirmation on the evidences for damaging the surrounded environmental systems.

Article (41)

The owner of the project or establishment whose activities produce hazardous wastes should keep a ledger in accordance with the form given in the annex (6/second) attached to these bylaws, registering the following details:

1. Terms issued by the Council for the project or the establishment.
2. Types and quantities of the hazardous wastes resulted from the project or establishment activity.
3. Method of disposing these wastes.
4. Parties contracted with to deliver the hazardous wastes.

Second : Hazardous Materials

Article (42)

Licensing the import or handling or transporting the hazardous materials is subject to the terms, conditions, period of licensing, obligations and license suspension cases stipulated in the articles (26), (27), (28) & (29) of these bylaws in addition to other terms and conditions given in this section.

Article (43)

The licensing of importing the hazardous materials is subject to the following conditions:

1. The object of importing should be to use in any of the following fields:

a. Industry
b. Construction and Building
c. Scientific Research
d. Petroleum and Gas
e. Electricity
f. Pesticides
g. Water Treatment.

2. The applicant must fulfill the requirements of the environmental approval to enroll with the commercial registry or to add an activity to it regarding the import of the hazardous materials as per the Form shown in the annex No. (2-13) attached to these bylaws. He should fulfill the requirements of the licence to practice the activity of importing hazardous materials in accordance with the Form shown in the Annex No. (2-12) attached to these bylaws.
3. The hazardous materials to be imported should not be from the hazardous materials whose handling is banned under the international pacts to which the State has joined with.
4. If the hazardous materials cause danger for the public, the licence issued by the concerned departments in the country of origin, which allows the use of the hazardous materials for the public, should be attached.
5. Attach a statement stating the consumption of the quantity previously imported in the stores from the same materials to be imported.
6. Fill the Form for applying the import of hazardous material as per the Form given in the annex No. (2-14) attached to these bylaws, including at least the following.

a. Scientific and commercial name of the material and its chemical components.
b. Serial number of UN and chemical registration number.
c. Extent of the danger for the materials and its impact on health and environment.
d. Weight of the hazardous material to be imported.
e. Date and time of expected transporting/
f. Purpose of importing (as per the licence)
g. Best method for storing and disposing the material.
h. Procedures to be taken when leakage of any material occurs.
i. Full name, address and receipt number of the shipping agent, consigner, consignee and the beneficiary.
j. Country of origin certificate from the exporting countries and the certificate pertaining to the analysis of pesticides and certificate of freeness from led in the materials related to paints and certificate of freeness from the radioactive materials in the fertilizers.
k. Date of expiry for the hazardous materials.

Article 44

The importer fro the hazardous materials shall keep a ledger for the hazardous materials, defining the quality and quantity of the imported hazardous materials, stored materials, handled and transported in accordance with the Form shown in the annex No. (6/Third) attached to these bylaws.

The secretariat general, in collaboration with the concerned department, shall undertake the regular inspection on this ledger to verify the particulars registered therein, terms of storing , handling and transport.

Article (45)

The licencee, if the hazardous materials are imported by air, should attach the following documents and information:

1. Original statement of the shipper.
2. Original statement of the air cargo.
3. Original list of inspection on the hazardous materials.

Whereas if the hazardous materials are imported by seas, the licencee and the shipping agent should inform the Customs and Ports General Authority, minimum forty eight hours prior to reach the consignments to the ports, of the following:

1. Plan for storing the consignment.
2. Shipment details.
3. Details of the hazardous materials

Article (46)

Those who produce or handle or transport the hazardous materials, whether in the form of gas or liquid or solid,

should take the safety measures to guarantee the safety of the environment especially the following:

1. Select the place where the production or storing of the hazardous materials is done in accordance with the necessary terms and conditions as per the quality and quantity of these materials.
2. The buildings where the production or storing of these materials takes place should be designed in accordance with the engineering principles to be followed for each type of these materials. These buildings will be subject to routine inspection through the concerned department and the Council.
3. Provide the necessary terms for the transport means and the storing places so that the environment as well as the health of the workers will not be subject any damage.
4. The technology used for the production should make no damage to the establishments or the environment or the workers.
5. The building should be equipped with safety and security equipment and first aid facilities in the quantity and number required, as defined by the civil defence department in coordination with the concerned department and the Council.
6. To provide the emergency plan to meet any expected accident during the production or storing or transportation or handling of those materials, provided that this plan should be verified and authenticated by the concerned admin department after the approval of the Council or the Civil Defence Department.
7. To subject the workers in this field for the routine medical checkups and to treat them for the diseased caused by the profession on account of the parties for

which they are working.

8. Make the workers aware of the risks while handling such materials and the necessary precautions to be taken while handling and confirm that they have the knowledge of it and are trained in this regard.
9. Making the inhabitants of the surrounding areas aware of the possible risks of these materials, method of treatment and to confirm that they know the alarm system when any accident occurs and the code of acts at that time.

Article (47)

The licencee to manage the hazardous materials will adhere to the following:

1. Not to do any work violating the period or field of the licence issued to him after meeting the requirements stipulated in the forms and applications for managing the hazardous materials as shown in the annex Nos. (2-12, 14, 15, 16, 17, 18, 19 and 20) as per the case.
2. Renew the licence enough time prior to the expiry.
3. Adopt internal rules and regulations in order to protect the workers, public and environment from the activities and practices related to the management of hazardous materials and provide enough number of personal protecting equipment.
4. Make a program for the necessary emergency plan in order to face the accidents and environmental damages resulted from the management of the hazardous materials including the description for the condition of the store, transport vehicles and method of packing, description for the condition of the workers

with respect to their numbers, years of experience and medical file for each and the working plan to face the risks of fire and injuries resulted from the activity of managing hazardous materials.

5. Adopt a admin system as per the size and quantity of the activity licensed for, provide that such system should include the following.
   a. Define the responsibilities for taking decisions related to the safety and security and responsibility of each person in the execution of the safety requirements.
   b. Define the problems that affect the safety and security and work on its treatment.
   c. Qualify and train the persons assigned to the safety and security.
   d. Adopt the organizational arrangements to facilitate the contact and speedy communication of information related to the safety and security on all levels.
6. Apply the safety and security system in commensurate with the size of the possible risks to achieve the following.
   a. To avoid occurring accidents resulted from subjecting to hazardous materials.
   b. Minimize the impacts resulted from any accidents if it occurs.
   c. Guarantee the availability of first aid facilities.
   d. Guarantee the security and safety from fire.
7. Adopt and apply a program to confirm the quality depending on guaranteeing the compliance with the requirements related with the safety and security. Train the workers and provide the necessary mechanism and procedures to confirm the quality by routine contact, evaluation and regular maintenance for the

safety and security equipment.

8. Packing the hazardous wastes in accordance with the requirements for the internal and external packings. To abide by the provisions connected with the information cards regarding their qualities and specifications, both for danger card and handling card, in accordance with the requirements shown in the attachment No. (8- second and fourth) attached to these bylaws.

Article (48)

The licencee to store the hazardous materials, after fulfilling the requirements of licence shown in the annex (2/17) and outline of licensing the store and storing of hazardous materials stipulated in the plan attached to the annex No. (2/18) attached to these bylaws, will adhere to the following:

1. Not to change or amend the materials licensed for except with the approval of the concerned department.
2. Consider the safety and security precautions following the procedures and principles determined by the concerned departments.
3. Adhere to the handling instructions including any precautions to protect the workers and environment.
4. Abide by the safety rules for the materials before executing the handling of any hazardous materials, to keep the work place neat and tidy and to use the protection dresses and equipment.
5. Use the approved containers stuck by the information for storing and transporting the hazardous materials

6. Not to transfer the hazardous materials to non-standard containers and follow the instructions of the manufacturing company when the hazardous materials are transferred from the containers.
7. Keep the flammable or explosive gases away from high temperature.
8. Well organization of the place to limit the risks of damage, leakage and fire in addition to the guarantee for the smooth and active operation.
9. Inspect the store regularly to know the leakage or mechanical damage.
10. Keep the flammable empty packing away form the storing place.
11. Leave all the ways leading to out free and confirm the safety of the emergency equipment.

Article (49)

The hazardous materials to be stored in the stores enough far from the residential areas as per the nature of the storing hazardous materials and the stores should be provided with the requirements shown in the annex No. (2-17 & 18) attached to these bylaws. It should be designed as per the following terms, standards and conditions:

1. The construction materials should be uninflammable and the structure of the building should be of concrete or steel. The steel structure to be protected from temperature using insulation. The insulation materials should be fire resistant like metal cloth or fiberglass.

2. Put the electrical pipes, channels and cables passing though the fire resistant walls in a fire resistant sandy

covers.

3. Provide ways to escape from any closed big area minimum in two directions and provide clear sign boards for the emergency exit allowing the easy exit at the time of emergency. It could be opened easily in the darkness and in strong smoke and it is advised to provide the emergency opening livers.

4. The air circulation of the store should be good considering the nature of the hazardous materials or the stored product. Enough air circulation should be achieved by providing opening in the roof or wall near to the roof or near to the flooring,

5. The flooring should be free from liquids, soft, non-slippery, free from cracks, easy for cleaning and designed in such a manner that allows the polluted fire resistant waters to flow.

6. Avoid the drainage opened in the stores where the hazardous materials are stored in order to prevent the uncontrolled discharge of fire resisting water and spilled products and to connect the drainage to a pit so that it can be disposed of later.

7. Control the risks of fire and spilling and guarantee the separation of non-conforming materials.

8. When lighting or other electric facilities are required it should be fixed by expert and no temporary electric fittings should be allowed. The safety of all electrical equipment should be guaranteed providing the electricity departments with earth circuit breakers and equipment for protection from over load.

9. When the solvents having low flashing point or the chemicals generating minute dusts are stored, anti inflation equipment should be used.

10. Not to allow to charging batteries or thermal covering or sealing plastic slides or welding inside the store.

11. When the storing of hazardous materials in the open air is required, roof or covering should be provided to protect form sun and rain.

12. The barrels should be stored in horizontal condition on the loading sheets and all the barrels to be stored in such a manner that leaves enough space to enter the fire extinguisher.

13. If the hazardous materials are of such kind that generates silent electricity during the handling, the licencee should confirm the following:

    a. Guarantee the electrical safety of the tanks, tubes, switching system, treating stations or to protect them with approved means.

    b. The operation procedures should consider avoiding the risks resulted from the generation or emission of the silent electricity.

14. Prevent installation of facilities for dwelling or cooking or dining or dress changing as a main part of the store. If necessary it should be ten meter far from the store and with separation walls.

15. Provide enough facilities for wash and pipes for the emergency wash of eyes and water sprays.

Article (50)

The storing of the unpacked (loose) hazardous materials should meet the following terms and conditions:

1. It should be stored inside the tanks on the land surface or underground.

2. Should the hazardous materials storing tanks are available on the land surface, the following terms to be

met:

a. To put them in the areas with inaccessible boundary walls and the storing place will not be less than 110% from the total reservoirs in the place.

b. Not to mix the reservoirs in one fenced place unless the materials in the reservoirs come under the same classification of UN.

c. The flooring of the areas used for storing should be make with inaccessible materials.

d. Not to put the unpacked inflammable liquids in a distance not less than 500 meter from the residential areas or 200 meter from the labors accommodation.

3. If the reservoirs of the unpacked hazardous materials are stored under the ground, including the petroleum products, the following terms to be met.

a. It should be designed in such a manner that allows for double walls if they are installed in the areas stipulated in the clause (1) of the article (6) of these bylaws.

b. It should be fixed under the supervision of an engineering having experience in this field.

c. To provide means for the necessary inspection on the spilling.

Article (51)

The hazardous materials should be stored in accordance with the storing plan, particularly considering the following:

1. Leave free space between the external walls, stored materials and lined up stacks in order to allow inspection, facilitate air circulation and fire fighting when needed.

2. To stack the materials in such a way that will not disturb the entering of cranes, handling equipment and emergency equipment.

3. Define all the passages and ways clearly on the floor and keep them free from any impediments.

4. Not to excess the height of stacks three meters unless the rack system is used.

5. Arrange a map showing the nature of risk for each part of the store including the places and quantities of the stored materials along with their features in addition to the available exits of emergency, fire extinguishers and ways to exit and escape.

6. The store keeper should keep the copy of this map and it should be upgraded when needed. A copy should be kept in an office far from the site as well.

7. Separate the materials as per the classifications of the UN and the requirements stipulated in the table of requirements for separating the hazardous materials

from any area visited by the public in accordance with the instructions given in the annex referred above.

8. The following information should be available for every employee in the store in written form.

    a. Instruction of safety operations for any equipment and to store the materials.

    b. Safety instructions documents for each stored or transported material.

    c. Instructions and procedures related with the health and security.

    d. Emergency instructions and procedures.

9. Not to store or load or transport the hazardous materials with food items in one vehicle.

Article (52)

The party which is licensed to store the hazardous materials should abide by the emergency plans referring the MSDS rules and regulations and especially it must take the following procedures:

1. Not dispose of any quantity, even small, from the spilled or leaked materials through the drainage system.

2. Provide and maintain the following equipment to deal with the spilling and leakage.

    a. Personal protection equipment
    b. Empty barrels
    c. Self sticking paper stickers to distinguish the barrels
    d. Solid material like sand or sawdust
    e. Cleaning liquid
    f. Brooms
    g. Shovels
    h. Binding keys
    i. Metal funnels
    J Wooden siphons to close the holes in the barrels.
    k Chemical resistant and water proof materials.

3. Conduct regular inspection and maintenance for the equipment of emergency and safety to guarantee their smooth functioning.

4. Clean and maintain the personal safety equipment after their use.

5. Suck the spilled liquids using suitable materials like sand and sawdust. No sawdust be used with inflammable or oxide liquids come under the categories (3) and (5) stipulated in the annex (8/third) attached to these bylaws.

6. Clean the spilled solid materials using industrial exhaust sweeper.

7. Deal with the spilling incidents and fire which releases toxic gas using suitable air circulation and breathing system based on the type of gas.

8. Dispose of all wastes including the filling materials and broken loading boards safely and considering the environment.

Article (53)

The party which is licensed to store the hazardous materials should provide the requirements of the personal protection and the necessary first aid to deal with the above materials, particularly the following:

1. Provide the following materials for the personal protection while working in the stores of hazardous materials.
   a. Protection helmets
   b. Safety glasses or mask for face.
   c. Tool to protect the respiratory system as per the nature of the materials dealt with.
   d. Work gown of one piece.
   e. Rubber or plastic gloves
   f. Safety shoes having metal cover to protect the foot.
   g. Any other requirements as prescribed by the concerned department.

2. Provide first aid facilities in accordance with the instructions from the Ministry of Public Health.

3. Provide the eye cleaning fountains and spray in the easily reachable locations.

4. Not to permit sleeping inside the places where the hazardous materials are stored.

Article (54)

The packing of the hazardous materials should meet the requirements of packing hazardous materials stipulated in the annex No. (8/fourth), in addition to the following:

1. To pack in suitable containers having capacity enough to bear all the circumstances of transport, handling, impacts, shakes and thermal changes.
2. To confirm that containers match in all ways with the materials packed therein so that it will not affected with the packed materials.
3. The packing should be tightly closed, by closing or fixing the internal packing or putting it on a lining material to prevent breakage or leakage and to have control over them when moved with the external packing.
4. When the lining or sucking materials are used in packing the liquids in vessels, these material should be capable of minimizing the risks resulted from this liquid.

5. The container which is filled with the hazardous liquids should include empty place in the top enough to deal in the highest temperature exceeding the temperature of packing, during the transportation process.
6. The cylinders or vessels of pressed gas should be well manufactured in accordance with the principles of industry. It should be packed, tested and maintained properly.
7. All kinds of packing should be in accordance with the international maritime and air transport directory, as the case may be.
8. The size of the packing should be suitable to stick all the marks and information cards as per the rules of MSDS.
9. The information cards should be fixed on every packing with a strong materials enough to bear the transport circumstances and to guarantee the protection from damage or erasure of the information registered therein.
10. The introduction and putting marks and information cards should be as per the following terms and conditions.
    a. To abide by the definitions in accordance with the classifications of the hazardous materials prescribed in the annex No. (8/first) attached to these bylaw and consider to apply the terms related to the category cards and secondary risks cards shown in the annex No. (8/second) attached to these bylaws.
    b. When the hazardous materials are submitted for sea shipment, it should be defined so that those who deal with it can take the necessary precautions while they deal with them.

c. The packing which includes the hazardous material should be marked with the correct scientific name, UN number, information card, photos, boards as per the international classification for the hazardous materials in a permanent form.

Article (55)

The licensing for the transportation of the hazardous materials should meet the terms and procedures stipulated in these bylaws, in addition to the terms and conditions stipulated in the form for applying the licence to transport the hazardous materials in the annex (2-19) attached to these bylaws and follow the procedures of licensing outlined in the plan for licensing the hazardous materials shown in the annex No. (2-20), attached to these rules and regulations.

Article (56)

The transporting of the hazardous materials by land should meet the following conditions:

1. To transport it in a safe way, abiding by the prescribed speed and using the times and tracks allotted for the transport vehicles.

2. To fix the metal plates on the external surface from all sides of the transporting units to warn about the content of the container as well as its danger. It should be coated with reflective paint using the required paint. It should be resistant to the impacts of climate.
3. The vehicles used to transport the unpacked and loose hazardous materials should use blinking yellow light indicating to the trailer and it should be turned on throughout the transport process.
4. All the drivers who deal with the hazardous materials should be well trained.
5. The drivers should have the documents including all the necessary information about the hazardous materials (scientific name, category, classification of the materials and UN number). Also a metallic board should be fixed on the internal body of the vehicle including same information.
6. The shipment document prepared by the shipper must include the details about the load of the shipment and complete the filling as per the procedures prescribed for packing. He should submit a certificate showing that the shipment has been filled and packed tightly.
7. The unpacked hazardous materials must be transported in tanks which meet the following requirements:
    a. The container should be manufactured from the materials suitable for the external environment and inside container form the material suitable for the load.
    b. The container should be made in accordance with the technical terms approved internationally.

c. Consider designing and constructing the containers on the basis of the allowed load, strength, pressure increase, temperature, features of the material and other factors affecting its durability.
d. Provide the equipment of service like valves, safety equipment and measuring equipment in such a manner that guarantees the protection against the risks may be subject during transport and handing.
e. Each section of the tank container with wide holes to allow the inspection on the container and its sections.
f. All the connections to tank should be properly marked and the pipes should be made of suitable materials.
g. Inspect and check the shape and components of each storage container using a qualified person.
h. Provide all the containers of tanks suitable equipment for easing the pressure.
i. The routine inspection and test of the tanks should carried out internally and externally as well as the hydraulic test to prevent leakage.

8. Not to use any trailers to transport the hazardous materials put in the containers, except they are equipped with suitable lockers.

Article (57)

The transporting of the hazardous materials by air should meet the following conditions:

1. The shipper should abide by the provisions related

with the transporting of the hazardous materials whether in the country of origin or transit or the country to which the consignment is addressed, in addition to the instructions of the international civil aviation authority.

2. The shipper will, particularly, undertake the responsibility of the following:

   a. Confirm that no international ban is existing regarding the transport of the hazardous materials.
   b. Confirm the proper packing of the hazardous materials and that they are free from leakage and the information included in the card are correct and all the information related to the shipping are true and authenticated.
   c. Bear the responsibilities related to the transport of communicative diseases and take the necessary action to guarantee the safe transport.
   d. Consider the provisions prescribed by the international agreements joined by the State regarding the hazardous materials borne by the passengers or crews or operators and the related approvals, commitments and prohibits.

Article (58)

The transporting of the hazardous materials by sea should meet the following conditions:

1. Adhere to the provisions of the proper packing for the hazardous materials.

2. Abide by the provisions of the international sea transport as per the agreements to which the State is joined.

3. Abide by the provisions of lining and separating the hazardous materials are stored.

4. The packed materials which discharge dangerous vapors should be kept in a place where good ventilation is available or in a safe place in the ship. Also the unpacked hazardous wastes which discharges dangerous vapor should be placed in a place having good ventilation.

5. Abide by the safety measures against the fire and explosion in the ship, especially which carries the inflammable liquid gases.

6. Consider taking additional precautions in order to minimize the fire when the materials subject to heating and self operations.

7. The captain or any person responsible in the ship should immediately report about any accident with details, especially when any accident having high loss occurs.

Article (59)

The training for the management of hazardous materials is subject to the following terms and conditions:

1. The persons who deal with the hazardous materials should be conversant with the features of the materials, the risk resulted from its use and method of dealing in the emergencies.
2. The party, which undertakes the training on the hazardous materials, whether individual or centre or any other party, should provide the necessary training courses in the basic safety measures related to the hazardous materials, storing, handling, classifications and description of the hazardous materials.
3. The training centres and parties should provide the necessary information about the main employees with them, their qualifications, experiences in the filed of managing hazardous materials, training works whereabouts and the training facilities arranged by them.
4. No person will be allowed to drive the vehicle for transporting the hazardous materials unless he participates in a course for training the drivers of transporting hazardous materials.
5. Every person who manages or supervises the hazardous materials stores should have participated in a training course on storing and handling the hazardous materials.
6. Every persons who work in the stores of hazardous materials or those who deal regularly with the hazardous materials should have enough training on every matters related to the management of

hazardous materials.

