



# Presidency of Meteorology and Environment

## Kingdom of Saudi Arabia

### Rules for Implementation of The General Regulations on the Environment

October 15, 2001

A personal Collection of

Abu Nasser Khondaker PhD CPEng. FIEB  
Research Engineer I & Coordinator  
Environmental Modeling & Atmospheric Monitoring Group  
Center for Environment & Water  
King Fahd University of Petroleum & Minerals  
Dhahran 31261, Saudi Arabia

**Kingdom of Saudi Arabia**

Office of the Second Vice President of the  
Council of Ministers, Minister of Defense and  
Aviation and Inspector General  
**Aviation Affairs**

**No. 1/1/4/5/1/924**

**Ministerial Decision**

The Minister of Defense, Aviation and Inspector General

Pursuant to the authorities vested in him by the General Regulations on the Environment promulgated by Royal Decree No. M/34, dated 28 Rajab 1422 [15 October 2001], and

Having reviewed Article 22 of the said Regulations

HEREBY DECIDES AS FOLLOWS:

1. Approve the Rules for Implementation of the General Regulations on the Environment attached hereto.
2. Publish this decision and the Rules attached thereto along with their six appendices in the official gazette. They shall take effect as of the date of publication.

Sultan ibn ‘Abd Al-‘Aziz

[Signature]

Minister of Defense and Aviation  
and Inspector General

## Chapter One

### Article I: Definitions

For the purposes of these Rules, the following terms shall have the meanings indicated for each of them, unless the context dictates otherwise:

- 1) **The Competent Agency:** The Presidency of Meteorology and Environment (PME), previously the Meteorology and Environmental Protection Administration (MEPA).
- 2) **The Competent Minister:** The Minister of Defense and Aviation and Inspector General.
- 3) **Regulations:** The General Regulations on the Environment.
- 4) **Public Agency:** Any ministry, department or government institution.
- 5) **Licensing Agency:** Any agency responsible for licensing projects with potential negative impact on the environment.
- 6) **The Concerned Agency:** The government agency responsible for environment-related projects.
- 7) **Person:** Any private natural or juridical person, including individuals and private establishments and companies.
- 8) **The Environment:** All ambient water, air, land and external space and all inanimate objects, plants, animals, various forms of energy, [ecological] systems, natural processes and human activities contained therein.
- 9) **Environmental Protection:** Preserving the environment and preventing and reducing its pollution and degradation.
- 10) **Air:** A mixture of constituent gases in their natural properties and known percentages as specified in the environmental standards enclosed herein.
- 11) **Environmental Pollution:** The presence of one or more substances or factors over a period of time in quantities or properties that will directly or indirectly be harmful to public health, organisms, natural resources or properties or adversely effect the quality of life and the well-being of people.
- 12) **Polluting the Environment:** Any direct or indirect act or conduct by any person, either deliberate, non-deliberate, resulting from negligence or ignorant misconduct, etc., that causes environmental pollution.
- 13) **Environment Degradation:** The negative impact on the environment that changes its nature or general properties, or leads to upsetting the natural balance of its elements or the loss of its aesthetic or visual characteristics