7. The model training courses include the following:
   a. Basic model training in managing the hazardous materials including (categories of hazardous materials, information cards, right packing, features of hazardous materials categories, perfect dealing with hazardous materials, personal protection equipment to deal with the hazardous materials, understanding the materials safety rules and related local, regional and international laws).
   b. Model training courses in storing the hazardous materials and dealing with them, including (introduction of UN number for the materials, designing the stores, emergency cases facing plans, provisions of lining and separation in the stores, professional health parameters, protection of respiratory system and skin and minimization of the silent electrical charges).
   c. Model training courses in transporting the hazardous materials including (introduction for silent electrical charges, correct loading and unloading, safe driving methods, putting sign boards on the vehicles, using UN number for materials, chemical risk warnings, response for emergency and accident procedures).

Article (60)

The employees of the Secretariat General and the staff of the other concerned departments appointed by the Council, who will have the capturing power as per the

article (62) of the Law, will conduct the inspection and monitoring in collaboration with the concerned departments in the places where the activity affecting the environment is practiced, in order to establish the violations to the provisions of the Law and these bylaws, as per the following terms and conditions:

1. Control and inspect all the activities related with the hazardous materials to confirm the compliance with the terms and conditions stipulated for using, storing, importing and handling the hazardous materials, including the places of works, documents, records, etc.
2. The inspection will be during the working hours of the establishment and the inspector should show the document proving his authority to conduct the inspection and capture the violations, considering the operation safety of the facility.
3. The inspector will undertake the verification of the validity of the licence, adherence to the environmental terms and conditions related to the hazardous materials, fulfillment of the necessary safety measures and its suitability with the nature and size of the expected risks.
4. Verify the existence of suitable drawings and marks as well as the fulfillment safety terms and conditions necessary for the workers.
5. The inspector will undertake inspection of files and documents related with the import or management of the hazardous materials.
6. The inspector can ask the explanations from the workers without the interference of the employer.
7. The inspector should prepare the a report including the steps and procedures of inspection, especially the

following.

a. Name of the establishment or the licensed party.
b. Content of the inspection and violations captured.
c. Any suggestions to develop the business in the establishment.
d. Final results of the inspection and recommendations.

8. The inspector should submit his report to the secretary general maximum by three days from the completion of the inspection. It will inform the concerned department about the result of the inspection and coordinate with them to take the procedures prescribed in the law in case of violation.
9. The inspector is not allowed to disclose any secret or publish any information he might have known while doing the inspection.

These procedures are applied to the inspection on the activities having relation with the hazardous wastes and materials which affect the environment in general each in accordance with its nature.

Chapter Two
Protection of Air Environment from Pollution

Article (61)

Considering the provisions of the second division from the chapter one of these bylaws, the site where the project is established should be suitable for the activity of the establishment. It should be compatible with the nature of the area distribution and land using plans. The air pollution in the area should not exceed the allowed limits. The total pollution in the air as a result of the total establishments in one area should be in the limits allowed and detailed in the annex No. (3) of these bylaws.

In all cases when the suitability of the site is considered its distance from the inhabited areas should be taken into account. The approval should be issued on the suitability of the area in accordance with the limits allowed for the air and sound pollutions in the area where the establishment is established.

Article (62)

All the projects when they practice their activities should abide by the parameters of the air quality shown n the annex (3) attached to these bylaws. The emissions from the fixed sources or the spilling of the air pollutants resulted from the activities should not exceed the maximum limit prescribed in the above referred annex.
Also no machinery or engines or vehicles or any mobile sources producing the pollutant of the environment cannot be used exceeding the limits allowed in the above referred annex No. (3).

Article (63)

Considering the terms and conditions of the environmental impact evaluation, the disposal or treatment or burning of garbage or solid or liquid wastes in the places not allotted for and nor far form the residential, industrial, agricultural and water drainage areas, is not allowed.
When the garbage and solid wastes are burnt the following should be considered:

1. Condition of the wind focusing the residential areas.
2. It should be minimum 5 kms far from the residential and agricultural areas as well as the water drainage.
3. Its area should be enough to burn the garbage transported to it within 24 hours.
4. The burning place should be spacious enough to receive the expected garbage in accordance with the nature of the area and number of inhabitants.

The department concerned with the treatment of the wastes should abide by the terms and conditions stipulated in these bylaws.

Article (64)

The concerned departments, as per the nature of the activity, when any kind of fuel or material is burnt, whether for the industrial purpose or power generation or construction or any other commercial purpose, the damaging smoke, gases and steam resulted should be in the limit prescribed in the annex (3) attached to these bylaws. The in-charge of these activities should take all the procedures to minimize the quantity of the pollutants resulted from the above burning as per the following procedures:

1. To select the suitable fuels, consider the proper designing for the boilers, ovens, stacks, etc. and use the control system having high efficiency.
2. Avoid uncovered burning which does not meet the proper designing to guarantee the complete burning. And the exhauster in the stack should be in accordance wit the suitable engineering specifications, matching with the nature of each project.
3. Design the burners, boilers and ovens in such a way that the emissions of the air pollutants therein will not exceed the limits prescribed in the annex (3) attached to these bylaws.
4. Don’t use the fuel oil or other heavy petroleum products or crude oils in the residential areas.
5. The emissions of the sulfur dioxide from the high

stack should be enough high so that it will be reduced when reach to the earth surface. The fuel that contains high sulfur should be used in the areas far from the residential areas, considering the air factors and distances to prevent its reaching to the residential and agricultural areas or to the water drainage.

6. Abide by the limits prescribed for the emissions from the fuel burning sources whether for smokes (flames) or dust or flying particles or sulfur dioxide gases or total carbo organic materials as per the limits given in the annex (3) referred above.
7. The height of the stacks installed for the industrial establishments should be in enough height to discharge the air pollutants and the maximum emissions should not exceed the limit prescribed in the annex (3) referred above.
8. The height of the chimneys and stacks that serve the public places like offices, restaurants, hotels and other commercial purposes should not be less than 3 meter from the edge of the top building and the gas discharging from the stack should be accelerated.

Article (65)

The parties who carry out the research, exploration, digging and production of crude oil, its purification and manufacturing should abide by the following terms and conditions:

1. Follow the necessary precautions to protect the environment in accordance with the nature of every project or enterprise or operation.
2. Follow the standard specifications prescribed for the safe operation methods with respect to the digging and storing of petroleum, petrochemicals and gas, their transporting, discharging of unwanted water and other materials, avoiding the waste of petroleum and gas.
3. Take the necessary measures to protect from fire and to protect the machinery, wells, residences of workers, stores and petroleum facilities.
4. Consider to define the safe areas between the exploring or producing wells and collection and production stations or any other industrial establishment, workshops, main and sub pipelines, residences, social and religious places and graveyards.
5. Consider the terms of dimensions and distances when the explosives are sued whether for earthquake survey or pipeline construction operations.
6. Provide the wells with materials, equipment and valves necessary to prevent explosion and prevent the oil or gas leakage.
7. Install the separation equipment and torches for the production, transportation and purification operations

for petroleum materials, petrochemicals and gases

8. Take necessary procedures to prevent the spilling of oil and gas taken for tests during the digging operations and complete the wells which cannot be joined, in addition to any oil or gas to be burnt, provided that best number and quantity of burners, torches, additional air should be used or if possible diesel to be used for completing the burning of heavy crude oil.
9. Install chimneys, stacks and pneumatics necessary for the production, purification and storing in the stations under the enterprises.
10. Adopt necessary plans, equip the equipment and machinery; and appoint and train the employees to face any leak or fire occurs in the heads of the wells or flowing lines or marine establishments or industrial enterprises or storing tanks or depots or workshops or residences or other similar buildings inside the activity of the establishment.
11. The storing tanks should meet the following:
    a. Minimum limit from the areas to the bank of main roads, other depots, buildings, and places exposed to fire.

    b. It should be tight closed and regularizing the steam spillage operations in accordance with the terms and conditions in this regard.
    c. The paint should be white or any other shining colour.

    d. To encircle the tanks with suitable walls to prevent the oils spillage if any and to provide them with outlets to release the rain water, provided that the size of the wall should be

complying with the size of the tanks and in accordance with the terms and conditions used for designing the tanks for storing the petroleum or petrochemical storing tanks.

12. Use the pressed air in the measuring and operating equipment instead of pressed dry gas, whenever possible.
13. Fulfill all the terms necessary for the smooth use of all instruments, equipment and machinery and it should be in good condition, sufficient for the allotted works. The necessary inspection and maintenance should be conducted on time.
14. Dispose of the gas accompanying the oil which cannot be utilized or used in a safe way in accordance with the international specifications in this regard.
15. Use and apply the mechanical and chemical means and apply them to take big quantities of well or tank wastes, prepare pits or tanks to receive the remaining wastes after the treatment, in a suitable and safe place far from wells or petroleum enterprises and residences, caring that these wastes will not flow to land surface or public road or water drainage or seals of sea coasts.

Article (66)

The spraying or using any epidemic ruinous or chemical compounds for the purpose of agriculture or health or other purposes is not allowed except with considering the terms, conditions and guarantees prescribed by the concerned departments in coordination with the Secretariat General, especially the following:

1. List the ruinous in the ledgers available with the concerned departments and advise the Council accordingly.
2. Inform the concerned health units in the area about the materials of spray and the anti poisons used for spraying the agricultural epidemics to provide the necessary first aid if subject to danger.
3. Provide dresses and protection measures for the spraying workers.
4. Warning about the spray enough time prior to spraying.
5. Put sign boards in the spraying areas.
6. Assign the spraying works to qualified workers.
7. Avoid the areas adjacent to inhabiting areas, fisheries, poultries, livestock sheds.
8. Not to spray the ruinous in the wind.

Article (67)

The licencee to spray or use the ruinous of epidemics or chemical components as per the foregoing paragraph should abide by the following:

1. To establish a program to control the health of the workers during the period of their service.
2. To prepare a program to monitor the work place and protect its continuity in order to achieve the suitable protection and safety for the workers, public and environment, taking samples of the soil and agricultural products regularly and subject them to analysis in order to know the method of measurements used.
3. Regular inspection on the workers, prohibition of smoking and having food and beverages during the

work.

4. To prepare a register to record the risks incurred by the workers as follows:
   a. Open medical file for every worker.
   b. Subject the workers for routine checkup to know whether they are subject to risks.
   c. Stop the workers from work, who are subject to risks as per the medical report
   d. Attach the details related to the accidents related to the workers.
   e. Follow the principles that help to understand the ability of the workers and their qualifications to know the features and toxicity of the hazardous materials and train them to avoid the mistakes that may lead to the human accidents.
5. To prepare a register for the spray periods and keep them upgraded, including the following details:
   a. Details of every item including the trade name, scientific name, chemical number, imported quantity, remaining quantity and date of validity.
   b. Register the date of using the material every time and quantity used in this operation.
   c. Routine inspection and control of the operations, date of execution and other remarks.
   d. Take regular inventory for the quantity of the hazardous chemical materials and confirm its safety and validity.

This register will be inspected by the Secretariat General regularly every three months.

Article (68)

All the parties and individuals who practice stoning or breaking or digging or excavating or building or demolishing or transporting that produces materials or wastes or soils, should take the necessary measures for

the safe storing and transporting to prevent their flying. The licensing department should verify the same as follows:

1. All the activities should be implemented in a safe way and far from the traffic and pedestrian interruptions.
2. Consider the coverage for flying to prevent air pollution.
3. Transporting wastes and mud in specially allotted vehicles with following conditions.
    a. It should be equipped with a special box and tight cover to prevent the spreading of mud and wastes to the air or spillage on the road.
    b. It should be equipped with loading and unloading equipment.
    c. It should be in a good condition in accordance with the safety, strength and lighting terms and equipped with the safety equipment.
4. To allot the places where the wastes are transported with licence from the concerned department so that it will not be in a distance less than 2 kilometers from the inhabited areas. It should be in low areas and should be leveled after the burial and filling.

Article (69)

All the parties and individuals, when the production or service or other activities are practiced, especially when the machines and equipment are operated or alarms or speakers are sued, should not overtake the limit allowed for the frequencies of sound inside the work place and in the closed places shown in the standards and criteria of sounds in the annex (3) attached to these bylaws.
The licensing departments should consider that the sound emerged from the fixed sources in one places to be under the limit allowed for and confirm that the enterprises have selected the machines and equipment suitable to guarantee the same, as shown in the annex (3) referred above.

Article (70)

The owner of the project or enterprise should take the necessary precautions and planning adopted by the concerned department to guarantee preventing the leakage or discharge of air pollutants inside the work site, exceeding the limits shown in the annex (3) attached to these bylaws, whether resulted from the nature of practicing the activity by the enterprise or fault in the equipment. He should give the protection measures required for the workers including the selection of the suitable machines, equipment and type of fuels. He should guarantee the necessary air circulation and installation of chimneys and other means for freshening the air.

Article (71)

The owner of the project or enterprise will take the procedures necessary to keep the degree of temperature and moisture inside the work site without defaulting the allowed maximum and minimum limits and the maximum limit for subjecting for each. In case of emergency works in the temperature or moisture beyond this limit, he should provide the suitable protection means for the workers such as dresses and other safety means, in accordance with the minimum and maximum limits for both temperature and moisture degrees as shown in the annex (3) attached to these bylaws.

Article (72)

The close and semi closed public places, projects and enterprises should be meeting the means of airing suitable for the size of the place, its gathering capacity and type of the activity being practiced thereof, to guarantee the renewal of air, its purity and to keep the suitable temperature and moisture. The quantities of the air to be available in these areas will be as described in the annex (3) attached to these bylaws.

Chapter Three
Protection of Water Environment from Pollution

Section One
Protection of Underground and Surface Waters

Article (73)

The standards prescribed for the drinking water, sea water and drainage water shown in the annex (3) attached to these bylaws should be followed and the concerned department should take the necessary procedures to implement those standards.

Article (74)

The concerned department will undertake adopting necessary procedures to organize the water stock from the underground water good for use, considering its best utilization in the extent not affecting the quantities available at present and in future, its features or principles of their distribution or usage.

Article (75)

The drinking water must be complying with the standards and criteria of the water quality with respect to the natural, chemical, biological and microbiological features, percentage of organic and inorganic components affecting the health. The water should be distributed, whether

through network or without network , as detailed in the annex (3) attached to these bylaws.

Article (76)

The standards of the drainage water quality, criteria of the exhaust waters treated from the land industrial facilities used for the irrigation, criteria of the disposal of the industrial waste to the general waste, criteria of the treated drainage water and criteria of the composure water disposal will be determined in accordance with the standards, criteria, percentage and limits shown in the table attached to the annex (3) of these bylaws.
The concerned department, in collaboration with the Council, will undertake adopting the terms and conditions necessary to arrange the best use of drainage water treated and having the quality prescribed in the annex (3) referred above, giving guidelines to consume them and not to waste them and to utilize them for agriculture and irrigation.

Article (77)

The concerned department, in collaboration with the Council, will undertake adopting the terms and conditions necessary for arranging the sites for putting and burying the solid wastes, including their sorting as per the quality and nature such as domestic wastes, building wastes and inorganic solid wastes. It should confirm, when selecting such sites, that it will not cause for the leakage of wastes and pollution of underground waters and monitor/control any possible leakage by digging necessary monitoring wells for the same.

Article (78)

The concerned departments, in collaboration with the Council, will undertake each as per their competence, the monitoring and control of different waters during the suitable periods, taking necessary samples, inspecting them, taking necessary procedures to keep the standards prescribed for protecting the drinking water from pollution and keeping the public health.

Section Two

Protection of Marine Environment
First: Pollution from Ships
1- Pollution with Oil

Article (79)

All the ships and transporters which visit the State ports should abide by the requirements stipulated in this Law and its bylaws, regarding the disposal or discharging of oil or oil mixture in the State ports or its regional sea or its exclusive economic zone.

Article (80)

The ship owner, captain and in-charge of oil transporting vessels inside the ports or the internal waters or the regional sea or the State's exclusive economic zone as well as the companies operating in producing oil should inform the concerned department immediately about any accident of oil spill as soon as it occurs, with details of the circumstances led to the accident, type of the spilled

material and the procedures taken to stop the spilling or to minimize the same, provided that the report, particularly, should include the following details:

1. The source possible for happening the spillage.
2. Extent of subjectivity to fire as a result of the accident or spilling.
3. Direction of the oil tracts formed.
4. Average of leaking if continued.
5. Dimensions of the oil tracts and quantity of the spilled oil.
6. Director and speed of wind, climate temperature and visibility.
7. Direction and speed of water and water temperature degree.
8. Condition of the sea.
9. High tide and low tide cases (sinking, high, medium, weak)
10. Threatened coastal places.
11. Nature of the area (coral reef, marine creatures)
12. Reporting source (name, telephone and address)
13 The method taken to treat the leak and quantity and type of the dispersers, if used.

In all cases, the concerned departments should provide the Council with entire information about the above mentioned accidents as soon as it occurs to follow up the procedures to be followed in this regard and submit an integrated report about the accident after finishing the treatment of its consequences.

Article (81)

The concerned departments should equip the shipping ports and the ports arranged to receive the oil transporters and ships repairing docks mentioned in the articles (47) and (52) of the Law, with the necessary equipment enough to receive the unclean composure water and different kinds of waters from servicing the reservoirs of the oils transporters and other ships.
These ports should be equipped with necessary vessels to receive the wastes, garbage, oil sediments and oil mixtures.
No ship or transporter will bill not be permitted for shipping or unloading unless contacted with the concerned department to receive them and direct them to the places allotted for disposing the wastes and unclean composure waters.

Article (82)

All the ships which have loading capacity less than 150 ton for oil transporters and 400 ton other ships and are sued by the Qatari ports or sailed through its areas should be equipped with the pollution minimizing equipment in accordance with the international agreements joined by the State.

Article (83)

The ships which transport the oil systematically from or to any of the Qatari ports or through any of the oil transport means inside the regional sea or the economic area belongs to the State should obtain the international

certificate of non-pollution with oil attested by the world classifications authorities approved by the Customs and Ports General Authority.

Article (84)

The owner or captain of the shop registered in the State or out of the State should keep a register for the oil in the ship and the in-charge should register all the information therein about the oil, particularly the following information:

1. The oil loading and delivery operations along with the type of oil.
2. Discharge of oil or oil mixture for the safety of the ship or its load or to save the souls, along with the type of oil being discharged.
3. Leak of oil or oil mixture due to the collision or accident with the details of oil percentage and size of leakage.
4. Discharge of unclean and reservoir servicing waters.
5. Disposal of polluting wastes.
6. Disposal of the water containing oil, which is collected in the machines outside the ship during its presence in the port.

Article (85)

The oil or oil mixture disposal operation is registered for the onshore platforms which are established in the water environment in a special register complying with the register of oil stipulated in the foregoing paragraph, provided that this register should include the following information.

1. Name and location of the platform.
2. Licence issued for the platform.
3. Name of platform owner
4. The activity practiced by the platform.
5. Details of the system, equipment and units for treating oil and oil mixture before being deposited and its control system.
6. Quantity and quality of the materials and liquids licensed to be discharged in the year ad its averages.
7. Actual quantity for the materials and liquids being discharged.
8. Details of the faults for the system, equipment and units for treating the oil or oil mixtures, date of fault, period of fault, results of the analysis after the repair immediately.
9. Name and signature of the person who fill the information of the register.
10. Date of issuing the information.

Article (86)

The oil ships with load capacity of 2000 and more, which operate in the regional sea or the economic area of the State, should submit to the concerned department a financial guarantee bond stipulated in the Article (49) of the Law. It should be valid and covering the responsibility for compensating all the damages resulted form the possible pollution from their part, which is to be determined by the concerned department.

This certificate is submitted in accordance with the terms issued under a decision from the concerned minister in coordination with the Council.

2 - Pollution with Hazardous Materials

Article (87)

The parameters and specifications of the hazardous materials when disposed of in the water environment have been limited to the terms and conditions shown in the annex (4) attached to these bylaws:
Also the liquid and illiquid materials damaging to the water environment and subject it to danger and prohibits for the ships and transporters to put or discharge in the regional sea or economic area of the State, from the organic and inorganic materials are described in the annex (4-2) attached to these bylaws.

3- Pollution with Different Drainages and Wastes

Article (88)

The ships and offshore platforms are prohibited from discharging the drainage to internal waters or regional seas or exclusive economic area of the state. It should be disposed of as per the following criteria and procedures.

1. The ship or the marine platform should be equipped with a unit to treat the drainage water.
2. Not to discharge the treated drainage water in the distance less than four sea miles from the coast.
3. If the ship or the marine platform discharges the wastes before treating them, it should not be in a distance less than 12 seal miles from the coastline.

In all cases no ship or marine platform is allowed to discharge the drainage wastes kept in the tanks at once but in medium quantities and the ship is sailed in a speed less than 4knot/hour.

The discharge operation, whatsoever, should not cause to appear visible floating solids in the regional water not to cause for change in the colour of these waters.
If the drainage water is mixed with water wastes must be treated, this treatment should be done before discharging them.
These provisions are not applied in case of discharge for the safety of the ship or those who are on the board or to save the souls in the sea or due to any damage occurred to the ship or its equipment, provided that all the precautions should have taken to prevent this discharge or to minimize them to the maximum limit before and after such damage.

Article (89)

The concerned departments should define the necessary vessels prepared for receiving the wastes and the place of delivery for the garage and provide the facilities to receive the wastes, polluted waters and ship wastes, considering that such facilities should be good for use, well maintained and kept clean regularly.

Article (90)

The concerned departments should consider, when the wastes collected in the facilities mentioned in the foregoing paragraph, not to spill these wastes or discharge any smell the reform and dispose them in the places in accordance with the terms stipulated in the Law No. (8) of 1974 regarding the Public Cleanliness and its executive bylaws.

Second: Pollution form the Sources in the Land

Article (91)

The party who is licensed to establish any of the projects or enterprises including the general stores, commercial, industrial, tourist and services enterprises on the seashore or nearby places, should abide by the following:

1. Not to discharge or put any untreated materials or wastes or liquids that may cause pollution in the coasts or adjacent waters.
2. Not to discharge any insolvent polluting materials, especially those stipulated in the annex (4-2) attached to these bylaws, in the water environment and adjacent coasts directly or indirectly.
3. Not to discharge solvent polluting materials to the water environment and adjacent coasts until they are treated and complied with the specifications and criteria stipulated in the annex (3) and annex (4-1) attached to these bylaws.
4. Provide suitable and enough units to treat the materials or wastes or liquids, start their operation as soon as such projects or enterprises are started and maintain their safety and maintenance regularly.
   The legal representative or the in-charge for the management of the project or enterprise that discharges to the water environment will be responsible for the violations committed by the

workers against the provisions of the Law and these bylaws and to provide the treating measures complying with the criteria and specifications specified in the annex (3) and annex (4-1) attached to these bylaws.

Article (92)

No project or enterprise will be allowed to be established on the sea coasts upto minimum two hundred meters inside from the coastline, nor to carry out any business which may affect the natural way of the coast or alter it by entering in the direction of the seawater or reduce the line except with the approval of the concerned department in collaboration with the Council and considering the provisions of the Law No. (4) of 1983, regarding the exploitation and protection of the living water wealth in Qatar and Law No. (10) of 1987, regarding the private and public properties of the State.

Article (93)

The following procedures and conditions to be followed in licensing any projects or enterprises or to practice any business mentioned in the foregoing paragraph:

1. Submit the application to the concerned department on the Form given in the annex (2-2) attached to these bylaws, attached with documents, information and required studies.
2. Conduct an environmental impact evaluation study in accordance with the section two of the chapter one of these bylaws, explaining the extent of the impact made by the project or the business on the

environmental balance of the coastal area, coastline and its natural ways, particularly the following:

a. Slaughtering
b. Sedimentation
c. Coastal waves
d. Pollution resulted form the project or business.
e. Works, precautions and plans suggested to avoid or treat the impacts, if any.

3. Provide the necessary means to treat the materials or wastes or liquids that may be discharged and may cause for the pollution of the coasts or adjacent waters.
4. Justifications for the establishment of the project in the economic and social perspective and confirm the non-availability of alternative places to establish the project therein.
5. The Secretariat General undertakes the study of the environment licence application for the project or the application for approval on the business to be established after the application and the attached documents are referred to it. The decision of the Council about the environmental licence or the approval is issued in accordance with the procedures described in the section two of the chapter one from these bylaws.
6. Fulfill other terms prescribed by the concerned department in accordance with the nature of the project or the business to be licensed for and as per the requirements of the above referred Law Nos. (4) of 1983 and (10) of 1987.

Annexes of

the Executive Bylaws for the Environment Protection Law
issued under Ordinance Law No. (30) of 2002

Annex (1)	Categories and Divisions of the Private and Public Development Projects which have a nature of causing damages to the environment.
Annex (2)	Forms, Applications, Outline, Permits, Approvals and Licences.
Annex (3)	Environment Protection Standards and Criteria.
Annex (4)	Criteria and Specifications of the Hazardous Materials when discharged in the water environment.
Annex (5)	Details of the Departments Concerned with the Licences regarding the wastes and hazardous materials.
Annex (6)	Enterprise Activity Register
Annex (7)	Special Rules related to the management of the hazardous wastes and its transportation through boarders.
Annex (8)	Special Rules related to the import, production, handling and transport of hazardous materials.

Annex No. (1)

Categories and Divisions Public and Private Development Projects that Cause for Environmental Damages

Annex No. (1)

Categories and Divisions
Public and Private Development Projects
that Cause for Environmental Damages

Sl.	Projects Classification
1.	Projects of searching, drilling, exploring, producing, manufacturing, re-manufacturing and producing, refining, storing, transporting, selling and collecting petroleum, petroleum derivatives and sub products like (petrol, diesel, oil and greases; including the related plants and equipment)
2.	Projects of searching, drilling, exploring, producing, storing and transporting gas and other hydrocarbonic materials ; including the related plants and equipment
3.	Factories of petrochemicals and oil refineries.
4.	Projects of exploring, producing, manufacturing, storing and transporting sands, rocks and gypsum
5.	Projects of melting, manufacturing and storing aluminium, steel and metals like gold and other metals.
6.	Projects of metal coatings and production like steel and other metals.
7.	Projects of manufacturing and storing cement and concrete materials.
8.	Projects of manufacturing and storing fiberglass, sponge, glass and flin.
9.	Projects of manufacturing and storing cements blocks, stones and tiles.
10.	Projects of manufacturing and storing insulation materials.

11.	Projects of manufacturing and storing papers, printing papers and manufacturing inks.
12.	Projects of manufacturing and storing woods and related items.
13.	Projects of cloth manufacturing.
14.	Projects of circling, reusing, treating and disposing of the hazardous and non-hazardous wastes.
15.	Projects of manufacturing, circling and storing photocopying and pictures printing inks.
16.	Projects of manufacturing, filling and storing chemical materials having different types and usages.
17.	Fertilizer projects
18.	Projects of manufacturing, filling and storing medicines, medical components and cosmetic materials.
19.	Projects of manufacturing, filling, storing and transporting different kinds of pesticides.
20.	Projects of manufacturing, filling and storing paints of different kinds and usages.
21.	Projects of manufacturing and filling gases of different kinds and usages.
22.	Projects of manufacturing, storing arms, ammunitions, firebox and likewise.
23.	Projects of manufacturing and storing different kinds of batteries.
24.	Projects of manufacturing, filling and storing cleaning materials, detergents and soaps.
25.	Projects of manufacturing and shaping and storing plastics.
26.	Projects of manufacturing and storing vehicle's tyres and different kinds of related equipment.
Sl.	**Classification of Projects**
27.	Projects of manufacturing and storing cooling equipments and different kinds of electrical

	instruments.
28.	Projects of erecting cable and wireless communication and transmission towers including microwave equipment.
29.	Projects of generating electro magnetic or ionic rays.
30.	Projects of electric power generating stations and lines of distribution.
31.	Projects of desalination, filling and purification of drinking waters and distribution networks.
32.	Projects of liquid and un-solid waste treatment facilities.
33.	Projects of producing, filling and storing food materials.
34.	Projects of collecting, nursing, slaughtering and skinning animals.
35.	Projects of tanning and manufacturing animal skins.
36.	Projects of planting fish wealth either in sea or in special basins out of the sea.
37.	Projects of qualifying lands for agriculture.
38.	Projects of planting and landscaping lands.
39.	Projects of manufacturing plant and animal oils and its derivatives.
40.	Projects of animal and plant fodders.
41.	Projects of roads out of the planning.
42.	Big infrastructure projects, public places, tourism facilities and service utilities (such as highways, commercial centers, residential complexes, commercial and residential towers exceeding ten floors and entertainment areas etc.)
43.	Projects for building industrial cities, areas and new outskirts.
44.	Projects for establishing airports, ports and harbours and deepening channels.
45.	Project established adjacent to the areas which have

	high environmental values such as valleys, coastal lands, islands, coral areas, unique areas for plants and animals including the natural quarantine and environmental and ecological sensitive areas.
46.	Projects to establish any activities, plants and business on the islands, coasts and beeches of the State.
47.	Projects that cause for demolishing coasts and island edges.
48.	Projects that may affect the hereditary or antique or historic or tourism or scientific or cultural or utility related nature already available.
49.	Projects for establishing hospitals and health facilities including the medical waste disposal facilities, substitutes and laboratories.
Sl.	**Classification of Projects.**
50.	Military Projects.
51.	Hazardous Materials Storing Projects.
52.	Projects that may influence on the soil and underground water such as irrigation or drainage projects.
53.	Projects implemented in the areas of exploitation or use of natural materials especially the rare items.
54.	Projects for re-qualifying the old areas which are affected by the pollution due to the burial and disposal of solid and liquid wastes.

Annex No. (2)

Applications, Forms and Outlines of Permits, Approvals and Licenses

Annex No. (2)
Applications, Forms and Outlines of Permits, Approvals and Licences

1. Outline of the procedures to submit the private and public development projects to the Secretariat General when they are planned and before the execution
2. Application Form for environmental licence.
3. Outline of the procedures to apply for the environmental licence.
4. Application Form for obtaining the operation licence.
5. Outline of the procedures to apply for the operation licence.
6. Outline of the procedures to submit complaint against the decision to reject the environmental licence or operation licence
7. Application Form for obtaining the licence for transporting and disposing the hazardous wastes.
8. Outline of the procedures for applying licence for transporting and disposing hazardous wastes..
9. Certificate form for the approval on transporting and disposing of the hazardous wastes.
10. Form of notification about the shipment and transportation of the hazardous wastes through the boarders.
11. Document form for shipping or transporting hazardous wastes through the boarders
12. Application form for obtaining a licence to practice the hazardous material importing activity.
13. Application form for the environmental approval on the registration with CR or addition of any activity thereto.
14. Application form for importing hazardous materials.

15. Outline of the procedures for applying to import hazardous materials.
16. Outline of the procedures for releasing hazardous materials.
17. Application form for obtaining a licence for a store or storing hazardous materials.
18. Outline of the procedures for obtaining licence for storing hazardous materials.
19. Application form for obtaining the licence for
20. Outline for the procedures of licensing the transport of hazardous materials.

Schlumberger

Annex No. (2/1)

Outline of the Procedures to Submit the Private and Public Development Projects to the Secretariat General when they are Planned and before the Execution.

Schlumberger

Annex No. (2/2)

Application Form for Environmental Licence.

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

(Annex 2/2)

Application Form for Environmental Licence

Application No.

1. **General Information**

1-1 Name of the Project: _____

Nature of the Project: (Infrastructure – Industrial – Agricultural –Others)

1-2 Name of the Project Owner: (Individual – Company – etc.)

1-3 Name of the In-Charge: _____

Address: _____

Tel: _____ Fax No. _____

1-4 Licence Issuing Authority: _____

2. **Project's Information**:
Project Particulars: (Kindly attach the detailed map approved by the concerned department along with standard drawings showing the site, location with respect to the population, neighbouring activities, roads, communications, antique areas, reserves, tourism places if any; and details of the air and sounds pollution expected to occur from the project in the area).

2-1 Address of the Project:

☐ City ☐ Village ☐ Industrial Area ☐ Others (Specify)

☐ Inside Plan ☐ Outside Plan ☐ Residential ☐ Commercial ☐ Indepen

Total area of the project (M^2) _____
Total area of the project buildings (M^2) _____

2-2 Nature of the Project:

☐ New ☐ Existing ☐ Expansion ☐ Amendment ☐ Change of Loc

☐ Renewal

Nature of Expansion or Renewal: _____
If the nature of the project is expansion of renewal whether the environm impact evaluation study has been submitted for the original project?
☐ Yes ☐ No

Date of Previous Approval from the Council:

2-3 Production Capacity: or Storing Capacity:

Mention the unit used: _____

2-4 Final Product: _____

_____

2-5 Second Product: _____

_____

2-6 General Description of the surrounding area of the project includin archeological and historical areas, reserves, tourism and entertai places.

_____

_____

2-7 Available and Non-available Infrastructure: _____

_____

Water Network	☐ Available	☐ Not Available
Electrical Network	☐ Available	☐ Not Available
Drainage Network	☐ Available	☐ Not Available
Road Network	☐ Available	☐ Not Available
Source for Fuel	☐ Available	☐ Not Available

2-8 Reason for the Selection of the Site: _____

_____

2-9 Stages of the Project and Expected Date of Commencement:

Construction : _____

Actual Commissioning: _____

4- Short Description of the Project during the Construction Stages:

_____

_____

_____

_____

4-1 Water Sources: _____ Usage: Average _____ Consu

4-2

4-3 Expected Labours and Their Accommodation: _____

_____

5- Wastes Resulted from the Construction and Method of Disposal:

5-1 Solid Wastes: _____ Type: _____

Quantity: _____ Method of Disposal_____

5-1 Liquid Wastes: _____ Type _____

Quantity: _____ Method of Disposal_____

5-3 Gas Emission (Smoke – Smell – Sticking Materials)

_____
_____
_____

5-4 Noise:
_____

6- Detailed Description of the Commissioning Stage: (Attach the Drawings Explanations).

6-1 Main Components of the Project: _____

_____
_____

6-2 Description of Industrial Operations: (supported with catalogues operation maps etc. ..)

_____
_____
_____
_____

6-3 Used Electrical Power: _____ Sources: _____

6-4 Raw Materials:

Material	Type	Quantity M^3/day or Kg/day	Source
		(Gas – Liquid – Solid)	

6-5 Considered substitutes for the raw-materials used:

6-6 Reasons for selecting the use the technologies:

_____

_____

6-7 Expected Manpower and Place of Accommodation:

6-8 Type and Source of Fuel : Average Use:

(Common Electricity – Generators - Solar Cells)

6-9 Water Sources : Average Use:

(Common Water – Underground – Water Surfaces - ……)

7- Wastes and Garbage Resulted from the Operations, their Treatmen
Method of Disposal:

7-1 Liquid Wastes:

Drainage:

Average Disposal : ( ) M^3/day or Kg/day

Method of Control: _____

Method of Disposal (Common Network, Stores, etc…) _____

Industrial Wastes:

Average Disposal : ( ) M^3/day or Kg/day

Method of Control: _____

Expected Analysis for the Industrial Waste:

Method of Industrial Waste Disposal: (Select one of the following choices)

- Through the network of the Municipality directly: ( )
- There is waste treatment unit for the project, then it is disposed in the network (attach the catalogues for the waste treatment unit and the standard of the waste resulted from the treatment unit) ( )
- Collected in a store without treatment ( )

7-1 Gas Wastes (Air Polluters)

Polluters from fixed sources: _____

Polluters from movable sources: _____

Polluters from fuel burning sources: _____

7-3 Solid and Hazardous Wastes:

Method of Transport, Handling and Storing:

Disposal of the Wastes (safe burial ground – contractor – others)

7-4 Hazardous Materials and Wastes

Method of Transporting, Handling and Storing

Disposal of the Wastes (safe burial ground – contractor – others)

8- Preliminary Analysis for the Environmental Impacts during the perio
Operation Stages and Minimization of the Environmental Impacts

8-1 Impact of the Project on the Air Quality:

8-2 Impact of the Project on the Quality and Availability of Water:

_____

_____

8-3 Impact of the Project on the Quality and Fertility of the Soil:

_____

_____

8-4 Visual Pollution:

_____

_____

8-5 Noise:

_____

_____

8-6 Any other possible or important impacts resulted from the activity:

_____

_____

8-7 Description of any other methods to minimize the negative impacts o project not mentioned earlier:

_____

_____

8-8 Precautionary measures taken regarding the health of the environment, safety of the workers and fire extinguishing facilites:

_____

_____

9- Storing:

9-1 Method of storing raw materials and its efficiency:

_____

9-2 Method of storing basic products and its efficiency:

_____

9-3 Method of storing byproducts and its efficiency:

_____

10- Transport:

10-1 Means of transporting raw materials and its efficiency:

_____

10-2 Means of transporting basic products and its efficiency:

_____

10-3 Means of transporting byproducts and its efficiency:

_____

11- Environment Protection Costs from the Capital:

11-1 Special cost for controlling the pollution (QRs.)

11-2 Qatari Capital:

- Enclose the environmental impact evaluation study for the projects enlisted in the Annex (1) attached to these regulations.

Continuation of the Annex No. (2/1)

Declaration

I, the undersigned , hereby declare that the information given in this Form are true and correct to the best of my knowledge and belief . In case of any change it shall be advised to the Council immediately.

Exponent :

ID No. :

Capacity :

Date :

Particulars to be Filled with the Knowledge of the Concerned Department or Licensing Party:

Endorsed by the Concerned Department or Licensing Party:

Name :

_____

_____

Title :

_____

_____

Signature :

_____

_____

Seal of the
Concerned Department or Licensing Party

Annex No. (2/3)

Outline of the Procedures for Applying for an Environmental Licence.

Schlumberger

Supreme Council for the Environment & Natural Reserves
Technical Affairs Dept.

Form of Application of Operation Licence

Note to Applicants

1. The application should be completed in block letters and submitted along with relevant supplemental information to General Secretariat.

2. All sections in the Licence Application may not be relevant to every activity. However, the Applicant should look through the complete Form and provide all relevant information. All required information must be provided. If any item is considered as 'not applicable' , the reason should be stated clearly.

3. When the annexes and technical documents are used, give the appropriate references for the same. The Council will look into all available information when the Application is reviewed.

4. This Application includes two parts: Preliminary Information and Other Addition Information. The Application must be subject to verification and study. If you wish to keep the information confidential, please attach a letter showing the reasons for the same in detail.

5. The Council assumes no responsibility for delays arising from the submission of incomplete information.

Preliminary Information:

Application No.	Date of Application (dd/mm/yy)	
Type of Application	☐New/Renewal ☐ Amendment ☐ Transfer	
Proposed/Actual Commencement of Operation (Month/Year)		
Name of the Company/Project		
Contract Person		
Postal Address		
Telephone		Mobile
		Fax
Email		
Type of Activity		
Number of Employees		
Capital (For new companies only)		
Environment Licence issuing date		

Licensing Authority		
Unconditional Approval		
Conditional Approval		
Stand on the Execution of the Postponed Procedures		
Company/Project Licence	Date:	No.
Hazardous Materials Storing Licence No.		
Other Licences Required for the Facility	Issued	Under Process
	▪	▪
	▪	▪

2. Other Information

2-1 Raw Materials Used Per Day:

Sl.	**Raw Materials**	**Qty (kg/day)**
1.		
2.		
3.		
4.		
5.		

2-2 List of Products and By-products Manufactured Per Day:

Sl.	Product / By Product	Qty (kg/day)

1.		

2.		
3.		
4.		
5.		
6.		

3- Water Pollution

3-1 Explain the method for treating the industrial wastewater arising from different industrial processes along with the diagrams showing the sources of water pollution and the quantity of water used in detail. (Please attach an explanatory letter).

3-2 Explain the method of disposing of the wastewaters resulted daily from the domestic, industrial, cooling and offshore operations.

Sl.	**Activities**	**Qty (M^3)**	**Method of Disposal**
1.	Domestic		
2.	Industrial		
3.	Cooling		

4.	Offshore		

4- Air Pollution :

4-1 Gas Emissions from Chimneys (Stacks)

1.	Total numbers of chimneys in the Company*					
2.	Stack No.	1	2	3	4	5
3.	Stack Height (M)					
4.	Stack Diameter (M)					
5.	Gas Qty (M^3/Hr)					
6.	Gas Temperature (^{0}C)					
7.	Gas Exit Velocity (M/Sec)					
8.	Type of Monitoring System (Fixed / Portable)					
9.	Pollution Emitting Rate (Mg/Sec)					
	SO_2					
	NO_x					
	CO					
	HC (Hydrocarbons)					
	PM (Perticualr					

	Matter)					
	Others					

Each stack should be provided with suitable holes to connect the monitoring equipment.

4-2 Fuel Consumption Per Day:

		Natural Gas	Oil
(1)	Daily Consumption in Tons or M^3		
(2)	Sulfur Content (%)		

5- Solid Wastes

Sl	Sources /Activities	Qty (kg/m^3)	Nature of Wastes Hazardous/ Non-hazardous	Mode of Disposal
1.				
2.				
3.				
4.				

6- Proposed technology and other techniques for preventing or minimizing the discharges and wastes from the Company or Project (Enclose).

7- Storing

7-1 Means of Storing Raw Materials and their Efficiency:

_____

_____

_____

7-2 Means of Storing Main Products and their Efficiency:

_____

_____

_____

7-3 Means of Storing Secondary Products and their Efficiency:

_____

_____

_____

Transportation:

8-1 Ways of Transporting Raw Materials and their Efficiency

_____

_____

_____

8-2 Ways of Transporting Main Products and their Efficiency

_____

_____

_____

8-3 Ways of Transporting Secondary Products and their Efficiency

_____

_____

_____

Affidavit of the Applicant	
I hereby confirm that the information given hereof are true and correct:	
Name:	Date:
Position:	
Address:	
Fax:	
Signature with Stamp	

For Official Use Only	
Received by:	Date:
Forwarded for Action to:	

Remarks:

Use separate sheets if needed to fill up the list of raw materials, products, information about the stacks and particulars of the water and air pollutions.

Encl:

1. Details description of the data and plans of the products, raw material used and method of manufacturing.
2. Information related to the quantity used and method of storing.
3. Report on the results of analyzing the waters from different units and places of their disposal (if any).
4. Results of tests for different components of solid wastes (if any).
5. Details plan for different production units, places of discharging the gases from the chimneys and torches.
6. Latest report for the components of the gas discharged from different stacks in the factory (if any).

Annex No. (2/5)

Outline of the Procedures for Applying for an Operation Licence.

Annex No. (2/6)

Outline of the Procedures for Complaining against the Decision Rejecting the Environmental or Operational Licence

Annex No. (2/7)

Form of Application for Licence to Transport and Dispose of the Hazardous Wastes

Supreme Council for the Environment & Natural Reserves
Technical Affairs Dept.