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- 14) **Pollution Accidents:** Accidents that result in pollution or degradation of the environment but are within the local and national capabilities to combat and control.
  - 15) **Environmental Disaster:** An accident that causes damage to the environment and needs greater capabilities to combat than those needed for pollution accidents.
  - 16) **Source Measures:** limits or percentages of concentration of the various pollutant resources beyond which no pollutants may be discharged into the ambient environment. This includes identifying the necessary control techniques to comply with these limits.
  - 17) **Environmental Quality Measures:** Limits or percentages of air, water or land pollutant concentrations that are not to be exceeded.
  - 18) **Environmental Measures:** Both environmental quality and source measures.
  - 19) **Environmental Standards:** The environmental specifications and requirements for controlling pollution sources.
  - 20) **Projects:** Any facilities, installations or activities of potential impact on the environment.
  - 21) **Project Owner:** The concerned or public entity or person owning the project, supervising it or responsible for its management or operation.
  - 22) **Existing Projects:** Projects whose construction began before the issuance of these Regulations.
  - 23) **New Projects:** Projects that haven't been built yet, or those in the phases of design, licensing or launching of construction operations.
  - 24) **Modified Projects:** Existing projects that have undergone one or more modifications, including expansion of area or production volume or changes in operating processes or crude oil volume, grade or quantities, which modification(s) are of potential impact on the environment.
  - 25) **Major Change:** Any expansion or change in the design or operation of any existing project with potential negative impact on the environment. For the purposes of this definition, any replacement of equivalent type and capacity shall not constitute a major change.
  - 26) **Environmental Impacts:** A set of environmental reactions resulting from preparing, constructing or operating any project.
  - 27) **Project Environmental Evaluation:** The study carried out to identify the project's potential or actual environmental impacts and the appropriate procedures and methods of preventing or reducing such negative impacts and
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- creating or enhancing the project's environmental positive effects in accordance with the applicable environmental measures.
- 28) **Air Pollution:** Introduction of materials or elements to the atmosphere or the air in a manner that could affect the quality of life and human health and well-being and cause damage to vital resources and ecological systems.
  - 29) **Surface Water:** All water existing on the surface of the earth, including sea, valley, dam, well and spring water.
  - 30) **Underground Water:** Water existing deep under the ground.
  - 31) **Water Pollution:** Direct or indirect introduction of any substances or energy into the water environment causing damage to living and non living resources, threatening human health, degrading the natural properties of water or hampering water-related activities such as fishing and recreation.
  - 32) **Land Pollution:** Performance of any activity or the direct or indirect introduction of any substances into various types of land and soil in a manner that causes damage to any or all of its physical, chemical or biological properties, threatens human health or hampers agricultural or urban activities.
  - 33) **Oil:** Includes all types and forms of crude oil and its products, including liquid hydrocarbons, lubricating oils, fuel oil, refined oils, tar and refining processes' oils and waste by-products.
  - 34) **Vessel:** Any floating unit of any type navigating or built on the surface of water.
  - 35) **Tanker:** Vessel originally built or modified to carry shipments of oil; any petroleum solid, liquid or gaseous substances; or any other harmful substances.
  - 36) **Discharge:** Adding pollutants to ambient air, pollutant-receiving water, soil or any central treatment facility.
  - 37) **Direct Discharge:** Discharge to the various environmental mediums (air, water and soil), excluding discharge to a central treatment facility.
  - 38) **Oil Transport Means:** All known means of oil transportation, including vessel; tanker; truck; road tankers; or submerged, subsurface or surface oil pipelines.
  - 39) **Coast:** Area where sea and land meet at the medium tidal point.
  - 40) **Coastal Range:** Coastal area affected by the sea and the marine area affected by land.
  - 41) **Shoreline:** The maximum limit reached by seawater on land during high tide.
  - 42) **Reservation:** An area of land, coast, sea or internal water which is environmentally-sensitive; distinct for a cornucopia of vegetation and animal