(Annex No. 7-2)

Form of Application for a Licence to Transport and Dispose of the Hazardous Wastes (Form No. 1)

Note to Applicants

1. The application should be completed in block letters and submitted along with relevant supplemental information to the General Secretariat.

2. All who proposes to transport and/or dispose of the industrial waste inside the State should fill up the Form No. (1) – Licence Application and the Form No. (2), 48 hours prior to the transportation, in order to obtain the final approval.

3. All the producers, transporters and receivers of wastes should follow the directions and instructions set forth by the Council in this regard. If the Application is accepted the Council will co-ordinate with the concerned departments in this regard. In case of any additional terms which the Council sees necessary it will be explained in the box allotted for the same in the Form.

4. The Applicant should read the Form carefully and fill up all the information required therein. In case of any inquiry while filling up the Application please call directly the Council. The Council assumes no responsibility for delays arising from the submission of incomplete information.

Information about the proposed waste transportation										
From	Name and Address of the Waste Producer :						Identification Number of the Producer :			
Application No.										
Date: (dd/mm/yy)										
To the Concerned Department										
Process										
Type of Application	☐ Normal ☐ Urgent Reason:									
Expected Date: (dd/mm/yy)										
Tick(√) the appropriate box	Toxic	Inert	Flamable	Corrosive	Odorous	Acid	Highly Reactive	Infectious	Flash Point	Boiling Point
Description of the Waste Please enclose the following:	Type of Waste (Solid / Liquid / Paste / Gas)									
	Intl Number for the waste (if any)									

▪ Lab analysis for the wastes ▪ Safety and security certificate.	Intl Number for materials (if any)	
	Origin:	
	Qty (Ltr. Kg. Ton ….etc)	
	Explain the present status of the waste (container, barrels, etc..)	
	Additional Information about the wastes.	
Special Handling Instructions	Please specify (personal safety equipment, eyes, hands and ears protection equipment, etc……)	
Validation of the Application		
Applicants Details	Name:	Stamp
	Signature :	Date (dd/mm/yy)
	Telephone:	Fax:
For Official Use Only		
From	Supreme Council for the Environment and Natural Reserves	
To Concerned Dept.		Tel.
		Fax:
CC: Civil Defence	Note: Copy only for hazardous wastes transportation only.	Tel
		Fax:
Decision	Request Accept ◯	Request Reject ◯
With the following	If the Application is accepted, the transporter should follow the following guidelines and	

conditions:	terms for source or producer of the wastes.	
	a- Producer	
	b- Transporter	
	c- Receiving facility	
	Please put circle in the suitable place: Other conditions upon delivery:	
	Return Form (1) and (2) to the Council	
	Other terms at the time of delivery.	
Recommended by:	Name	Designation
	Signature	
Approved	General Secretariat	
	Date: (dd/mm/yy)	

- The transporter should keep the copy of the original application and the original certificate should keep while transporting the wastes.

Annex No. (2/8)

Outline of the Procedures for Applying a Licence for Transporting and Disposing of the Hazardous Wastes.

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Annex No. (2/9)

Form No. 1
Approval for Transporting and Disposing of the Hazardous Wastes.

Supreme Council for the Environment and Natural Reserves

Technical Affairs Dept.

(Annex 2/9)

Certificate of Approval for the Transportation and Disposal of Wastes (Form No. 2)

This Form must be completed and sent by the waster generator 48 hours prior to the intended waster transfer to the Supreme Council for the Environment and Natural Reserves (SCENR) and the concerned department. The generator must verify to have the final signature of both the SCENR and the concerned department before transporting the waste through a duly licensed waste transporter. The transporter should keep a copy of the approval certificate and coy of the original application (Form No. 1)

After obtaining the approval the transporter and the receiving parties should fill up the remaining part of the Form promptly and as per the part allotted for each in the Form. Confirm the compliance to the instructions of SCENR regarding the waste transport and disposal in addition to the compliance to the terms and conditions stipulated in the Forms (1) and (2).

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Please complete in block letters

Part (A) - To be completed by the waste producer		
From	Name and Address of the Waste Producer :	Identification Number of the Producer :
Application No.		
Date: (dd/mm/yy)		
Short Description of the Waste	Note: Form 1 contains the full description and is to accompany the waste transport along with Form 2	
To	Supreme Council for the Environment and Natural Reserves	
CC: Concerned Department		
Undertaking of the Waste Producer	I hereby declare that the above information is true and correct to the best of my knowledge Signature of the Safety and Environment Manager Name: Designation: Seal:	

Part (B) – To be completed by waste transporter		
Licence No.	Name of Driver	Information about the Transporter

	Telephone:	Mobile:	Fax:	
Licensing Authority	Concerned Dept.	Mesaieed	Ras Laffan	Other
Method of Transport	Road	Air	Sea	
Vehicle Registration No.				
Transporter Undertaking Period of Licence	I hereby acknowledge the receipt of the above mentioned waste for transport. Name of Driver / Operator : Date : Signature of Driver / Operator:			

Part C : To be filled by Receiving Party		
Receiving Party Information	Name and Address of the Party	Licence No.
Receiving Party's Declaration	I hereby acknowledge the acceptance of the waste accompanying this Form Name of the Site Attendant: Signature of the Site Attendant: Date:	
	Any remarks of discrepancies between the Waste Form (1) and the actual shipment	

		Yes No.		
		What?		
For Official Use Only				
Final Approval Before Waste Shipment				
SCENR Representative	Name	Designation	Signature	Date
Concerned Dept.	Name	Designation	Signature	Date
SCENR Post Shipment Verification, if required				
Date of receiving wastes by the receiving party	Date of Arrival at SCENR	Any discrepancy with original Application? Yes No. Describe in detail:		
Checked by:	SCENR Staff Name		Date:	

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Annex No. (2/10)

Form of Notification
Regarding the Shipment or Transport of
Hazardous Wastes through Boarders

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.
(Annex 2/10)

Form of Notification
Regarding the Shipment or Transport of Hazardous Wastes through Boarders

1- Source:	3- Notice is Related to:
Transporter:	4. Total Number of Trips:
Contract Person: Tel.	5. Estimated Value
Transport/Shipment through the boarder:	6. Time Intended for Transport:
Reason for Exportation	8. Disposer (Name and Address)
2. Importer (Name and Address)	Contact Person:
Tel Fax / Telex	Tel Fax / Telex
7. Indented Transporter: (Name and Address (2)	Actual Place
10. Waste generating party (Name and Address)	9. Method of disposal
Contact Person:	Code (d) / (e) – 4
Tel	Technology Used (Attach details if necessary)
Place of generation:	14. Material Description:
Generation Operation:	17 No. Y :
11. Means of Transport (1)	18. No. H
12. Type of packing (4)	(2) Grade as per the classification of UN
13- (1) Chemical compound of the waste	19. UN classification No.

<table>
<tr><td>15. Waste identification code:
IWIC</td><td colspan="2">Name of shipment as per UN</td></tr>
<tr><td>In the exporting country:</td><td colspan="2">20. Concerned State
Code No. for the concerned authorities, entry and exit points</td></tr>
<tr><td>In the importing country:</td><td colspan="2" rowspan="2">16. Classification as per OECD
☐Yellow
☐Red ☐ Other (attach details)</td></tr>
<tr><td>Other defined parties:</td></tr>
<tr><td>Customs Code</td><td colspan="2"></td></tr>
<tr><td>Country of Export</td><td>Country of Transit</td><td>Country of Import</td></tr>
<tr><td>21. Customs Offices at the Entry and Exit (European Federation)
Entry:
Exit:</td><td colspan="2">23. Declaration of the Source / Generating Party:
I declare that the above information are true. All the terms and conditions are met and the insurance covers the transport operation through boarders.
Name: Signature
Date:</td></tr>
<tr><td colspan="3">Use of the Concerned Authority</td></tr>
<tr><td>24. To be filled by the concerned authority:
(EEC – OECD)</td><td colspan="2">25. Approval on transportation is issued by the concerned authority:
(Country) :</td></tr>
</table>

Notice Receiving Date: Transit (Basel) Acknowledgement of Receipt on Name of the Concerned Authority: Seal and/or Signature	Date of Approval : Date of Expiry: Special Conditions : ☐ Yes, see the column 26 overleaf ☐ No Name of the Concerned Authority: Seal and/or Signature

(1) Put (x) in the appropriate column (2) Attach list in case of more than one shipment (3) See the list if the shipment is multiplied (4) Take the code given overleaf.

Annex No. (2/11)

Form of Document Regarding the Shipment or Transport of Hazardous Wastes through Boarders

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.
(Annex 2/11)

Form of Document Regarding the Shipment or Transport of Hazardous Wastes through Boarders

1- Source:	3- Notice is Related to:
Transporter:	4. Total Number of Trips:
Contract Person: Tel.	5. Estimated Value
Transport/Shipment through the boarder:	6. Time Intended for Transport:
Reason for Exportation	8. Disposer (Name and Address)
2. Importer (Name and Address)	Contact Person:
Tel Fax / Telex	Tel Fax / Telex
7. Indented Transporter: (Name and Address (2)	Actual Place
10. Waste generating party (Name and Address)	9. Method of disposal
Contact Person:	Code (d) / (e) – 4
Tel	Technology Used (Attach details if necessary)
Place of generation:	14. Material Description:
Generation Operation:	17 No. Y :
11. Means of Transport (1)	18. No. H
12. Type of packing (4)	(2) Grade as per the classification of UN
13- (1) Chemical compound of the waste	19. UN classification No.

<table>
<tr><td>15. Waste identification code:
IWIC</td><td colspan="2">Name of shipment as per UN</td></tr>
<tr><td>In the exporting country:</td><td colspan="2">20. Concerned State
Code No. for the concerned authorities, entry and exit points</td></tr>
<tr><td>In the importing country:</td><td colspan="2" rowspan="2">16. Classification as per OECD
☐Yellow
☐Red ☐ Other (attach details)</td></tr>
<tr><td>Other defined parties:</td></tr>
<tr><td>Customs Code</td><td colspan="2"></td></tr>
<tr><td>Country of Export</td><td>Country of Transit</td><td>Country of Import</td></tr>
<tr><td>21. Customs Offices at the Entry and Exit (European Federation)
Entry:
Exit:</td><td colspan="2">23. Declaration of the Source / Generating Party:
I declare that the above information are true. All the terms and conditions are met and the insurance covers the transport operation through boarders.
Name: Signature
Date:</td></tr>
<tr><td colspan="3">Use of the Concerned Authority</td></tr>
<tr><td>24. To be filled by the concerned authority:
(EEC – OECD)</td><td colspan="2">25. Approval on transportation is issued by the concerned authority:
(Country) :</td></tr>
</table>

Notice Receiving Date: Transit (Basel) Acknowledgement of Receipt on Name of the Concerned Authority: Seal and/or Signature	Date of Approval : Date of Expiry: Special Conditions : ☐ Yes, see the column 26 overleaf ☐ No Name of the Concerned Authority: Seal and/or Signature

(1) Put (x) in the appropriate column (2) Attach list in case of more than one shipment (3) See the list if the shipment is multiplied (4) Take the code given overleaf.

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Annex No. (2/12)

Application Form for Obtaining Licence to Practice Hazardous Materials Importing Activity

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

(Annex 2/12)

Application Form
for Obtaining Licence to Practice Hazardous Materials Importing Activity

Name of Company / Establishment

Company Address:

Street Name:	Zone Name:
Tel.	Fax:
Store Address	
Street Name:	Zone Name:

Type of Activity:

We undertake to submit all the technical publications, standard materials and samples for the materials shown in the purchase bill whose copy is affixed, if the concerned departments request so.

We also undertake to take all the precautionary measures upon filling, transporting and storing these materials and to restrict the use of these materials only for: _____ _____. We shall not mix up the hazardous materials with any other materials except with a licence from the concerned departments and shall keep ledgers for the required hazardous materials.

In-Charge Signature Date:

Encl:
Map
Safety and Security Equipment
Emergency Plan
Driver's Experience Certificate

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Annex No. (2/13)

Application Form for Obtaining Environmental Licence to Enroll in the Commercial Registry or to Add an Activity of Importing Hazardous Materials thereto

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

(Annex 2/13)

Application Form
for Obtaining Environmental Licence to Enroll in the Commercial Registry or to Add an Activity of Importing Hazardous Materials thereto

Date : ___/__/___
Application No.: _____

Type of Application Registration
Addition of Activity

1- Trade Name of the Company: _____ **2- Nationality** ☐ Qatari ☐ Non-Qatari **3- Address**: Street Name: _____ Area: _____ Tel _____ Fax:_____		6- Party to whom the materials are supplied: ☐ Govt. ☐ Private 7- Method of Supply: ☐ Partitioned Order

4- Type of Activity: ☐ Import of Pesticides ☐ Import of Hazardous Materials for Printing ☐ Import of Hazardous Materials for Building Works ☐ Import of Hazardous Materials for Paints ☐ Import of Adhesive Hazardous Materials ☐ Import of Chemical Fertilizers ☐ Import of Hazardous Materials for anti corrosion ☐ Import of Hazardous Materials for cleaning ☐ Import of Hazardous Materials for photography ☐ Import of thermal insulations ☐ Import of Hazardous Materials related to petroleum and gas ☐ Import of Hazardous Materials related to water treatment ☐ Import of Hazardous Materials related to labs ☐ Import of Hazardous Materials related to plastic materials ☐ Import of Hazardous Materials related to _____		☐ Full Order ☐ Director Supply 8- Supply In-charge: _____ Tel: Bleep: Mobile:

5- Object of Import: ☐ Manufacturing ☐ Use ☐ Sale ☐ Any other objective: _____- _____		We confirm the authenticity of the all details mentioned above. Signature and Seal of the Company. Note: In case of change in any of the above mentioned information the Chemical Materials Dept. of the Supreme Council should be contacted.

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For Official Use:

Approved: Dated:

In-Charge: Signature:

Note: Please enclose two copies of C/R if registered
Please type the Form.

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Annex No. (2/14)

Application Form
for Importing Hazardous Materials

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

Import Application Form

Application No.
CR No.
Name and Address of the Company:
Name
Plot No.
Street Name
Zone No
P. O Box
City
Telephone:
For whom the Import is made:
Date of Supply
Method of Transport and Port of Entry:

Sl.	Trade Name	Chemical Name or Formula	CAS No.	Qty	Type of Package	Size & No.

Please type all the required information.

Method of Disposal	Storage Condition	Exporters name Country and	Producers Name	Toxicity Level

Please type all the required information.

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Annex No. (2/15)

Outline of the Procedures for Importing Hazardous Materials

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Annex No. (2/16)

Outline of the Procedures for Releasing Hazardous Materials

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Annex No. (2/17)

Form of Application for Obtaining a Store Licence or to Store the Hazardous Materials

Schlumberger

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

Form of Application for Obtaining a Store Licence or to Store the Hazardous Materials

Annex No. 2/17

Name of the Company: Area:
Street Name: Telephone:
Fax: P.O. Box
Street No. Building No.

1- Site Residential Commercial
Industrial
2- Building Independent Joint
Multi storied
3- Using floor Underground Ground
First

Safety Terms

Fire Fighting Alarm Fire Extinguisher
Emergency Exit
Water Wash Bow Ventilation
Drainage System
Identification Board Warning Board

Specifications of the Stored Materials:

Flaming Gas Explosive Combustible
Corrosive Paints and Inks
Biological

Poison and Toxic Non Flammable
Flammable Liquids
Interacting with Air & Water
Pesticide

Storing:

1. Steel racks and stands for storing
2. Wooden racks and stands for storing materials that interact with water & air.
3. Distance between the walls and pallets for chemical materials, 75 cm.
4. Height 30 cm from land surface.
5. Storing area is clean from hardboards, woods and packing materials.
6. The chemical materials movements are strictly registered.

Packing:

1. There are passages between the stored materials.
2. Packing is suitable for the stored materials.
3. Packing is free from corrosion and leaking and closed to prevent vapors.
4. Packing carries the instructions to be used when needed.
5. There are sign boards showing the nature of the materials and extent of danger.
6. Stored materials are separated in accordance with the degree of danger.

Remarks of Civil Defence Department

Name of Inspector	Signature	Officer, Technical and Engineering Affairs Section

Remarks of the Supreme Council for the Environment

Name of Inspector	Signature	Head of Chemical Materials Section

For Official Use

Accepted and Complying with the terms and conditions:
Rejected for the following reasons
1-
2-

Valid upto: __/____/_____
Certificate No.

Annex No. (2/18)

Outline of Procedures for Obtaining a Store Licence or to Store the Hazardous Materials

Schlumberger

Annex No. (2/19)

Form of Application for Obtaining Licence for Transporting the Hazardous Materials

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

Form of Application for Obtaining a Store Licence or to Store the Hazardous Materials

Annex No. 2/19

Name of the Company: Area:
Street Name: Telephone:
Fax: P.O. Box
Street No. Building No.
Type of the Vehicle Number of the Vehicle:

1- Site	Residential	Commercial
Industrial		
2- Building	Independent	Joint
Multi storied		
3- Using floor	Underground	Ground
First		

Specifications of the Transported Materials:

Flaming Gas	Explosive	Combustible
Corrosive	Paints and Inks	
Biological		
Poison and Toxic	Non Flammable	
Flammable Liquids		
Interacting with Air & Water		
Pesticide		

Safety Terms

Fire Extinguisher	Emergency Exit
Warning Board	

Ventilation Pressure Discharge System Identification Board

Details of the Transported Dangerous Materials:

Trade Name Chemical Name
CAS No. Weight of Packing
Packing:
No of Packing Net Weight
Containers:
Weight of Container Net Weight

Packing:

1. Packing is suitable for transport
2. Packing is free from corrosion and leaking and closed to prevent vapors.
3. Packing carries the instructions to be used when needed.
4. There are sign boards showing the nature of the materials and extent of danger.

Containers:

Safety Equipment and Pressure Discharging Equipment
Safety and Strength of the Tank

Details of the Part Receiving the Hazardous Materials	
Name of the Company:	Area
Street Name:	Tel.

Schlumberger

Annex No. (2/20)

Outline of Procedures for Obtaining Licence to Transport the Hazardous Materials

Annex No. (3)

Standards and Criteria of Environment Protection

Annex No. (3)

Standards and Criteria of Environment Protection

First: Standards and Criteria of Air Quality

Second: Standards and Criteria of Normal Water Quality

Third: Standards and Criteria of Drinking Water

Fourth: Standards and Criteria of Sea Water

Fifth: Standards and Criteria of Noise

Sixth: Standards allowed in the closed work circumstances.

Annex (3 / First)

First: Standards and Criteria of Air Quality

Annex No. (3/First)

First: Standards and Criteria of Air Quality

1. Maximum limit allowed for the emissions from the fixed sources as per the type of the enterprise:

a) Cement Manufacturing:

Pollutant	Maximum Limit
Particulate matter	50 mg/Nm^3
Sulphur Dioxide	35 mg/Nm^3
Nitrogen Oxides	240 mg/Nm^3

b) Power Generating Stations and Facilities

More than 25 MW

Pollutant	Maximum Limit
Particulate matter	5 mg/Nm^3
Nitrogen Oxides	55 mg/Nm^3
Sulphur Dioxide	0.2 ton/daily/MW from first 1000 MW in addition to 0.1 ton/daily/MW above 1000 MW

The projects licensed before this law comes into effect the maximum limit for the Nitrogen Oxides will be: 125 mg/Nm^3

Gas turbines should include the units to recover the lost temperature.
The factories must use all the produced electrical power.

2- Less than 25 MW
Dry low Nox Burner is used for control.

c) Steel Manufacturing :

Pollutant	Maximum Limit
Particulate matter	50 mg/Nm^3
Sulphur Dioxide	35 mg/Nm^3
Nitrogen Oxides	300 mg/Nm^3

d) Cement Manufacturing :

Pollutant	Maximum Limit
Ammonia	150 mg/Nm^3
Nitrogen Oxides	55 mg/Nm^3
Particulate matter Prilling Tower Granulaiton	 150 mg/Nm^3 50 mg/Nm^3
Sulphur Dioxide	35 mg/Nm^3

The projects licensed before this law comes into effect the maximum limit for the Nitrogen Oxides will be: 125 mg/Nm^3

e) Gas and Oil Manufacturing (Onshore Operations):

1. Emissions of Stacks:

Pollutant	Maximum Limit
Unburned Hydrocarbons	20 mg/Nm^3
Hydrogen Sulphide	15 mg/Nm^3
Sulphur Oxides	1000 mg/Nm^3
Nitrogen Oxides	55 mg/Nm^3
Particulate Matter Gas Fired Oil Fired	 5 mg/Nm^3 50 mg/Nm^3
Sulphur Dioxide	500 mg/Nm^3

The projects licensed before this law comes into effect the maximum limit for the Nitrogen Oxides will be: 125 mg/Nm^3 and pollution of Sulphur Dioxide will be: 1000 mg/Nm^3

Note: The maximum limit allowed will not be applied on the units that produce acid (gas) which is injected in the geological gas ambushes.

2. Facilities for Refining Gas Consists of Sulphur:

These standards are allotted for the units that refine the gas, working with sulphur treating capacity of more than 5 tons per day.

The percentage of recovering sulphur from the total entering gas should not be less than 99% for seven consecutive days.

Pollutant	Maximum Limit
Carbon Monoxide	5000 mg/Nm^3
Reduced Sulphur Compounds (CS_2, COS, H_2S)	50 mg/Nm^3

3- External burning sources (boilers – heaters) of more than 25 MW:

Pollutant	Maximum Limit
Particulate Matter	5 mg/Nm^3
Sulphur Dioxide	500 mg/Nm^3
Nitrogen Oxides	55 mg/Nm^3

The projects licensed before this law comes into effect the maximum limit for the Nitrogen Oxides will be: 125 mg/Nm^3 .

When these criteria are implemented the best available and financially feasible techniques and the total emissions should be considered.

For the units of less than 25 MW the method of Dry Low Nox Burner is used.

4- Turbine Gas Engines of more than 25 MW.

Pollutant	Maximum Limit
Particulate Matter	5 mg/Nm^3
Sulphur Dioxide	500 mg/Nm^3
Nitrogen Oxides	55 mg/Nm^3

The projects licensed before this law comes into effect the maximum limit for the Nitrogen Oxides will be: 125 mg/Nm^3 .

For the units of less than 25 MW the method of Dry Low Nox Burner is used.

5- Facilities and enterprises that load ships with materials containing more than 1000000 m^3 volatile organic compounds per year.

The loading is carried out with vapour pressure equivalent or exceeding 10.3 Kpa (1.5P) in the temperature 25^o Celsius.

Pollutant	Maximum Limit
Volatile Organic Compounds (VOC)	Recovery of 95% in weight

6. Leaking Emissions:

The emissions from the volatile organic compounds for each operation should be less than 20 mg/Nm^3.

F. Oil and Gas Industry (Offshore Operations)

Emissions of Stacks:

All the precautionary measures to be taken to confirm the workers form the emissions of the stacks in the offshore sites.

All the offshore operating facilities should submit a plan to stop the gas igniting operation through flaring to be approved.

G. Petrol Refining (Oil)

Emissions of Stacks:

Pollutant	Maximum Limit
Particulate Matter Gas Fired Oil Fired	 5 mg/Nm^3 50 mg/Nm^3
Nitrogen Oxides	55 mg/Nm^3
Sulphur Oxides	500 mg/Nm^3
Hydrogen Sulphide	15 mg/Nm^3
Carbon Monoxide	500 mg/Nm^3

The projects licensed before this law comes into effect the maximum limit for the Nitrogen Oxides will be: 125 mg/Nm^3 .

H. Petrochemical Industries:
Emissions of Stacks:

Pollutant	Maximum Limit
Particulate Matter Gas Fired Oil Fired	 5 mg/Nm^3 50 mg/Nm^3
Sulphur Oxides	35 mg/Nm^3
Nitrogen Oxides	55 mg/Nm^3
Carbon Monoxide	500 mg/Nm^3

The projects licensed before this law comes into effect the maximum limit for the Nitrogen Oxides will be: 125 mg/Nm^3 and pollution of Sulphur Monoxide will be: 500 mg/Nm^3

2. Maximum Limit Allowed for the Emissions from the Fuel Burning Sources:

Pollutant	Maximum Limit
Flare	The black smoke will not exceed five minutes in an hour (using cart ranglman No. 2)
Particulate Matter	5 mg/Nm^3
Sulphur Dioxide	500 mg/Nm^3, average concentration in an hour.
Total Organic Carbons	Daily average 10 mg/Nm^3

3- Maximum Limit Allowed for Emissions from the Movable Sources:

The vehicles used now should be inspected during the renewal of their registration or as per the instruction given below:

	Old (Model before 2006)	New (Model 2006 and above)
Petrol driven vehicles Carbon Monoxide	4.5%	0.5%
Hydrocarbons	1200 part out of million	300 part out of million
Lambda Index (^) *	--	1.0 ± 0.3
b) Diesel driven vehicles	65%	65%
Opacity Or	$2.44m^{-1}$	$2.44m^{-1}$
(K) k factor		

* Lambda: ratio between the air and burning fuel in the engine.

The owners and operators of the vehicles and emission sources on the road or far from road should operate them in a good form so that the emissions can be reduced. No visible emissions should be found in the exhaust pipes.

The petrol driven vehicles or model 2006 and above should include the Lambda index (^) in addition to the triple direction switches for hydrocarbon, carbon monoxide and nitrogen oxide. The switch must be complying with local legislations of the country of origin and the table given below:

4- Surrounding Air Quality:

Pollutant	Max Limit	Averaging Period	Unit	Ambient Air Quality Criteria Attainment Key
Sulphur Dioxide	365 80	24 hrs Annual	ug/m^3	A B
Particulate Matter (< 10 microns diameter)	150 50	24 hrs Annual	ug/m^3	A B
(NO_2) Nitrogen Oxides, as (NO_2)	400 150	1 hr 24 hr	ug/m^3	D A

	100	Annual		B
Photochemical Oxidants, as O3	235 120	1 hr 8 hr	ug/m^3	C G
Carbon Monoxide	40 10	1 hr 8 hr	ug/m^3	D E
Lead	1.5	3 months	ug/m^3	F

Ambient Air Quality Criteria Attainment Key

A : 99.7% to collect the daily averages during one calendar year.
B : Account average for all daily measures taken during the one calendar year.
C : 99.7% for all days during one calendar year, which includes measures for one hour in the maximum limit or less than the criteria.
D : 99.9% for every measures for every hours taken during one calendar year.
E : 99.8% for every maximum measures, average 8 hours per day for one calendar year.
F : Account average for every measures for every hours during three months.
G : 98% of all daily maximum measures (average 8 hours) during one calendar year.

5- Quantities of the Necessary Air for Airing the Closed and Semi Closed Places, Projects and Enterprises:

Sl	External Air Quantity *** Cubic Decimeter /Minute /Person	Type of the Place and Activity
1.	140-280	Places with high roof, bank, lecture hall, prayer hall, big public shop-theatre – no smoking room.
2.	280-240	Flat – haircutting saloon – beauty shop – hotel room or room where light smoking is found
3.	420-560	Cafeteria – shop with small restaurant – public work place – hospital room – restaurant or room where medium smoking is found.
4.	560-850	Private work place – office or clinic or room where high smoking is found.
5.	850-1700	Meeting halls or room full of smoking.

*** without using the air-conditioning equipment.
The emptiness allotted for one person will not less than 4.25 M^3
The floor area allotted for one person will not be less than 1.4 M^2

The closed hazardous places should be provided with such mechanical airing system that is capable of providing

the average air change inside the place at the rate of 12 times every hour.

The natural airing should be provided in the fully or partially opened hazardous places guaranteeing the air change in such places at the rate of 12 times every hour during 95% of the time. This system can be supported, if needed, with mechanical system to reach the airing average to the standard of closed hazardous places.

Schlumberger

Annex No. (3 / Second)

Second: Standards and Criteria of Wastewater Quality

"Annex No. 3/Second"

Second: Standards and Criteria of Wastewater Quality

1- Standard of Treated Wastewater Used for Irrigation:

Parameter	Symbol	Max Limit of Irrigating Plantations	Max Limit of Irrigating Green lands	Unit
1- Physical Test				
Total Dissolved Solids	TDS	2000	2000	Mg/L
Total Suspended Solids	TSS	50	50	Mg/L
PH	PH	6-9	6-9	Mg/L
Floating Particles	Nil	Nil	Nil	Mg/L
2- Inorganic Matters				
Ammonia as N	NH_4^+	15	15	Mg/L
Chlorine Residual	Cl_2	0.1	0.1	Mg/L
Cyanide (Total)	CN	Nil	0.2	Mg/L
Dissolved Oxygen	DO	>2	>2	Mg/L
Fluoride	F	15	15	Mg/L
Phosphate as P	PO_4^{-3}	30	30	Mg/L
Sulphate	SO_4^{-2}	400	400	Mg/L
Sulfide	S^{-2}	0.1	0.1	Mg/L
Biochemical Oxygen Demand	BOD_5	10	50	Mg/L

Total Kjeldahl Nitrogen as N		35	35	Mg/L

Chemical Oxygen Demand	COD	150	150	Mg/L
3- Trace Metals				
Aluminium	Al	15	15	Mg/L
Arsenic	As	0.1	0.1	Mg/L
Barium	Ba	2	2	Mg/L
Boron	$^{-}$B	1.5	1.5	Mg/L
Cadmium	Cd	0.05	0.05	Mg/L
Chromium, total	Cr	0.01	0.2	Mg/L
Cobalt	Co	0.2	0.2	Mg/L
Copper	Cu	0.2	0.5	Mg/L
Iron	Fe	1	1	Mg/L
Lead	Pb	0.1	0.1	Mg/L
Manganese	Mn	0.05	0.05	Mg/L
Mercury	Hg	0.001	0.001	Mg/L
Nickel	Ni	0.2	0.2	Mg/L
Zinc	Zn	0.5	0.5	Mg/L
Sodium Absorption Rate	SAR	10	10	Mg/L
4- Organic Matters				
Oil & Grease		10	10	Mg/L
Phenols		0.5	0.5	Mg/L
Total Organic Carbon	TOC	75	75	Mg/L

5- Biological Tests				
Total Coliform		2.2	2.2	
Egg parasites		<1	<1	
Worm parasites		Nil	Nil	
Toxicity Evaluation	Each case to be studied separately			

2- Standard for the Discharge of Industrial Effluents into Sewers:

Parameter	Symbol	Allowed Limit	Unit
Synthetic detergents		30	Mg/L
Cyanide Compounds	CN	1	Mg/L
Sulphides	S^{-2}	10	Mg/L
Sulphites	SO_4^{-2}	1000	Mg/L
Tar & Tar Oils		20	Mg/L
Oil & Grease		15	Mg/L
Suspended Solids	SS	500	Mg/L
Chemical Oxygen Demand	COD	3000	Mg/L
Metal Salts (Total)			
Cadium	Cd	10	Mg/L
Chromium, total	Cr	2	Mg/L
Copper	Cu	4	Mg/L
Lead	Pb	5	Mg/L
Nickel	Ni	4	Mg/L
Silver	Ag	4	Mg/L
Zinc	Zn	5	Mg/L

Arsenic	As	5	Mg/L
Mercury	Hg	0.1	Mg/L

3- Standard of Ballast Water Discharge:

Parameter	Symbol	Allowed Limit	Unit
Ammonia, as N	NH_3	3	Mg/L
Biochemical Oxygen Demand	BOD_5	50	Mg/L
pH	pH	6-9	Mg/L
Required Chemical Oxygen	COD	250	Mg/L
Oil and Grease		Nil	Mg/L
Suspended Solid	SS	35	Mg/L
Total Oil (Hexane Extractable)	TO	15	Mg/L
Total Organic Carbon	TOC	100	Mg/L
Oil and Grease		15	Mg/L

4- Standard for Discharging Liquid Waste to the Public Sewage Network for Treatment:

Parameter	Symbol	Allowed Limit	Unit
pH	pH	5-10	
Color		Non-resistance	
BOD_5	BOD_5	1000	Mg/L
COD	COD	3000	Mg/L
Temperature	C	60	Mg/L
Insolubles		2000	Mg/L
Total Dissolved Solids	TDS	4000	Mg/L
Grease and Oil		15	Mg/L
Sulphide (as ions)	S^{-2}	10	Mg/L
Sulphate (as ions)	SO_4^{-2}	1000	Mg/L
Phenol		150	Mg/L
Cyanide	CN	1	Mg/L
Detergents (capable of vigorous decomposition)		100	Mg/L
Total chlorinated Hydrocarbons	TCH	0.5	Mg/L
Total organic carbon	TOC	1000	Mg/L
Caustic Alkali (calcium carbonates)		3000	Mg/L
Total toxic metals		10	Mg/L
Aluminum	Al	30	Mg/L
Arsenic	As	5	Mg/L
Barium	Ba	10	Mg/L
Beryllium	Be	5	Mg/L
Cadmium	Cd	2	Mg/L
Total Chromium		5	Mg/L
Copper	Cu	5	Mg/L

Iron	Fe	25	Mg/L
Lead	Pb	2	Mg/L
Mercury	Hg	0.1	Mg/L
Nickel	Ni	5	Mg/L
Sliver	Ag	5	Mg/L
Zinc	Zn	10	Mg/L

5- Standard for the Treated Effluents Sanitary Waste Water

Parameter	Symbol	Allowed Limit	Unit
Total Suspended Solids	TSS	10	Mg/L
Biochemical Oxygen Demand	BOD_5	10	Mg/L
Chemical Oxygen Demand	COD	150	Mg/L
Dissolved Oxygen	DO	2 (Minimum)	Mg/L
Total coliform (MPN)	MPN	23	Mg/L
Free Residual Chlorine	Cl_2	0.1	Mg/L

6- Standard of Cooling Water.

Parameter	Symbol	Allowed Limit
Temperature Difference	COD	3 Δ C^{O}
Daily Free Residual Chlorine	Cl	0.05 mg/L

1. These standards will not be applied on the cooling water used on the platforms of marine production or drilling or excavation or ships.
2. The water once used will be discharged in the sea at the suitable mixing area to be fixed in coordination with the SCENR using hydromechanics sample for spreading having three dimensions and particular ecological study for the site.
3. The temperature difference is measured between the water entry place directly for the enterprise and the approved bank of the mixing area
4. The free residual chlorine to be monitored in the cooling water either continuously or minimum 4 times using the samples collected by Grab at the point of discharge to the receiving water.
5. As an alternative to the above, the facilities may adopt a limit for discharging by using the same sample of spreading used to define the temperature degree (above $3^{O}C$) and the limit of the mixing area. The impact of the chlorine in the facilities will be on the surrounding water in the limit of 0.05 mg/L at the

edge of the temperature location fixed for the difference of temperature degree $3^{O}C$

Annex No. (3 / Third)

Third: Standards and Criteria of Drinking Water

“Annex No. 3/Third”

Third: Standards and Criteria of Drinking Water:

1- Natural Features of the Drinking Water:

Feature	Measuring Unit	Maximum Allowed Limit
Colour	Original colour unit (with platinum couplet measure)	15 units
Muddiness	Muddiness measuring equipment	5 units
Taste	-	Acceptable
Smell	-	Acceptable
Temperature	-	Acceptable

2- Chemical Features of the Drinking Water Quality:

Components	**Unit**	**Max Limit**
Aluminium	Mg/L	0.12
Ammonia	Mg/L	1.5
Chlorides	Mg/L	250
Copper	Mg/L	1
Total hardness	Mg/L	500
Sulphoric Hydrogen	Mg/L	0.05
Iron	Mg/L	0.3
Manganese	Mg/L	0.1
pH	Mg/L	8.5-6.5
Sodium	Mg/L	200

Sulphur	Mg/L	250
Total soluble solids	Mg/L	1000
Zinc	Mg/L	3

3- Chemical Features of the Drinking Water Quality:

Components	Unit	Max Limit
Arsenal	Mg/L	0.01
Barium	Mg/L	0.7
Boron	Mg/L	0.5
Cadmium	Mg/L	0.003
Chrome	Mg/L	0.05
Copper	Mg/L	2
Cyanide	Mg/L	0.07
Fluoride	Mg/L	1.5
Lead	Mg/L	0.01
Silver	Mg/L	0.1
Tin	Mg/L	1
Uranium	Mg/L	2
Beryllium	Mg/L	1
Manganese	Mg/L	0.5
Mercury	Mg/L	0.001
Molybdenum	Mg/L	0.07
Nickel	Mg/L	0.02
NA_3	Mg/L	50
NA_2	Mg/L	3
Selenium	Mg/L	0.01

Antimony	Mg/L	0.005

The total nitrates NA_3 and NA_2 concentrations should not be more than 1 as follows:

$$\frac{\text{NA}_3 \text{ concentration in the sample}}{50} + \frac{\text{NA}_2 \text{ concentration in the sample}}{3} \leq 1$$

4- Percentage of the organic components which have impact on the health, in the drinking water:

Component	Maximum Limit Allowed (ug/l)
a- Chlorine Alkynes	
Tetra Carbon Chloride	2
Dichloro Methane	20
2.1 Dichloro Ethane	30
1.1.1 Tricholor Ethane	2000
Trihalo Methane	None
Dioxin / Viran	None
b- Chlorine Ethane	
Phenyl Chloride	5
1.1 Dichloro Ethane	30
2.2 Dichloro Ethane	50
Trichloro Ethane	70
Tetrachloro Ethane	40
c- Perfumed Hydrocarbons	
Benzene	10
Tolowin	700

Ziline	500
Ethyl Benzene	300
Stirin	20
Benzobirine	0.7
d- Chlorine Benzenes	
Monochlorobenzene	300
2.1 Dichlorobenzene	1000
4.1 Dichlorobenzene	300
Trichlorobenzene (total)	20

e- Different Organic Materials	
Refines of Diethele Hexyls	80
Fathals of Diethele Hexyls	8
Acrilamid	0.5
Hepchloro Hydrine	0.4
Hexacholoro Biotadine	0.6
EDT Acid EDTA	600
Nitro Acetic Acid	200
Tri Oxide Bioltelitine	2
Microcitin RL	1

Component	Maximum Limit Allowed (ug/l)
Pesticides:	
Chlorine	20
Dicarbon	10
Derine and Diderine	0.03
Atrazine	2
Bentazwin	300
Carbovioran	7
Chlordan	0.2

Chlorotolioron	30
DDT	2
2.1 Dibpromo –3-Chloroproban	1
4.2 Dichlorovinosci, Acetic Acid	30
2.1 Di Chloroproban	40
3.1 Di Cholorprobine	20
Hepta Chlor and Hepta Chlor Epoxied	0.03
Izo Protioran	1
Lindan	9
MSPI	2
Mithoxy Chlore	20
Mitola Chlore	10
Molinat	6
Penti Mthylene	20
Penta Chlorphenol	9
Permithrin	20
Propanil	20
Paridat	100
Simazin	2
Tri Floralin	20
4.2 DP	90
Dichlorprop	100
Phenoprop	9
Micoprop	10
5.4.2 T	9
Sinazin	0.6
2.1 Dipromoethan	15
Dikwat	10
Tripiothelazine	7

5- Cleaning Materials and Products

Cleaning Materials	Maximum Limit Allowed (ug/l)
Monochloramine	3
Chlorine	5
Cleaning Material Products	**Maximum Limit Allowed (ug/l)**
Promat	25
Chlorite	200
6.4.2 Tri Chlorophenol	200
Formaldihid	900
Promoform	100
Di Promochlor Methane	100
Promo Di Chloromethane	60
Chloroform	200
Bichloro Acidic Acid	50
Trichloro Acidic Acid	100
Chloral Hydrate	10
Di Chloro Asseto Nitril	90
Di Promo Asseto Nitril	100
Tri Chloro Asseto Nitril	1
Chloride Sianojin	70

Note: The concentration of the tri halomethane (total halogen components) should not be more than (1) as follows:

$$\frac{\text{Concentration of Promoform}}{} + \frac{\text{Concentration of Di Promo Chloromethane}}{} + \frac{\text{Concentration of Promo Di Chloromethane}}{} \leq$$

Max Limit Allowed for Promoform	Max Limit Allowed for Di Promo Chloromethane	Max Limit Allowed for Di Chloromethane

6- Concentration of Radioactive Activity:

a) The concentration of radioactive activity for nuclides in the drinking water (filled for dose of 0.1 mSV for one year) :

Radioactive Factors	Dose Transferring	Approx Calculated Value
Hydrogen 3	1.8×10^{-11}	7800
Carbon 14	5.6×10^{-10}	250
Cobalt 60	7.2×10^{-9}	20
Strontium 89	3.8×10^{-9}	37
Strontium 90	2.8×10^{-8}	5
Iodine 129	1.1×10^{-7}	1
Iodine 131	2.2×10^{-8}	6
Cesium 134	1.9×10^{-8}	7
Cesium 137	1.3×10^{-8}	10
Lead 210	1.3×10^{-6}	0.1
Polonium 210	6.2×10^{-7}	0.2
Radium 224	8.0×10^{-8}	2
Radium 226	2.2×10^{-7}	1
Radium 228	2.7×10^{-7}	1
Thorium 232	1.8×10^{-6}	0.1
Uranium 234	3.9×10^{-8}	4
Uranium 238	3.6×10^{-8}	4
Plutonium 239	5.6×10^{-7}	0.3

b) Radioactive Components in Drinking Water:

Rays	Max Limit Bq/L
Total Activity of Alpha Rays	0.1
Total Activity of Beta Rays	1

7) Free Chloride Sediments:

1. The free chloride sediments in the unpacked drinking water should be enough to kill all microbes, so that the concentration of the free chloride sediments in these waters, when reached to the consumer, should range between 0.2 particle in million and 0.5 particle in million after a minimum period of 30 minutes when the hydrogen number of is less than 8.

2. The concentration of chlorine in the epidemic circumstances or in special circumstances will increase as per the determination of the Ministry of Public Health or the concerned departments.

If the water is treated with ozone or ultra violate rays or any other treating method, such treatment must be enough to kill the microbes and the treated water must be complying with the microbiological specifications for the treated water entered to the distribution networks.

8. Vital Conditions:

The non-packed drinking water must be absolutely free from alga, fungi, parasites, insects, their eggs, stools, bladders, parts of animals and amebas.

9. Microbiological Conditions:

1. The non packed waters should be free from the microbes causing for diseases and fecal microbes and viruses causing damage to the public health.
2. If the water is distributed through networks:
   a. Treated water entered to the network:
      * It should be free from colon bacteria in any 100 ml of the inspected sample.
      * It should be free from any fecal colon bacteria in any 100 ml of the inspected sample.
   b. Non treated water entered to the network:
      * It should be free from colon bacteria in any 100 ml of the inspected sample i.e. in 98% of the inspected samples during the year, in the big facilities which can inspect a big quantity of samples.
      * It should be free from any fecal colon bacteria in any 100 ml of the inspected sample.
      * The total number of colon bacteria should not be more than 3 groups/100 mil of the sample inspected each period, not in two consecutive samples.
   c. In case of distributing water without network:
      * The total number of colon bacteria should not be more than 10 groups/100 mil of the inspected sample, provided that it should not happen repeatedly, in case of repetition, substitute source should be found out as possible.
      * It should be free from fecal colon bacteria in

any 100 ml of the sample.