- life; or of a touristic, esthetic or economic value, which requires the protection thereof.
- 43) **Storage:** All operations to keep or contain wastes and other hazardous, toxic or radioactive substances for the purpose of treating, transporting or disposing thereof.
- 44) **Storage Pool:** Any padded or unpadded hole, depression or area naturally or artificially enclosed, consisting mainly of earthy, cement or any other processed materials designated for holding accumulated liquid-containing wastes.
- 45) **Disposal:** All operations of incineration; precipitation; or intentional or unintentional, direct or indirect, discharge of any wastes or hazardous, toxic or radioactive substances, either in gaseous, liquid or solid state, into the environment.
- 46) **Container:** Any vessel or container used to hold or transport substances or wastes, including hazardous substances and wastes.
- 47) **Offsite Location:** Any location outside the land surrounding and belonging to the project.
- 48) **Sludge:** Any solid, semi-solid, liquid or precipitating wastes remaining at the bottom of tanks or containers, such as those resulting from the treatment processes of household, commercial or industrial sewage or potable water or produced by air pollution control devices.
- 49) **Ground Treatment Facility:** Any facility where wastes are placed or mixed with soil or diluted with some materials to change their chemical or physical properties as a method of treatment.
- 50) **Landfill:** Any facility, other than a ground treatment facility or a storage pool, where wastes are disposed of in an environmentally safe manner either by placing them on the ground or burying them underground.
- 51) **Waste Pile:** Non-liquid waste accumulations not placed in containers, a landfill or a storage pool.
- 52) **Treatment:** Any means or technique of altering the physical, chemical or biological properties of wastes, which means or technique is used to neutralize such wastes; utilize substances or energy contained therein or released by them; and transform the hazardous wastes into wastes that are non-hazardous, less hazardous or safer to transport, store, dispose of, prepare for storage, or reduce in volume.

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- 53) **Closed Internal Treatment:** The process under which waste treatment is directly related to the project's production process and which is used to prevent waste or any of its components from leaking into the environment.
- 54) **Maximum Allowable Limit:** numerical value not to be exceeded by the pollutant material element values.
- 55) **Monthly Average:** Arithmetic average of pollutants elements found through the analysis of random samples for thirty successive days.
- 56) **Liquid Wastes:** Liquid and semi-liquid wastes resulting from households, housing complexes, shops, public and private establishments, restaurants, factories, workshops and plants activities including agricultural and industrial sewage wastes.
- 57) **Hazardous Materials:** Any materials classified as hazardous under the rules and directions set forth by the Competent Agency in cooperation with concerned agencies and under regional and international directives.
- 58) **Wastes:** Wastes as defined in Appendix 4.
- 59) **Hazardous Wastes:** Wastes of various activities and processes considered hazardous to the environment, health and public safety. It also means the hazardous wastes defined in Appendix 4.
- 60) **Properties of Hazardous Wastes:** Chemical, physical or biological properties of wastes, representing one or more of the hazardous waste substances' properties referenced in Appendix 4.
- 61) **Transportation Document:** The form specified by the Competent Agency for the follow up on hazardous wastes' transportation from the point of production to the point of storage, treatment or ultimate disposal.
- 62) **Environmental Observation Networks:** Networks set up by the competent or concerned agency or persons, featuring stations and work units, to observe environmental elements and pollutants.
- 63) **Compensation:** Compensation for damages resulting from environmental pollution of whatever source; the resultant [application of] the provisions of regional and international agreements that the Kingdom did or will in the future join, sign or endorse; or any compensation for environmental pollution accidents provided for by the Rules for Implementation of these Regulations.
- 64) **Ballast Water:** Water inside a ship or tanker that transports oil and other petroleum derivatives which water is used to maintain tanker or ship balance when sailing empty.
- 65) **Ballast Water Receiving Centers:** Installations, equipment and pools designed to receive, precipitate, treat and discharge the ballast water pollutants.
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- 66) **[Regenerative] Capacity of Natural Resources:** The limit under which resources can naturally or artificially regenerate and the exploitation levels do not cause a permanent drainage or wasting of such resources.
- 67) **Projects of Special Nature:** Implemented projects which activities relate directly or indirectly to safety, health or national economy.
- 68) **Environmental Awareness:** The society's awareness of the importance of protecting the environment, rationalizing the exploitation of natural resources and preventing or limiting such resources' degradation or pollution.
- 69) **Promoting Environmental Awareness:** Promoting the society's knowledge of the importance of the environment and its effect on human behavior, economy and health.
- 70) **Environmental Education:** The systematic process of promoting awareness, behavior, skills, conceptions and values that encourage positive attitudes towards the environment and the natural resources.
- 71) **Awareness Programs or Campaigns:** Systematic and planned efforts and activities to promote environmental knowledge and raise environmental awareness.
- 72) **Means and Materials of Promoting Environmental Awareness:** All known and available means and materials, either in print or audio or visual products, including publications, books, films, programs, contests, expeditions, etc.