Note: The packed drinking water parameters should be in accordance with the Gulf Standards and Specifications No. (MSC-1025)

Annex No. (3 / Fourth)

Fifth: Standards of Seawater Quality

Annex No. (3 / Fourth)

Fifth: Standards of Seawater Quality

Parameter	Limit	Unit
PH	8.3-6.5	
Salt	33-45	Part in Thousand
Dissolved Oxygen	More than 4	mg/L
Total Suspended Materials	30	mg/L
Phosphor	30	ug/L
Nitrates	100	ug/L
Silica	900	ug/L
Nitrite	35	ug/L
Ammonia (nitrogen)	15	ug/L
Total Petroleum Hydrocarbons	5	ug/L
Cadmium	0.7	ug/L
Nickel	20	ug/L
Mercury	Less than 0.4	ug/L
Iron	90	ug/L
Copper	15	ug/L
Lead	12	ug/L
Vanadium	10	ug/L
Multiplied Chlorine Phenols	Not allowed	
Chlorophyll	1	ug/L

Annex No. (3 / Fifth)

Fifth: Standards and Criteria of Sounds

Annex No. (3 / Fifth)

Fifth: Standards and Criteria of Sounds

- The value of the sound levels have been prepared to protect the inhabitants from the physiological weakness resulted from the over sound levels. The standards include the limit of the sound levels and guidelines for planning the land use.

- The sound levels should be measured to obtain an environmental licence using the Ocatave Bank Analyer, type (1).

- The nighttime standards will start from 10:00 pm until 04:00 am.

Standards of Noises in the Residential, Commercial and Industrial Areas:

Areas	Maximum noise level at the building areas (average 10 minutes)	
	Daytime	Nighttime
Residential and Establishments	55	45
Commercial	65	55
Industrial	75	75

Residential Areas:
The area that constitutes from more than 50% residential buildings, including schools, hospital and mosques.

Commercial Areas:
The area that constitutes from more than 50% commercial shops, offices, garages and commercial buildings.

Industrial Areas:

The area that constitutes from more than 50% industrial facilities.

Annex No. (3 / Sixth)

Fifth: Criteria Allowed in the Closed Work Environments

Annex No. (3 / Sixth)

Fifth: Criteria Allowed in the Closed Work Environments

1- Noise

a. Cannot be exposed for more than 115 decibel (a) if the subject person is provided with ear protector "Muff"
b. The maximum limit of sound is considered as 85 decibel for 8 continuous hours
c. In case of subjecting to different levels of sounds during the working hours exceeding 85 decibel and for alternative periods the following standard is used

$$\frac{a1}{b1} + \frac{a2}{B2} + \frac{a3}{B3} = \text{The result will be (1)}$$

"One" is the maximum allowed limit.
(a) indicates to the period in which he is subject to a particular level of sound in an hour.
(b) indicates to the allowed limit in that level as shown in the following table.

d. The maximum lime of the high sound from using the heavy hammers is considered as 140 decibel and it cannot be overtaken.

In case of emergency, one can be subject to more than 85 decibel, provided that the period of subjecting given each decibel should be considered.

Strength of Sound in	Period of Sound in Hour

Decibel	
85	8
90	4
95	2
100	1
105	0.5
110	0.25
115	0.125

2- Temperature and Moisture:

The factory owner must take the necessary measures to keep the temperature and moisture inside the work place without overtaking the maximum or minimum limits. In case of emergencies that necessitate overtaking these limits he should provide the suitable protection means for the workers.

Classification of Work Difficulty Degrees:

a. The work is considered as light if the energy spent is equal to 200 kilo rate/hour
b. The work is considered as medium if the energy spent is equal to 200 –350 kilo rate/hour
c. The work is considered as tough if the energy spent is equal to more than 350 kilo rate/hour

The maximum levels as per the work system and its difficult M^{o}

Work System and Rest	Light Work (Percentage)	Medium Work (Percentage)	Tough Work (Percentage)

Continued Work	30	26.7	25.0
75% work +	30.6	28	25.9
50% work +	31.2	29.4	27.9
25% work +	32.2	31.1	30

The average moisture should not be more than 80% in the work place

Means of protection if the work is required in the temperature or moisture exceeding the allowed limit:

1. The work should accommodated with the work environment before starting the works.
2. Organize the work hours and rest to minimize the physiological load on the worker and to get enough rest between the working hours.
3. Distribute the total working hours equally in a day.
4. Schedule the hot works in the less hot days.
5. Short rest period, at least once in every hour to take water and salt. Minimum 2 ltrs of drinking water diluted with 0.1% of salt should be provided for one worker (without giving salt capsules). The water should be available in handy not more than 60 m away from the work place.

6. Provide suitable preventive dresses and equipment.
7. Take all necessary engineering and designative precautions and engineering control that allows to reduce the temperature degree.

3- Lights:

1. The levels indicated before each operations in the following table is considered as the minimum limit. To

go down from this limit is not allowed.

2. The light in the work place is measured horizontally in one meter length from the land surface.

Sl	Type of work	Strength of Light in Lux
1.	Works that necessitates passing through the passages and bearing the load	50
2.	Works that need separating some materials and big products	200
3.	Works that need collecting minute products, work on typewriters and office works	500
4.	Works that need extreme accuracy like watches, ornaments, tailoring and stitching.	1000

4- Maximum Limits for the Concentration of the Hazardous Chemicals:

Note: The parameters and standards not mentioned can be determined by discussing with the concerned departments and in coordination with the Secretariat.

Name of Material	Maximum Concentration, calculated in Mgm/M^3
Ascetic Acid	25
Ammonia	18
Ammonium Chloride (Smokes)	10
Aniline	10
Antimony and its components	0.5

Arsine	0.2
Petroleum asphalt smokes	5
Aluminium oxide and aluminium	10
Biotin	1.9
Berlim	0.5
Beromine	0.7
Cadmium (salts and mud)	0.002
Cadmium oxide based on cadmium factor	0.05
Calcium oxide	2
Carbon disulphur	30
Carbon dioxide	9
Carbon monoxide	55
Carbon fourth chloride	30
Chloride phenol dioxide	0.5
Chloroform	50
Chromic acid calculated on the basis chromes	0.05
Copper and its steams and mud on the basis of copper	0.2
Cresol	22
Chloride Gas	3
Cholrodan	0.5
DDT	1
Diyedrine	0.25
Andrine	0.1
Phenol	19
Phosgene	0.4
Phosphene	0.4
Formic acid	9
Naphthalene	50

Florien	1
Formaldehyde	3
Hydrazine	0.1
Sianore Hydrogen	10
Sulphur Hydrogen	14
Amine Diethyl	30

Aldrine	0.25
Di Phenol	1.5
Amine Di Phenol	10
Amine Ethanol	8
Di Ethel	1
Nitrogen Oxide	0.2
Nitrogen Dioxide	30
Nitric Acid	6
Petrol	5
Berdine	30
Parathions	15
Manganese and its components	0.1
Manganese steam	5
Organic mercury components	1
Inorganic mercury components	0.01
Milathone	0.1
Inorganic lead and components (smokes and mud)	10
Fourth Ethyl of Lead	0.15
Lidan	0.1
Methyl Parathion	0.5
Tri Chorine Naphthalene	0.2
Tri Nitrotoloin	5
Chloinon	0.5
Methyl Chloride	0.4

Nickel	105
Nickel carbonyls	1
Nickel components	0.35
Di Methyl	0.1
Iron and steam and iron oxide	1
Selenium Components	5
Sulphur Dioxide	0.2
Sulphoric Acid	5
Steam of Zinc Oxide	1
Steam of Zinc Chloride	5

Fantium calculated on the basis of pent oxide fantium	
Inhaled or Minute Mud	0.05
Smokes	0.05
Welding Steam	5
Warvarin	0.1

5- Criteria and Standards of Mud Allowed in the Work Environment:

1) Rock mud
The maximum limit of free silica mud concentration (silicon dioxide), which is allowed in the work environment, is calculated in the following methods:

a) Maximum limit of concentration allowed for total mud in mgm for each m^3 of air

b)

c) Maximum limit of concentration allowed for total mud in mgm for each m^3 of air

$$= \frac{30\ mg/m^3}{\%\ \text{for free silica in the sample} + 3}$$

2) With respect to other rock mud the maximum limit of concentration allowed in the work environment will be as follows:

Materials		Maximum Concentration Allowed
1.	Asbestos mud in which the length of asbestos is not more than 5 micron	2 from asbestos fibers for each cm^3 of air
2.	Portland cement mud	1.059 million particle for each m^3 of air
3.	Perlight	For the minute or inhaled mud

		$5mg/m^3$ compared to the total mud 10 mg/m^3 or 1.059 million particle for each m^3
4.	Mud of the materials that do not include asbestos fiber	$2mg/m^3$ of the minute mud or inhaled
5.	Inert mud containing less than 1% free silica, which will not cause for ailing changes but lead to frustration for the workers during work.	1.059 million particle for each m^3

3) Mud of Solid Woods 1mg/m^3
Mud of Non-solid woods 5mg/m^3
Mud of fiber glass 10mg/m^3

Annex No. (4)

Criteria and Specifications of the Hazardous Materials when Disposed of in the Water Environments

Annex No. (4)

Criteria and Specifications of the Hazardous Materials when Disposed of in the Water Environments

1) Criteria and Specifications of Some Materials when Disposed of in the Water Environments

2) Liquid, Illiquid, Polluting and Unsolvable Materials Prohibited to be Disposed of in Water Environments:

1) Criteria and Specifications of Some Materials when Disposed of in the Water Environments

Considering the provision of the Article (89) of the executive bylaws of the Environment Protection Law, no disposal of wastes is allowed except in the distance not less than four marine miles from the coastline if the waste water is treated and in the distance not less than twelve marine miles if the disposal is for the wastes not treated.

Also disposal is not allowed in the places of fishing or places of bathing or natural quarantines, protecting the economic or beauty value of the area.

Description	Symbol	Max Limit	Unit
1- Physical Experiments			
Total dissolvent	TDS	1500	Mg/L
Total suspended solids	TSS	50	Mg/L
Hydrogen base	PH	6-9	
Floating bodies		Nil	
Temperature Degree	T	Not more than three degrees above the relevant average	$(\Delta T)^{oC}$
Turbidity	NTU	50	Mg/L
Colour		Free from colour materials	
2- Inorganic Materials			
Ammonium	NH_4^+	3	Mg/L

Sediment Chloride	Cl_2	0.05	Mg/L
Cyanide	**CN**	0.1	Mg/L
Fluorides	F	1	Mg/L
Phosphor in the form of Phosphate	**PO_4^{-3}**	2	Mg/L
Sulphur	S^{-2}	0.1	Mg/L
Required Vital Oxygen	BOD_5	50	Mg/L
Required Chemical Oxygen	COD	100	Mg/L
Urea		2	Mg/L
Total Nitrogen	TKN	100	Mg/L

3- Rare Factors			
Aluminium	AL	3	Mg/L
Arsenic	As	0.5	Mg/L
Barium	Ba	2	Mg/L
Boron	B^-	1.5	Mg/L
Cadmium	Cd	0.05	Mg/L
Total Chrome	Cr	0.2	Mg/L
Cobalt	Co	2	Mg/L
Copper	Cu	0.5	Mg/L
Iron	Fe	1	Mg/L
Lead	Pb	0.1	Mg/L
Manganese	Mn	0.2	Mg/L
Mercury	Hg	0.001	Mg/L
Nickel	Ni	0.5	Mg/L

Zinc	Zn	2	Mg/L
Silver	Ag	0.005	Mg/L
Selenium	Se	0.02	Mg/L

4- Organic Materials			
Oil and grease	O & G	15	Mg/L
Total phenols		0.5	Mg/L
Halogen Hydrocarbons and Different Kinds of Pesticides		0.1	Mg/L
Dioxine / Viran		$1.34x10^{-7}$	Ug/L
Tri Halomethane	THM	100	Ug/L
5- Biological Experiments			
Possible No. of Colon Group in 100 M^3	MPN	100	MPN/100ml

No of infantal eggs		Nil	
No of infantal worms		Nil	
No of fecal colon bacillus		100	MPN/100ml

Annex No. (4/2)

Liquid, Illiquid, Polluting and Unsolvable Materials Prohibited to be Disposed of in Water Environments:

Liquid, Illiquid, Polluting and Unsolvable Materials Prohibited to be Disposed of in Water Environments:

The unsolvable materials are those materials which are found in the environment for a long period, depending

basically on the quantities disposed of in the water environments. Some of them are solved after a long period ranging from months to years depending on the components of these materials and concentration in the environment.

Inorganic Materials:

For Example:

Mercury and its components
Lead and its components
Cadmium and its components

Cobalt, Fantium, Nickel, Selenium, Zinc and its Components

Organic Materials

For Example:

Organophosphorus Pesticides
Dimethoate
Malathion

Organochlorine Pesticides
Aldrin
Dieldrino
DDT

Chloridane

Endrine

Unsolvable and Remaining the Residues for Many Years

Polychlorinated Biphenyls

(PCBs)

Aroclor 1254

2,3,5,6 Tetrachlorobiphenyl

2.3.6 Trichlorobiphenyl

Unsolvable completely and counted as high toxic in its very low concentrations:

Polynuclear Aromatic Hydrocarbons (PAH)

Benzo (a) Pyrene Naphthalene

Solvable, small quantity is solved within years.

Solid Materials

For Example: Plastic, Fishing Net, Coir, Containers.

Annex No. (5)

Details of the Departments Concerned with Licensing for Wastes and Hazardous Materials

Annex No. (5)

Details of the Departments Concerned with Licensing for Wastes and Hazardous Materials

Concerned	Responsibilities regarding the

Administrative Dept.	disposal of the hazardous materials
Ministry of Interior	1. License the safe transport of the hazardous materials and wastes through roads. 2. License the stores for storing the hazardous materials. 3. Approval for the fire protection system for the hazardous materials. 4. Response and deal with all the accidents related with the hazardous materials like spilling or accident or fire.
Ministry of Municipal Affairs and Agriculture	1. License and register the agricultural and domestic pesticides and fertilizers 2. License spraying and using pesticides. 3. Wastes.
Customs and Ports General Authority	Confirm the use of real information cards, documents and correct handling for the hazardous materials transported to and from the State by air, sea and land, also the wastes.
Ministry of Public Health	1. Licence and register the drugs, medicines and chemical parts 2. License the projects for treating the medical wastes.
Supreme Council	1.Approval for spraying and using the

for the Environment and Natural Reserves	pesticides and their disposal 2. Approval for importing, using, handling and disposing of the hazardous materials. 3. Hazardous materials and wastes management 4. Permit for importing, handling, transporting and using the materials damaging ozone layer.
Ministry of Energy and Industry	1. License establishing hazardous waste treating projects 2. License the hazardous materials related o the petroleum and gas industries
Ministry of Economy and Commerce	Registration of the companies and establishments that deal with the hazardous wastes.

Note:

All the licences are issued from the concerned administrative department after obtaining the approval of the Supreme Council for the Environment and Natural Reserves as per the Provisions of the Rules and Regulations.

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Annex No. (6)

Enterprise Activity Registers

Annex No. (6)

Enterprise Activity Registers

First: Register for the Impact of the Enterprise Activity on the Environment

Second: Register for the Hazardous Wastes Resulted from the Enterprise Activity

Third: Register for the Hazardous Materials

Fourth: Register for Spraying Pesticides

Annex No. (6/First)

First: Register for the Impact of the Enterprise Activity on the Environment

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

First: Register for the Impact of the Enterprise Activity on the Environment

Annex No. 6/Second

Name of the Enterprise / Project Area
Street Name Tel
Fax P.O. Box
Street No. Building No.

Industry: No and Date of Environment Permit:
No and Date of Operation Permit
No. and Date of Approval for Storing the Hazardous Materials
Period Covered by the Particulars

Responsible for Issuing the Register (In-charge for the follow up)

Name: Profession
Date: Signature

Technical Information about the Enterprise
Type of the Activity: Raw Materials
Type of Products:

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Control over Pollution

Special terms issued by the General Secretariat for the Enterprise.

Details of the type of emissions and parameters of their disposal (in hour/day/month/year) method of disposal as gas, liquid, solid or other (sound and vibrations)
Parameters of the test procedures for each type of emissions coming from the enterprise as stipulated in the enterprise commissioning permit.
Outlets after the treatment operations
Extent of efficiency for the treatment measures.
Procedures of follow up and environmental security applied in the establishment
Follow up developments
Tests, routine measurements and results.
Violations occurred in the parameters and specifications of the pollutants released by the enterprise

Annex No. (6/Second)

Second: Register for the Hazardous Wastes Resulted from the Enterprise Activity

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

Second: Register for the Hazardous Wastes Resulted from the Enterprise Activity

Annex No. 6/Second

Name of the Enterprise / Project Area
Street Name Tel
Fax P.O. Box
Street No. Building No.

Industry: No and Date of Environment Permit:
No and Date of Operation Permit
No. and Date of Approval for Storing the Hazardous Materials
Period Covered by the Particulars

<u>Responsible for Issuing the Register (In-charge for the follow up)</u>

Name: Profession
Date: Signature

Technical Information about the Enterprise
Type of the Activity: Raw Materials
Type of Products:

Control over Pollution

Special terms issued by the General Secretariat for the Enterprise.

Details of the type and quantity of the hazardous wastes resulted from the activity of the project or enterprise.
Method of disposal for the hazardous wastes.
Parties contracted with to dispose of the hazardous wastes.
Parties contracted with to receive the hazardous wastes.
Efficiency of the treating measures:

Annex No. (6/Third)

Third: Register for the Hazardous Materials

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Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

Third: Register for the Hazardous Materials

Annex No. 6/Third

Name of the Company Area
Street Name Tel
Fax P.O. Box
Street No. Building
No.

Information about the Hazardous Materials

Trade Name: Common Name
Chemical Name:
CAS Purpose of the Use
Material: Liquid Sold Gas Country of Origin
Produced Quantity: Date of Production
Expiry:
Imported Quantity Remaining Part
Transported and Handled Quantity:

Details of the Receiving Party or Beneficiary or Addressee of the Hazardous Materials

Name of the Enterprise / Project Area

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Street Name
Tel
Fax
P.O. Box
Street No.
Building
No.

P.O. Box

In-charge : Store Location
Received Qty: Purpose of Use:

In-charge of issuing the ledger

Name Profession
Date Signature

Procedures of the Concerned Dept.

Name Profession
Date Signature

Procedures of the Council

Name Profession
Date Signature

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Annex No. (6/Fourth)

Fourth: Register for Spraying Pesticides

Supreme Council for the Environment and Natural Reserves
Technical Affairs Dept.

Fourth: Register for Spraying Pesticides

Annex No. 6/Fourth

Information about the Party who Requests for Spray

Name of the Company Area
Street Name Tel
Fax P.O. Box
Street No. Building No.

Information about Pesticides

Trade Name: Common Name
Chemical Name:
CAS Active Ingredients
Material: Liquid Sold Gas
Purpose of spray or use
Manufacturer: Country of Origin
Registration of the Pesticide in the Country:
Date of Production Expiry:

Information about Spray

Location of Spray		Area of Spray		Equipment Used		Date of Spray	
Total Qty of Pesticide		Used Qty		Remaining Qty		Time of Spray	

Sprayer's Name		Worker Licence

Details of the Importing Party

Name of the Company
Street Name
Fax
Street No.
No.

Area
Tel
P.O. Box
Building

Imported Qty:

Purpose of Import:
Store Location

In-charge of issuing the ledger

Name
Date

Profession
Signature

Procedures of the Concerned Dept.

Name Profession
Date Signature

Procedures of the Council

Name Profession
Date Signature

Encl: 1- Pesticide import licence
2- Worker Licence or Experience Certificate
3- Map showing the spray area

Annex No. (7)

Schlumberger

Principles of Management and Transporting of Hazardous Materials through Boarders

Principles of Management and Transporting of Hazardous Materials through Boarders

1. Diagram for shipping and transporting the hazardous materials through boarders.

2. Short report about the wastes (WPS), part (a) and part (b)

3. Approval on the sample for the wastes shown in the short report.

4. Items of wastes to be monitored.

5. List of wastes that need special consideration.

6. List of risks included in the hazardous wastes.

7. Treatment and disposal operations.

8. Details to be included in the shipping and transporting notice of the hazardous materials through boarders.

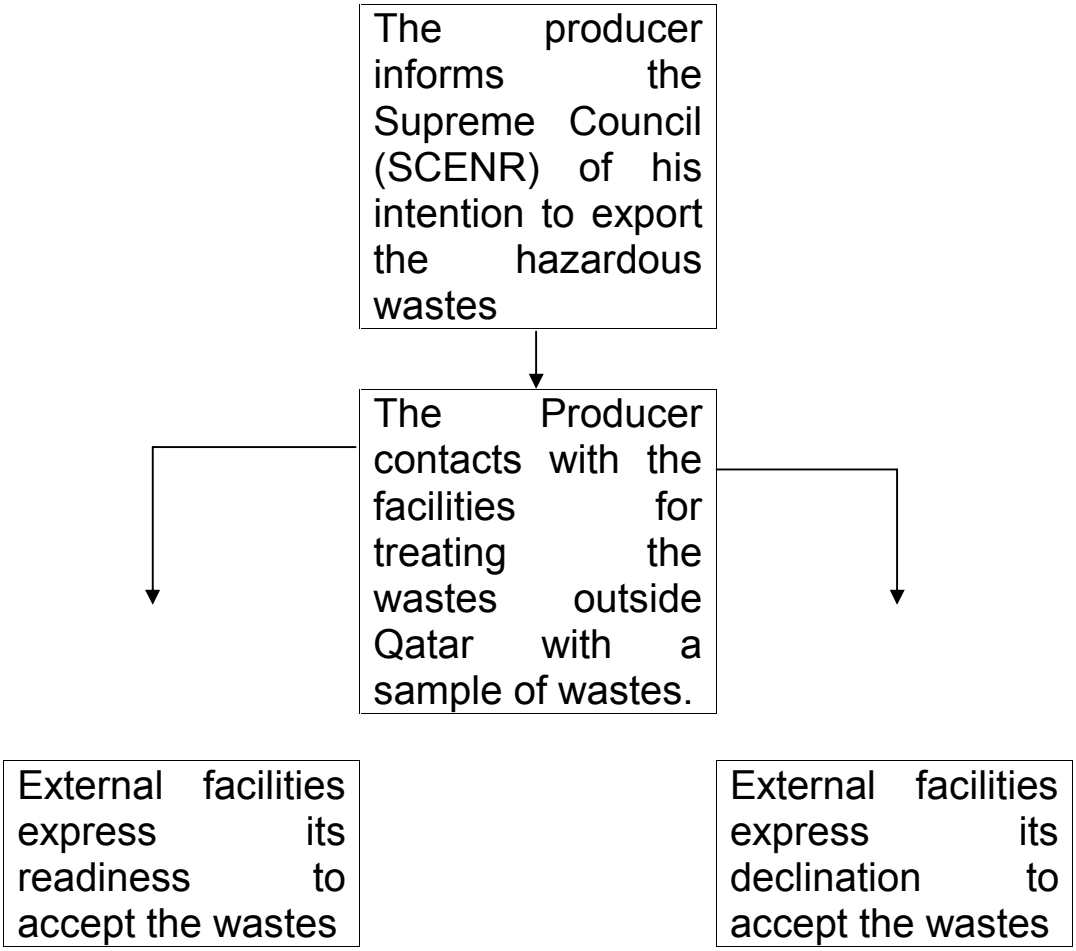
9. Details to be included in the shipping and transporting documents of the hazardous materials through boarders.

Annex No. (7/1)

Diagram for shipping and transporting the hazardous materials through boarders.

Annex No. (7/1)

1- Diagram for shipping and transporting the hazardous materials through boarders.



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The producer obtains approval of the concerned departments in the importing nation, defines the entry point and requirements of packing and transport

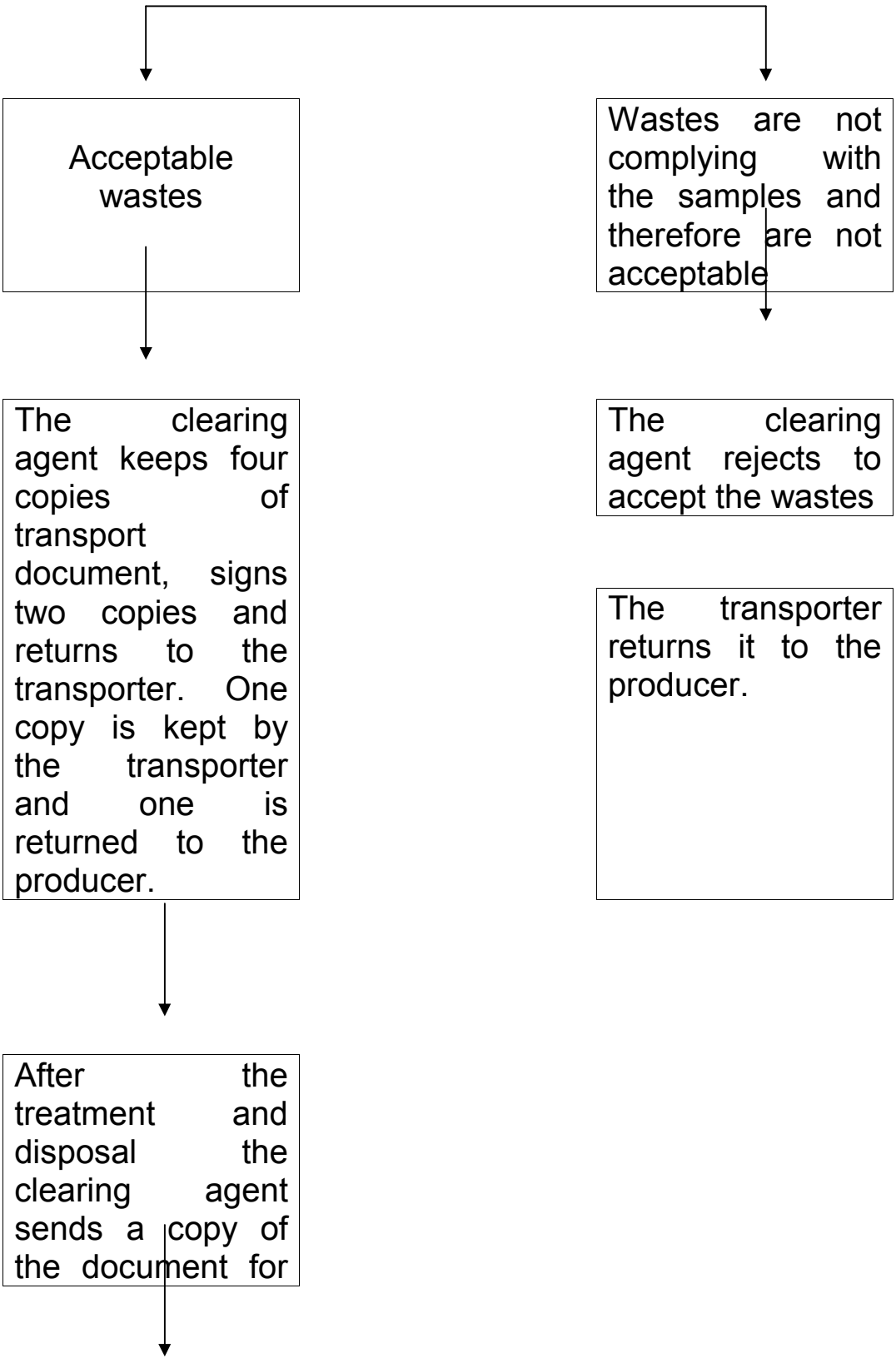
The producer obtains the approval of the SCENR regarding the shipment

The producer obtains the approval of the transit countries.

The producer confirms that the shipper has made the necessary insurance and obtained the documents required for shipping.

The producer stores the wastes until a suitable alternative is found out.

The transporter reaches to the destination / Disposer inspects the quality/quantity of the wastes


Acceptable wastes
Wastes are not complying with the samples and therefore are not acceptable
The clearing agent keeps four copies of transport document, signs two copies and returns to the transporter. One copy is kept by the transporter and one is returned to the producer.
The clearing agent rejects to accept the wastes
The transporter returns it to the producer.
After the treatment and disposal the clearing agent sends a copy of the document for

completing the transport operation to the producer, SCENR

The SCENR informs the International Agreements Agencies to which the State is joined about the completion of the shipping procedure and disposal of the hazardous materials

Annex No. (7/2)

Short report about the wastes (WPS), part (a) and part (b)

Annex No. (7/2)
Short report about the wastes (WPS), part (a) ,
cover page:

Name of Producer: Manufacturer: Address: (Location of receiving wastes): Address:

Particulars submitted about the wastes sources number from part (b) From WPS No. to WPS No. Amendments on the above waste sources (define in WPS No.)

I, in my capacity as the authorized representative of the above company, declare that the information given in the part (a) and part (b) regarding the short report of the wastes as well as the attached documents and complete and correct. All the risks known and suspected have been revealed. Name: Designation: Tel. Fax:

Signature:	Date:

Part (b) – WPS No.

1- Name of the waste producer:

2- Name and source of the waste:

3- Quantity and parameter of the waste production repetition:
Once only ( ) daily ( ) weekly ( )
Monthly ( ) yearly ( )
Others _____ quantity _____ metric ton.

4- Quantity and parameter of the waste shipment repetition:
Once only ( ) daily ( ) weekly ( )
Monthly ( ) yearly ( )
Others _____ quantity _____ metric ton.

5- Quantity of the wastes, type of storing in the site (unpacked, barrel, etc.)
Unpacked ( ) barrel ( ) piles ( ) tanks ( )
Pit/Well ( ) stall ( )
Others _____ Qty _____ metric ton.

6- Short description of waste generating operation

(including raw materials and chemicals, chemical actions, main products, by products, intermediate products.
Use addition sheet, if needed.

7- Explain the physical specifications:
Uniformed ( ) Non uniformed ( ) pumpable ( ) non pumpable ( ) liquid ( ) precipitate ( ) poweder ( ) sticky ( ) small balls ( ) block ( ) gluey
Frozen or Melt ( ) paste ( ) density ( ) pH ( ) colour ( ) smell ( ) appearance ( ) % of solidness
Boiling degree ( ) melting degree ( )

8- Explain the special risks of the wastes:
Inflammable ( ) interactive ( ) corrosion ( ) rusty
Easily flammable ( ) explosive ( ) toxic ( ) wild ( ) communicative ( ) radioactive ( ) sensitive for collision ( )

9- Explain the chemical composition of the wastes: This list should include the factors that influence on the physical nature of the wastes and make the wastes hazardous. If the composition is based on the lab analysis, the lab analysis should be enclosed.
The result of previous analysis can be submitted.

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Annex No. (7/3)

Approval on the Sample Representing the Wastes Mentioned in the Short Report

Annex No. (7/3)

Approval on the Sample Representing the Wastes Mentioned in the Short Report (WPS No.)

1. Hour and Date of Taking Sample: _____ Type of Sample: ( ) Random ( ) Compound ( ) Others _____

2. The exporter from whom the sample is taken:

3. Equipment or method of taking sample:

4. Quantity of the sample taken:

5. Type of the container where the sample was put:

6. Whether the pollution was removed from the equipment used for taking sample and the container used for putting the sample:

7. When the sample was taken did you stick the sticker on the container including the following details? (Kindly fill up the following part including the signature as same as the signature put on the sticker prepared

by you).

Name: Name of Wastes: Hour and Date of Taking Sample: Signature of the Person who took the Sample:

8. Hour and Date of Delivering / Sending the Sample:

Signature of the Signatory	Name of In-charge
Designation	Date

Annex No. (7/4)

Type of Wastes to be Monitored

Annex No. (7/4)

4- Type of Wastes to be Monitored

a) Sources of Wastes:

Y 1 Wastes from hospitals and medical centres.
Y 2 Wastes from the medicine productions
Y 3 Drug and pharmacy wastes
Y 4 Wastes from the use of vital poisons and herbal medical products
Y 5 Wastes from using the chemicals protecting woods.
Y 6 Wastes from producing and using the organic dissolvents
Y 7 Wastes from thermal treatment and mixing operation that includes cyanide
Y 8 Wastes of metallic oils not good for original use.
Y 9 Wastes from oils, waters, mixers of hydrocarbons and emulsions.
Y 10 Wastes from the materials or items containing or polluted with Biphenyl treated with chlorine (PCBs) and/or Biphenyl treated with Brome.
Y 11 Wastes from resulted from desalination or thermal operations.
Y 12 Wastes from the production and use of inks, paints, colours and warmish.
Y 13 Wastes from the production and use of plastics, gules and stickers.
Y 14 Wastes resulted from the new and unfamiliar research activates, whose impact on the man or environment is not known.

Y 15 Wastes having explosive natures.
Y 16 Wastes from the use of photographic chemicals and films developing materials.
Y 17 Wastes from treating the surfaces of metals and plastic
Y 18 Wastes from the industrial wastes disposal operations

b) Wastes including the below:

Y 19 Metallic carbonyl
Y 20 Beryllium and compounds
Y 21 Hexade compound of chrome
Y 22 Copper and compounds
Y 23 Zinc and compounds
Y 24 Arsenic and compounds
Y 25 Selenium and compounds
Y 26 Cadmium and compounds
Y 27 Antimony and compounds
Y 28 Tellurium and compounds
Y 29 Mercury and compounds
Y 30 Thallium and compounds
Y 31 Lead and compounds

United (1)

1 HI Explosives

3	H3	Easily flammable liquids
4.1	H4.1	Highly inflammable solid materials
4.2	H4.2	Materials and wastes that are subject to automatic and accidental fire.
4.3	H4.3	Materials and wastes that emit highly explosive gases when collided with water.
5.1	H5.1	Oxides
5.2	H5.2	Organic peroxide materials
6.1	H6.1	Dangerous Toxics
6.2	H6.2	Communicative materials
8	H8	Corrosive materials
9	H10	Materials causing form toxic gas emissions when collided with air or water
9	H11	Subsequent or chronic toxics
9	H12	Suggestive toxics
10	H13	The materials or wastes

(1) complies with the risk classification law included in the “recommendations of the UN regarding the transport of hazardous goods” (ST/SG/AC.10/1 REV/5, UNITED NATIONS, NEW YORK, 1983).

Annex No. (7/7)

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Treatment and Disposal Operations

Annex No. (7/7)
Treatment and Disposal Operations

The part (a) includes all waste disposal operations as below:

Code	Operation
D1	Inserting inside or on the land (such as burials etc.)
D2	Treating the land (Vital disposal of the liquids or wastes in the solid, etc.)
D3	Deep injection (Injection of wastes which can be pumped into wells or lagoons etc.)
D4	Surface collection (such as putting the liquid wastes in pits or digs or surface lagoons)
D5	Burial in the land in engineering form (such as inserting inside the lined and separate rooms, each covered and separate from other and from the surrounding environments).
D6	Disposal in a water body excluding seas and oceans.
D7	Disposal in seas/oceans including the insertion to the bottom of the sea.
D8	Biological treatment, which is not defined in any other part of this annex, which finally produces compounds or mix that can be disposed of by any of the operations in the annex (a).
D9	Chemical physical treatment not specified in any other place in this annex, which finally produces compounds or mix that can be disposed of by any of the operations in the annex (a).
D10	Burning on the land.
D11	Burning on the sea.
D12	Permanent storing (like putting in containers in the mines, etc.)

D13 Mix before carrying out any operations in the part (a)
D14 Repacking before carrying out any operations in the part (a)
D15 Storing to wait for any operations mentioned in the part (a)

The part (b) operations of treatment and disposal of the hazardous wastes suitable for reuse or recycling and repairing lands or other use.

This part includes all operations related with the materials which are considered as hazardous wastes, unless it is disposed of and included in the operations mentioned in the part (a), for reusing or recycling as follows:

Code	Operation
R1	Reuse as fuel (excluding the direct burning or other method) to generate power.
R2	Repair and regenerate the solvents
R3	Recycling and repair of the organic materials not used as solvents.
R4	Recycling and repair of metals and metal components.
R5	Recycling or repairing inorganic materials.
R6	Regeneration of acids or principles.
R7	Recompose of the used components to minimize the pollution.
R8	Recompose of incentive materials.
R9	Recycling of used oils or reuse of the early used oils.
R10	Treatment of land for the use of agriculture or the improvement of the environment.

R11 Use of the wastes of materials resulted from any operation numbered as R1 R10

R12 Exchange of wastes to carry out the operations numbered R1-R11

R13 Collection of the materials required for any of the operations in the part (b).

Annex No. (7/8)

Details to be included in the shipping and transporting notice of the hazardous materials through boarders.

Annex No. (7/8)

8- Details to be included in the shipping and transporting notice of the hazardous materials through boarders.

1. Reasons for transporting and shipping the wastes through the boarders.
2. Exporter of wastes.
3. Producer of the wastes and local of production.
4. Clearing agent of the wastes and actual site for disposing of the wastes.
5. Transporter expected to transport the wastes and his agencies if any.
6. The state to which the waste is transported.
7. Expected transit states.
8. Waste importing state
9. General and individual notice
10. Estimated date of shipment (trucks), period and timed needed to transport or shipment and suggested means of transport (including the points of exit and entry).
11. Means of expected transport (land, rail, sea, air, internal waters).
12. Details of insurance:
13. Name and physical character of the wastes, including No. Y, No. of UN and any other details including the emergency procedures in case of any accident.

14. Type expected packing (loose bag, barrel, transporter)
15. Estimated quantity weight and size:
16. Operation caused for producing wastes.
17. In case of wastes listed in the (7/4) of this rule, the item from 7/6 attached to the rule regarding the risk characters, Code H and classification of UN to be defined
18. Method of disposal as per the annex (7-7) regarding the attached provisos of treatment and disposal.
19. Declaration from the producer and exporter that the information are true and correct.
20. Reference information (including the technical specification of the factory) for the exporter or producer from the clearing agent, by which the latter makes his evaluation of the wastes. There is no reason exists to believe that the wastes will not be dealt with proper method with respect to the environment as per the rules and regulations of the importing nation.
21. Details related with the contract between the exporter and clearing agent.

Annex No. (7/9)

Details to be included in the shipping and transporting documents of the hazardous materials through boarders.

Annex No. (7/9)

9- Details to be included in the shipping and transporting documents of the hazardous materials through boarders.

1. Exporter of wastes.
2. Producer of the wastes and local of production.
3. Clearing agent of the wastes and actual site for disposing of the wastes.
4. Transporter expected to transport the wastes and his agencies if any.
5. Subject of general and individual notice.
6. Estimated date of shipment (trucks), date and signature of each person responsible for the waste.
7 Means of expected transport (land, rail, sea, air, internal waters).
   Details of insurance:
8. Name and physical character of the wastes, including No. Y, No. of UN and any other details including the emergency procedures in case of any accident.
9. Particulars related to the requirements of transport, including the emergency procedures in case of any accident.
10. Date of packing and number of parcels.
11. Estimated quantity weight and size:
12. Declaration from the producer and exporter that the information are true and correct.
13. Declaration from the producer and exporter confirming that the concerned departments in the concerned states have no objection.
14. Declaration from the clearing agent about the receipt of the waste at the disposal site, explanation as to the method of disposal and the date expected for the

disposal.

Annex No. (8)

Principles of Importing, Producing, Handling and Transporting Hazardous Materials

Annex No. (8)

Principles of Importing, Producing, Handling and Transporting Hazardous Materials

First: Classification of Hazardous Materials

Second: Cards of Categories and Secondary Risk Cards

Third: Requirements for Separating the Hazardous Materials

Fourth: Packing the Hazardous Materials

Annex No. (8/ First)

First: Classification of Hazardous Materials

Annex No. (8/ First)

First: Classification of Hazardous Materials

1. When the real classification is made for any hazardous materials, the UN instructions and the procedures prescribed to test these materials should be followed.

2. As a guideline the hazardous materials are classified as follows:

    - Category 1 - Explosives
    - Category 2 - Compressed or liquid gas
    - Category 3 - Liquid flammable materials
    - Category 4 - Solid flammable materials
    - Category 5 - Oxidized materials
    - Category 6 - Toxic materials
    - Category 7 - Radioactive materials
    - Category 8 - Rusty materials
    - Category 9 - Materials of other risks

Category – 1

1- Explosives excluding the things whose transport involves high risks or those who explicit risks is suitable for other categories.

    Note: The materials which itself is not an explosive but it can make a explosive surrounding of gas or steam or dust, will not be included in the category (1).

2- Explosive materials that do not include the explosives in quantity or quality which cause for intended or unintended flame during the transport or making external impact on the equipment such as bulging or fire or smoke or temperature or high sound.

3- The materials and items not mentioned in the above paragraphs, which are manufactured to make explosive impact or like fire works.

The category 1 is divided into the following:

Category (1-1)	The materials and items that include the risk of total explosion or the explosion that impacts practically on all the load immediately.
Category (1-2)	The materials and items that include the risk of bulging (bulging the top of the packet) and not the risk of total explosion.
Category (1-3)	The materials and items that include the risk of fire and small explosion also or the risk of bulge or both, not total explosion risk. This category includes the materials and items that make big radioactive temperature or burning one after another causing for small explosion or bulging impact or both.
Category (1-4)	The materials and items that do not include big risks

This category includes the materials and items that cause for minor risks only.

In case of flaming or exposure during the transport and the impact resulted therefrom is limited basically on the packet and the appearance of big particles or in big extent is not expected. The external fire is caused practically any immediate explosion for all the contents of the packet.

Category (1-5)

Materials which are absolutely not sensitive, which can cause a major explosion.

This category includes the materials which have major explosion risk, but it is not sensitive to that extent making its exposure or transport from blaming stage to explosion under the normal transport circumstances.

Category (1-6)

Materials which are absolutely not sensitive, which have no total explosion risk. This category is limited to absolute non-sensitive items, which can be exploded and shows the possibility of less explosion or non-automatic exposure.

Generally, the category (1) is a unique category with respect to the packing, mostly having the impact of danger, necessitating the listing of this material in a fixed group as part of this category.

Category (2) Pressed or Liquid or Transferred Gases under Pressure:

1- This category includes the pressed gas, liquid gas, solvent gas, liquid frozen gas, mixture of one or more gases with one or more steams of the materials in other categories, materials filled with tellurium hexafluoride, sprinklers exceeding one liter.