## Article II: Goals

The General Regulations on the Environment and their Rules for Implementation aim at achieving the following:

1. Preserving, protecting and developing the environment and preventing its pollution.
2. Protecting public health from the hazards of activities and actions that are harmful to the environment.
3. Preserving, developing and rationalizing the usage of natural resources.
4. Making environmental planning an integral part of comprehensive development planning in all areas of industrial, agricultural, urban and other industries.
5. Promoting awareness of environmental issues, individual and collective responsibility for protecting and improving the environment and national voluntary efforts in this regard.



## **Chapter Two Tasks and Obligations**

### **Article III**

Pursuant to Article III of the General Regulations on the Environment, the Competent Agency shall be entrusted with the tasks of preserving the environment and preventing its degradation, including the following:

- 3-1 Review and evaluate the environment's condition, develop observation means and tools, gather information and conduct environmental studies.
- 3-1-1 Coordinate with the concerned agencies to prepare periodical reports on the Kingdom's environmental condition and develop environmental information infrastructure and the environmental databases required to evaluate the condition of the environment.
- 3-1-2 Develop means of observing and monitoring environmental pollution and degradation in all cities, regions and territorial waters of the Kingdom, including the establishment of a sufficient number of observation and monitoring posts through stations, fixed and portable laboratories and other means of measurement and observation.
- 3-1-3 Develop an executive plan to deploy observation, monitoring and tracing instruments for the various types of pollution, and linking such instruments to an integrated network connected to the Competent Agency's main offices to follow up on pollution cases and coordinate observation and monitoring methods and protection, combating and follow up plans with the concerned agencies.
- 3-1-4 Propose projects and mechanisms to implement the environmental studies in a manner that covers the Kingdom's various environment types in conjunction with the concerned agencies, research centers, national universities and regional and international centers, institutes and organizations as needed.
- 3-2 Document and publish environmental information.
- 3-2-1 Utilize environmental databases and information available to it, public agencies, concerned agencies or persons in documenting and publishing environmental information.