2- The category (2) includes the gas materials whose
   a) Steam pressure shall be in 50 m degree and more than 300 kilo Pascal.
   b) The materials which become gas completely in the temperature of 20^{o} C and the standard pressure of 101.3 kilo Pascal.

3- The gas, during the transportation, is described as follows in view of its physical nature.
   a) Pressed gas: Non-solvent gas, the gas when filled under pressure becomes full gas in the temperature 20^{o} C.
   b) Liquid gas: it is the gas when packed for transport becomes semi liquid in the temperature 20^{o} C.
   c) Liquid Frozen Gas: it is the gas when packed for transport becomes semi liquid due to his low temperature.
   d) Solvent Gas: Pressed gas that is, when packed,

dissolved to a solution

4- Distribution of the materials part of the category 2:
The category 2 is divided into the following:
a) Category 2-1 Inflammable gases
b) Category 2-2 uninflammable and non-toxic gases
c) Category 2-3 Toxic gases

A- Category 2-1 Inflammable Gases
The inflammable gases in the 20 ^{o} Celsius and pressure of 101.3 kilo Pascal shall be:
Inflammable when mixed with 13% or less of air.
Its flammability with air may be 12% or less irrespective of the minimum limit of the explosion.
The flammability should be defined by tests or measurements through the method approved by the International Specifications Organization (ISO)

When the information available be not enough to use this method, the tests approved by the concerned departments can be used.

Notes:
The nozzles with capacity exceeding 1 Ltr (UN 1950) and small containers containing gas (UN 2037) are considered in the category 2-1.

B- Category (2-2) Uninflammable and Non-toxic Gases:

The gases that are transported with a pressure les than 280 kilo Pascal and 20^{o} Celsius or as cooled liquids, such as:

- Choking gases that reduce or replace the oxygen available in the air.
- Oxide gases that possibly when oxygen is provided cause or contribute to burn other materials more than caused by the air.

C. Category (2-3) Toxic Gases :

The gases which are known as high toxic gas and cause for danger for the health or that are assumed as toxic or corrosive for the skin, as LC 50 or less will kill 50% of the lives available therein, it equals or becomes less than 5000 out of million.

Category (3) Inflammable Liquids:

It includes the category (3) inflammable liquids which meet the above parameters and is listed under the category (3) if the sparking point does not exceed 61 degree Celsius, excluding the following exemptions:

Exemptions:

a) The liquids whose sparking point is not less than 23 degree Celsius and not more than 61 degree Celsius, but the liquids whose burning point exceeds 104 degree Celsius and which burn before reach to the burning point. Many flammable liquids, water mixtures and petroleum product mixtures are exempted from this parameter because they do not constitute real burning danger.

b) The water solutions which do not include more than 24% ethanol in size.

c) Alcoholic beverages and other products for human use, when filled in the internal packing whose size is not more than 5 ltr.
d) The materials listed in other categories due to more severe characteristics.

Category (4) **<u>Inflammable Solid Materials, Materials that Subject to Automatic Flame and Materials that Discharge Inflammable Gases when Contacted with Water:</u>**

1- The category (4) is divided into the following:

a) Inflammable Solid Materials
b) Materials that Subject to Automatic Flame
c) Materials that Discharge Inflammable Gases when Contacted with Water

a) Specifications of the Inflammable Solid Materials
The solid materials that subject to flame easily as well as those subject to flame during the collision. It may be powdered, grained or pasted materials. It is dangerous as it causes for fire if contacted with source of fire and the flam spreads easily. The danger is not only in the fire but it cause for the toxic fire as well. The mine powders are dangerous especially due to the difficulty in putting the fire off and the ordinary extinguisher materials like carbon dioxide or water may increase the danger.

b) Specifications of the Materials which have self Interaction and the Related Materials:

The Materials which have self-interaction may subject to strong dissolution discharging the temperature.

The materials which have self interaction should not put under the category of (4-1)

1) If they are:
   - Explosive as per the parameters of category (1)
   - Oxides as per the definition procedures of (5-1)
   - Above organic oxide as per the parameters of the category (5-2)
   - Temperature dissolved less than 300 goal / gm
   - Self speed for the temperature dissolved by more than 75 ^{O} Celsius

   Note: The temperature of dissolution can be defined using any method approved internationally, such as

   Minute differential test for the temperature measurement.

c) Sensitivity Removed Explosives : They are the materials which are wet in water or alcohol to reduced with other materials to minimize the explosive character.

2) Category (4-2) Materials which can be subject to auto flame:
   a) Auto flaming materials
   b) Self heating materials.

   Specifications of the auto flaming and heating materials
   The self heating is produced in the materials that lead to auto flaming from the interaction of the material with oxygen and non exposure of the heat resulted from in enough speed to the surroundings.

The auto flame occurs when the heat production average exceeds the range of endurance and reach to the degree of automatic fire breaking. There are two kinds of materials that produce auto flames.

a) The materials including the mixtures or liquid or solid solvents, even the quantity is les it flames within 5 minutes when contacted with air. These materials are mostly subject to the auto flame and are called the auto flaming materials.

b) Other materials which are subject to the auto heating when contacted with air without providing the energy. These materials flame if they are in big quantities only (in kilograms) and after a long period (hours or days). These materials are called auto heating materials.

3- **The category (3-4) – The Materials that discharge inflammable gases when contacted with water:**

Some materials, when contacted with water, may cause for discharging inflammable gases, causing to be exploded when mixed with air. These mixtures can be flamed easily with all the normal sources of flaming such as open fire or hand tools which discharge sparks or unprotected lights.

The frequency of explosion or the flame resulted from the explosion may subject the life of the people or environment to danger, for example, calcium carbide.

Category (5) **Oxide Materials or Above Organic Oxides:**

1- The category (5) is divided into the following:

a) Category (5-1) Oxide Materials

These materials, even though not flammable necessarily, may discharge oxygen easily, or it may cause oxide arising the fire in other materials or stimulate burning of other materials causing for the severity in fire.

b) Category (5-2) Above Organic Oxides:
Most of the materials listed under this category are flammable and include the composition of Bivalent O-O. These materials are functioning as oxides and possible are subject to explosion. It may also interact in a dangerous way in its liquid or solid form with other materials, most of them burn easily and are sensitive for collision or friction.

2- Due to different characteristics of the materials listed under the categories (5-1) and (5-2), it is not practical to put one parameter for classifying the materials in one parameter under any of two categories. The parameters used to put the materials under the categories (5-1) and (5-2) can be obtained from the concerned departments.

3- The categories (5-1) and (5-2) are functioning as separate categories for the purpose of marking the packing, containers and transport vehicles and for the purpose of separating the packing and transportation.

Category (6) **Toxic Materials:**

1- The category (6) is divided into the following:

a) Category (6-1 a) Toxic Materials
The materials that may subject the life of the human to death or sever injury if taken or inhaled or contacted with the skin.

b) Category (6-1 b) Damaging Materials
The materials that may subject the life of the human to damage if taken or inhaled or contacted with the skin.

c) Category (6-2) Communicative Materials
The materials that include micro living objects including bacteria, virus, parasites or objects developed genetically or bred or cycled, which are assumed or believed reasonably as cause for disease for the human or animals.

2- Toxic Parameters to be inserted along with the Category (6) :

Physical Status of the Material	Through LD50 Oral (Mg/Kg)	Through LD50 Skin (Mg/Kg)	Through LD50 Inhale (Mg/Kg)
Solid	200	1000	10
Liquid	500	1000	10

Note. LD50 is a dose enough to kill 50% of lives in the quantity available therein.

Category (7) Radioactive Materials:

It includes the category (7) or the union of the materials which causes for immediate radiation.

Category (8) Corrosive Materials:

It includes the category (8) i.e. the materials which causes by the chemical activity for severe damage when contacted with the living shells or ever damage other material or means of transport.

Category (9) Different Hazardous Materials

It includes the category (9) and constitutes danger during the transport excluding other categories. The category (9) includes a number of materials and items that represent minor risks and dangerous materials which do not have other category parameters.

Annex No. (8/ Second)

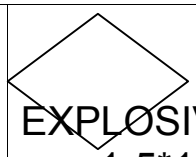
Second: Cards of Categories and Secondary Risk Cards.

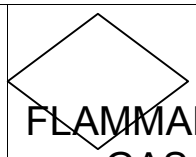
Annex No. (8/ Second)

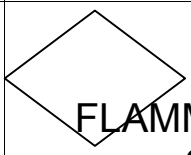
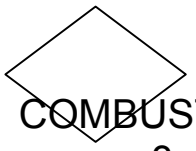
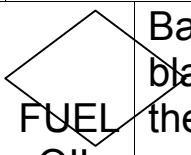
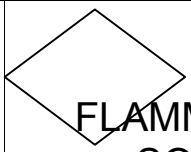
Second: Cards of Categories and Secondary Risk Cards.

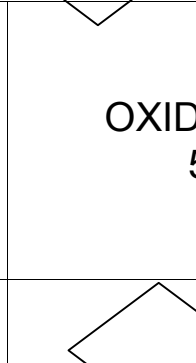
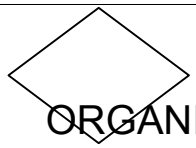
Shape and colour of the category cards and secondary risk cards:

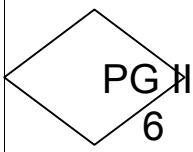
Secondary Risk Item or Category		Colour of Card
1-1 1-2 1-3	  	Background orange from the colour specified in the table (1-1) and the letters in black colour as well as the codes and figures if any.
1-4		Background orange from the colour specified in the table (1-1) and the letters, codes and figures in black colour

1-5		Background orange from the colour specified in the table (1-1) and the codes and figures if any and the letters to be black.
1-6		Background orange from the colour specified in the table (1-1) and the codes and figures if any and the letters to be black.

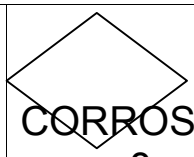
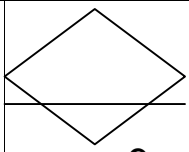
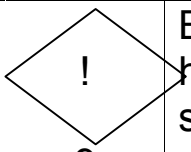
2-1		Background red from the colour specified in the table (1-1) and the codes and figures if any and the letters to be black and white.
2-2		Background green from the colour specified in the table (1-1) and the codes and figures if any and the letters to be black and white.
2-2		Background yellow from the colour specified in the table (1-1) and the codes, figures and letters to be in black.

2-3					Background white and the letters, codes and figures if any and the lines in black.
3					Background black from the colour specified in the table (1-1) and the codes and figures if any and the letters to be black and white
4-1					Background to be in seven red lines and six horizontal lines, each in equal breadth, in red colour as shown in the table (1-1), the code, letters and figures, if any, and lines in black colour.

4-2		Background: top half white and bottom half red as shown in the table (1-1), codes, letters, figures and lines in black colour.
4-3		Background blue from the colour specified in the table (1-1) and the letters, code, figure and lines in black and white.
5-1		Background yellow from the colour specified in the table (1-1) and the letters, code, figure and lines in black.
5-2		Background yellow from the colour specified in the table (1-1) and the letters, code, figure and lines in black and white.

6-1a		Background white and the letters, codes and figures in black.
6-1b		Background white and the letters, codes and figures in black.
6-2		Background white and the letters, codes and figures in black.
7		Background: top half yellow as shown in the table (1-1) with white boundaries, and bottom half in white and the code, letters, figures and lines in black, the height of the figures should not be less than 25 mm and the card size should not be less than 250 mm x 50 mm.
7		Background white and the code, letters, figures, lines in black. The word “radioactive” should flowed by a red vertical pole from the colour specified in the table (1-1)

7		Background: top half yellow as shown in the table (1-1) with white boundaries, and bottom half in white and the code, letters, figures and lines in black, the word “radioactive” should flowed by a red vertical pole from the colour specified in the table (1-1)
7		Background: top half yellow as shown in the table (1-1) with white boundaries, and bottom half in white and the code, letters, figures and lines in black, the word “radioactive” should flowed by a red vertical pole from the colour specified in the table (1-1)

8		Background: top half white and bottom half in black with white boarders, the code in black colour and the letters and figures in white colour.
9	 	Background: top half seven horizontal black lines and six white lines, all of them in same breadth. Bottom half: background in white colour with black letters and black figures and lines under the word.

Notes:

- The letters may be appeared in the category cards and secondary risks cards in one or two lines.

The surface of every card and secondary risk card should be in the same colour of code inside the edge and parallel.

This line will be in the length of 5 mm inside the edge in the square card which has sides of 100 mm, increased or reduced after the line from the edge to match with the size of the card. The cards must be square put on 45 degree angle like a diamond.

- The category card can be used as secondary card provided that the bottom corner should be removed from the category card as shown below or to make the figure incorrect.

The explosives categorization code should be shown in the area allotted for the same with (*)

The group of compatibility with the explosives in the category (1-4) should be shown marked in the area allotted area.

The external packing, transport containers and vehicles that include the hazardous materials from both categories of (6-1a) and (6-1b) should be marked using the category card (6) only.

Specifications of the Colours on the Cards:

The colours mentioned in the fourth column above are shown in the column of the table (1-1).

The colour of the card should be fixed after putting it on the packing or loading unit or shipping container or vehicle, complying with the sample of the colour fixed in the column (2) of the table (1-1). The ink used for printing the card should be resistant against fading the colour.

Table (1-1)

Colours of the category cards, secondary risk cards and mixed category cards.

Column 1 – Colour of Card	Column 2 : Refer the sample of colour shown in the Panton system for comparison.
Orange	Panton 151
Red	Panton 195
Green	Panton 361
Blue	Panton 300
Yellow	Panton 109

Schlumberger

Annex No. (8/ Third)

First: Requirements of Separating the Hazardous Materials

Annex No. (8/ Third)

Third: Requirements of Separating the Hazardous Materials

a- General Requirements:

Category	1-1	1-2	2-2	3-2	1-3	1-4	2-4	3-4	1-5	2-5	1-6	8
1-1		C	C	C	C	C	C	C	C	C	C	C
1-2	C			C	B	B	C	B	C	C	B	B
2-2	C			C	A	A	B	A	A	B	A	A
2-3	C	C	C		C	C	C	C	C	C	C	C
3-1	C	B	A	C		B	B	B	C	C	B	A
4-1	C	B	A	C	C		B	B	C	C	B	A
4-2	C	C	B	C	C	B		B	C	C	B	A
4-3	C	B	A	C	C	B	B		C	C	B	B
5-1	C	C	A	C	C	C	C	C		B	B	B
5-2	C	C	B	C	C	C	C	C	B		C	B
6-1	C	B	A	C	C	B	B	B	B	C		A
8	C	B	A	C	C	A	A	B	B	B	A	

Notes:

The separation between two different categories of hazardous materials will be defined by using the code put at the intersection of the horizontal line which represents the first category and the horizontal line that represents other category.

a- The separation should be minimum 3 m distance.
b- The separation should be minimum b m distance.
c- Prohibited to store in same room or distance where

the minimum is less than 10 m

d- The distance can be reduced if fire protection is installed in accordance with the environment and safety.

e- The materials storing places should be out of the work areas wherever it is suitable, when the hazardous materials are stored in the industrial enterprises.

Minimum 3 m distance should be given for any uninflammable material production facility and 10 m distance for inflammable materials and any flaming source.

b- <u>Requirements of Separating the Hazardous Materials from the Public:</u>

The hazardous materials should be kept separated from the area where the public visits as per the following requirements :

Category	**Minimum Separation (in Meters)**
1	50
1-2	5
2-2	5
2-3	15
3-1	10
4-1 to 4-3	5
5-1 to 5-2	5
6-1 to 6-3	5
8	5

- The supervision should be made strictly in the store by a supervisor who enjoys the training and experience.

Annex No. (8/ Fourth)

Fourth: Packing of Hazardous Materials

Annex No. (8/ Fourth)

Fourth: Packing of Hazardous Materials

1- General Requirements of Packing:

1- The hazardous materials should be packed in good quality packets. The packing should be free from any marks that will have influence on its contents. The manufacturing, closing, preparation of packing before transporting should be in such manner that prevents any leakage.

The external part of the packet should be free from any quantity of the hazardous material. This provision is applicable to any packets, which is reused.

2- The new or manufactured or reused or re-qualified packets should be complying with the approved packing specifications and the requirements of the performance test. These packets should be made and tested in accordance with the quality guaranteeing program meeting the satisfaction of the concerned department, confirming that these packets are meeting these requirements. Any packets showing the weakness marks when compared to the type of the approved design or it should be re-qualified to make it bearing the test prescribed for the design of packets.

3- The packets, which are contracting directly with the hazardous materials should be resistant to the chemical impact and other impacts of these

materials. Also the packing materials should not include any materials that interact dangerously with the contents or form dangerous products or weaken the packets. The materials like plastic that become soft or delicate in the temperature or due to chemical impact should not be used as packets. It should be confirmed that the packets are complying with the method of the materials packed therein. This is particularly applied for the materials corrosive and delicate materials.

4- The body of any packet should be made in such a manner that resists adequately the impact of the vibration. The buffers and bumpers should be fixed tightly and actively using positive means and the closing instrument should be designed in such a manner that will not make the closing improper or incomplete and should be designed in such a manner making the inspection and closing easier.

b- **Internal Packing:**

1- Lining Material:

The internal packing should be covered with a lining material in order to prevent breaking or occurring any leakage. In order to control the movement along with the external packing the lining materials should no interact dangerously

with the contents of the internal packing. Any leakage for the contents should not make any severe impact on the specifications of the lining material.

2- Absorbent Material

Unless otherwise stated the liquids come under the category (3) or (4) or (8) and the sections (1-5) or (1-6) which represent the high or medium risk materials / items should be packed in the glass or pottery internal packets using the materials suit for absorbing the liquids. No need of absorbing materials if the internal packets are protected in such a manner that guarantees the non-breakage or leakage during the normal transporting. If the external cover is not enough strong to prevent the leakage, the means to contain the liquid in case of leakage should be provided. It may be in the shape of lining to prevent the leakage or plastic bag or other similar material to protect the contents.

C. Requirements of Other Packing:

1. The nature and thickness of the external packing should be in such a form that if any collision occurs and any possible fire breaks out then it will not change dangerously the chemical stability of the contents.

2. The harmonious packets that include any liquid hazardous material, other than the inflammable liquids in internal packing of 120 ml or less or the materials that cause for epidemics, should be packed in such a way that the closure on the internal packing should be to the top and the top direction should be marked on the packet. The words “this is to top” or “this is the end to top” can be used.

3- The packing should be in such a size allowing to stick all the required marks on the packing under this rule and any other national rules.

4- The UN specifications should be used for packing as per the systems adopted by the UN currently based on the recommendations of the UN experts, regarding the transportation of the hazardous

materials.

D. Information Cards:

1- The following paragraphs are applied for the packing information cards only, regarding the guidelines related to the information cards of containers or other materials.

E. Types and Specifications of the Cards:

1- Endurance: The material of every card, printing and sticking materials should be strong enough to bear the normal transporting circumstances and the cards should remain clear to read all times.

2- Type of Cards:

There are two kinds of cards:

a) Cards of Danger: It is required for most of the dangerous materials of all categories.

b) Handling Cards: It may be required alone or along with the danger warning cards for some hazardous materials.

3- Specifications of the Cards:

The cards of danger and handling used on the hazardous materials should be complying with all aspects from shape, colour, code and text, as per the design samples stipulated in this regulations. The minimum dimension of the danger cards will be 100 mm x 100 mm unless prescribed otherwise. The danger card should include a line in the same colour of the code 5 mm far from the edge and parallel to the edge. The top half should be allotted for the code and the bottom half for the text, number of the category or group, excluding the cards of group (1-4), (1-5) and (1-6).

4- A text showing the nature of the risk can be given in the bottom half of the card/cards of danger in addition to the number of the group or the group of compatibility. The text should be in English unless otherwise stipulated. In this case Arabic translation should be provided giving for both languages equal importance. The same provisions of language shall be applied in the cards of handling.

The cards may be included introductory information including the name of the manufacturing company, provided that the information should be printed out of the frame line in a size not exceeding 10 points.

5- Use of Danger Cards:

a) The main danger card for each item or material listed in addition to the duplicate card for each item or material which as secondary risks, as specified in the recommendations of the UN.

b) The card that shows the major risk of the hazardous material should include the number of the category or the group as suitable in the bottom corner of the card. The card that shows the secondary risk should not include the category or group number and this number should be erased, if any.

6- Prohibited Cards:

a) The dimensions of the cylindrical packets or other high packets should be in such a manner that card would not roll on its own.

b) The arrows are not allowed on the packets except for showing the suitable direction of the packets including the liquid hazardous goods.

7. Sticking Cards:

1. The cards should stuck firmly or printed on the packet in such a manner that makes reading easier and not disturbed by any part of the packet or other cards.

2. The card should be pasted on a background in different colour.

3. The cards cannot be folded or pasted in such manner that makes the parts of the card showing in the different parts of the packet.

4. If the surface of the packet is not acceptable to the cards, the card(s) can be tied to the packet using a strong tie.

5. When the secondary risk cards are used it should be pasted near to the major risk cards.

6. When the top direction cards are used, minimum two cards should be used. The cards should be pasted on the opposite sides so that the arrows will indicate to the correct direction.

7. Other Requirements:
The cards will be allowed to include the instruction of other regulations provided that it should not

contradict to these instructions.

9. Put marks on the packets:
   All the packets should be marked with the correct name as per the instructions of the UN, code of UN followed by the unique introduction number of UN.