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- 3-2-2 Coordinate with the concerned agencies to set up the environmental information network and lay down procedures for its development and management.
  - 3-2-3 Establish environmental information exchange and circulation procedures for the concerned agencies, researchers, decision makers and other segments of the society that need such information and circulate as much of this information as possible.
  - 3-2-4 Document and update environmental information. Public and concerned agencies and persons shall continuously provide the Competent Agency with their available environmental information based on the rules specified by the Competent Agency.
  - 3-2-5 Prepare and develop procedures and rules to qualify and register agencies and persons engaged in the various environmental fields.
  - 3-2-6 Qualify and register agencies and persons engaged in the various environmental fields.
  - 3-3 Prepare, issue, review, develop and constitute environmental protection standards.
  - 3-3-1 Study the characteristics of various ecological systems and media and the sources of pollution and establish and prepare their environmental standards.
  - 3-3-2 Coordinate with the concerned agencies to review, develop and apply environmental standards as needed (Appendix 1).
  - 3-3-3 Develop the bases and procedures for evaluating the impacts of industrial and developmental projects on the environment and the general guidelines for environmental impact evaluation studies.
  - 3-3-4 Coordinate with the concerned agencies to review, supplement, and develop environmental standards, criteria and guidelines related to the activities for which such agencies are responsible.
  - 3-4 Develop draft environmental regulations related to its responsibilities.
  - 3-4-1 Develop draft environmental regulations.
  - 3-4-2 Coordinate with the concerned agencies to develop plans and rules for implementation for environmental regulations.
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- 3-4-3 Review and develop plans and rules for implementation for environmental regulations in light of environmental requirements and parameters.
- 3-5 Ensure public agencies' and persons' commitment to environmental regulations, standards and criteria and take the necessary actions to achieve this purpose in coordination and conjunction with concerned and licensing agencies.
- 3-5-1 Coordinate and cooperate with the concerned and licensing agencies to determine the necessary implementation procedures to ensure public agencies' and persons' commitment to environmental regulations, standards and criteria (Appendices 1, 2 and 3).
- 3-5-2 Coordinate and cooperate with the concerned and licensing agencies to implement those procedures
- 3-5-3 Coordinate and cooperate with the concerned and licensing agencies to review, follow up on and develop implementation procedures appropriate to the environmental parameters and develop necessary technical and human capabilities required for this purpose.
- 3-5-4 Coordinate and cooperate with the concerned and licensing agencies to provide and develop monitoring and inspection tasks to ensure public agencies' and persons' commitment to environmental regulations, standards and criteria (Appendices 1, 2 and 3).
- 3-5-5 Issue environmental approvals for installations and persons in a manner that will guarantee compliance with the Regulations and their Rules for Implementation.
- 3-5-6 Authorize any agency to perform some of the environmental works assigned to the Competent Agency.
- 3-5-7 Encourage agencies engaged in production services activities and industrial facilities to apply environmental management regulations.
- 3-6 Keep abreast of the latest regional and global developments in the areas of the environment and its management.
- 3-6-1 Follow up on regional and global environmental developments, coordinate with the concerned agencies and national contact points concerning regional and international environmental commitments, and pursue their implementation procedures on the national level.
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- 3-6-2 Coordinate and cooperate with concerned and public agencies to develop a national environmental disaster plan.
  - 3-6-3 Coordinate national positions on international and regional environmental agreements and conventions.
  - 3-6-4 Follow up on environmental memoranda of understanding and cooperation and coordinate efforts with the concerned agencies to implement them.
  - 3-6-5 Follow up on the implementation of international and regional environmental agreements articles and protocols and coordinate with the concerned agencies and national contact points to implement the procedures required of the Kingdom.
  - 3-6-6 Coordinate efforts with international and regional governmental environmental organizations and agencies and coordinate with the concerned agencies to benefit from the such organizations' efforts in following up on the discharging of national obligations arising from international agreements.
  - 3-6-7 Coordinate and cooperate with concerned and public agencies to benefit from the environmental scholarship, training or workshop programs organized by international and regional organizations and agencies.
  - 3-6-8 Coordinate and cooperate with the concerned agencies to utilize mutual environmental cooperation agreements.
  - 3-7 Promote environmental awareness at all levels.
    - 3-7-1 Coordinate and cooperate with the concerned agencies to develop an environmental education, awareness and media strategy and its implementation plans.
    - 3-7-2 Mobilize physical and moral endeavors and manpower to implement the environmental awareness strategy programs and plans.
    - 3-7-3 Coordinate and cooperate with the concerned agencies, individuals and persons and utilize national, regional and international events in promoting environmental awareness.
    - 3-7-4 Support efforts of the agencies concerned with training and education to develop environmental education programs and curricula.
    - 3-7-5 Coordinate efforts with international and regional organizations and programs to support national environmental awareness programs.
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- 3-7-6 Encourage and stimulate all agencies' and persons' efforts to promote environmental knowledge and awareness.
- 3-7-7 Issue and develop environmental awareness materials and programs, and cooperate with the concerned agencies and persons to utilize the support, facilities and programs they provide to promote environmental knowledge and awareness.

## **Article IV**

- 4-1 Each public agency shall take the appropriate measures to ensure the application of the rules provided for herein to its projects, projects under its supervision or projects licensed by it and compliance with the environmental regulations, standards and criteria specified in the Rules for Implementation hereof.
- 4-1-1 Public agencies shall develop instructions, implementation procedures and by-laws through which they shall hold persons and projects belonging to, supervised by or licensed by such public agencies responsible for applying the Regulations' provisions and Rules for Implementation.
- 4-1-2 Public agencies shall hold persons and projects belonging to, supervised by or licensed by such public agencies responsible for implementing all Rules for Implementation hereof and procedures issued by the Competent Agency concerning the implementation of the environmental standards, criteria and guidelines. Each person shall be held responsible for the environmental transgressions and violations [arising from] his operations as contractor or subcontractor.
- 4-1-3 Environmental standards and criteria issued or to be issued, amended or supplemented by the Competent Agency shall be considered appendices to these Rules and a complementary part thereof.
- 4-1-4 Public, licensing and concerned agencies and persons shall ensure that environmental works related to their projects are carried out by contractors qualified for such works under the bases and criteria specified by the Competent Agency in Appendix 3.
- 4-1-5 All concerned, public and licensing agencies and persons shall undertake to urgently and promptly notify the Competent Agency of all pollution accidents,

violation of environmental measures and standards or adverse environmental impacts at the facilities or projects operated, supervised or licensed by them.

- 4-2 Each public agency responsible for issuing standards, specifications, or rules concerning the conduct of activities with impact on the environment shall coordinate with the Competent Agency before such issuing.
- 4-2-1 All agencies shall coordinate with the Competent Agency before issuing, updating or amending any standards, criteria or rules relating to the conduct of activities with impact on the environment.
- 4-2-2 Pursuant to Paragraph 2 of Article IV of these Regulations regarding environmental standards, criteria, specifications, guidelines and rules issued by public agencies prior to the issuance of these Regulations, public and concerned agencies shall coordinate with the Competent Agency to review previously issued environmental standard, criteria, specifications, guidelines and rules in order to amend or update them as required based on guidelines and instructions issued by the Competent Agency.

## **Article V**

Licensing agencies shall ensure that environmental evaluation studies are conducted at the feasibility study stage for projects of potential adverse impacts on the environment. The agency charged with implementing the project shall be responsible for conducting environmental evaluation studies in accordance with the environmental bases and standards set forth by the Competent Agency in the Rules for Implementation.

- 5-1 Public, concerned and licensing agencies and persons responsible for project implementation or operation shall conduct environmental evaluation studies in accordance with the environmental bases, standards and criteria mentioned in Appendix 2.
- 5-2 Public, concerned and licensing agencies shall ensure that environmental evaluation studies are conducted at the project feasibility study stage and in accordance with the environmental bases, standards, criteria and rules indicated in Appendix 2.
- 5-3 The Competent Agency shall review the environmental impact evaluation studies submitted by the public, concerned and licensing agencies and persons who either own or operate projects, upon whom the requirements, rules and guidelines set forth by the Competent Agency for implementing the project

shall be binding. Pledging to comply with such requirements, rules and guidelines shall be considered a prerequisite for obtaining permissions to implement such projects.

- 5-4 Concerned, public and licensing agencies engaged in any of the various environmental activities; working in the field of protecting and developing natural resources; or licensing industrial and development projects with potential adverse impact on the environment shall coordinate with the Competent Agency to ensure commitment to conducting environmental evaluation studies in accordance with the environmental bases and standards specified in Appendix 2.
- 5-5 Public and concerned agencies and persons implementing or operating projects shall periodically provide the Competent Agency with [a statement] advising that they are in compliance with environmental bases, standards, criteria and procedures.
- 5-6 If the Competent Agency discovers that the concerned agencies, persons or agencies implementing projects have not fulfilled the requirements of environmental evaluation studies submitted along with the feasibility studies, or have not complied with the requirements, guidelines and comments the Competent Agency set forth on the environmental evaluation studies for implementing the projects, coordination shall be made with the concerned and licensing agencies to take the required actions that will achieve commitment to, and compliance with, environmental evaluation studies submitted as part of the feasibility studies.

## **Article VI**

An agency implementing new projects, conducting major modifications to existing projects or having projects with specific expired investment terms shall employ the best and most suitable techniques available for the local environment and the least environment-polluting material.

- 6-1 Without prejudice to the environmental impact evaluation study, licensing of new projects, major modifications to existing projects or projects with specific expired investment terms shall require public, concerned and licensing agencies and persons implementing such projects to undertake, prior to commencing their activities, to employ technologies which are the best, internationally tried and most suitable for the local environment; the least environment-polluting materials; and appropriate treatment techniques for post operation wastes and emissions harmful to the environment in accordance with

the environmental standards, criteria and guidelines specified in the appendices hereof.

- 6-2 In conjunction with the Competent Agency, public, concerned and licensing agencies shall take the necessary and sufficient measures to implement the contents of Paragraph 6-1.
- 6-3 Public, concerned and licensing agencies and persons implementing major modifications to existing projects or to projects with specific expired investment terms shall undertake to rehabilitate the environment and restore it to its previous condition as far as possible in accordance with the environmental regulations, guidelines and standards set forth by the Competent Agency in coordination with the concerned and licensing agencies.
- 6-4 In conjunction with scientific research centers and agencies specialized in the area of technology, the Competent Agency and the concerned agencies shall, periodically every five years, survey modern and available technologies which are suitable for the local environment.

## **Article VII**

- 7-1 Agencies in charge of education shall incorporate environmental concepts into the various educational stages' curricula.
- 7-1-1 In conjunction with the Competent Agency, agencies concerned with education shall incorporate environmental concepts into the curriculums of general and high education stages and into training programs.
- 7-1-2 Concerned agencies shall take the necessary actions to ensure the development of the current environmental concepts in curriculums of general and high education and training programs based on the latest environmental developments.
- 7-1-3 Agencies concerned with education and training shall motivate and develop extracurricular activities and programs to promote environmental awareness.
- 7-2 Agencies responsible for the media shall enhance environmental awareness programs in the various media and enhance the environmental protection concept from an Islamic perspective.
- 7-2-1 The Competent Agency shall coordinate with public and concerned agencies and persons to plan to hold specialized environmental forums and conferences



as well as workshops and training courses in the field of the environment to enhance and promote environmental awareness and the environmental protection concept from an Islamic perspective.

- 7-2-2 Concerned agencies and the Competent Agency shall corporate and coordinate to develop a national plan to enhance and develop environmental educational, media and awareness programs and utilize national, regional and international events, exhibits, workshops, forums, conferences and environmental contests to promote environmental awareness and instill the concepts of environmental preservation and protection from an Islamic perspective.
- 7-3 Agencies responsible for Islamic affairs, Da'wah and guidance shall enhance the role of mosques in encouraging the community to preserve and protect the environment.
- 7-3-1 The Competent Agency shall support and follow up on efforts of the agencies responsible for Islamic affairs, Da'wah and guidance in enhancing the role of mosques in encouraging the community to preserve and protect the environment and promote the environmental protection concept from an Islamic perspective.
- 7-4 Concerned agencies shall set up appropriate training programs to develop capabilities in the area of preserving and protecting the environment.
- 7-4-1 The Competent Agency shall cooperate and coordinate with the concerned agencies to support their efforts in setting up and developing appropriate training programs to enhance capabilities in the various areas of preserving and protecting the environment.
- 7-4-2 The Competent Agency and the concerned agencies shall coordinate with scientific research centers, scientific institutes and agencies engaged in environmental activities to set up and develop training programs in various environmental fields.
- 7-4-3 The Competent Agency and the concerned agencies shall coordinate with regional and international organizations, bodies and scientific research centers to utilize the training programs provided by such organizations, bodies and centers to develop national capabilities in the areas of the environment and its protection and preservation.
- 7-4-4 The Competent Agency shall cooperate and coordinate with the concerned agencies to utilize bilateral cooperation agreements in the area of environmental protection signed between the Kingdom and Arab and friendly

states to set up mutual training programs to develop capabilities in preserving and protecting the environment.

### **Article VIII**

Pursuant to Article VIII of the General Regulations on the Environment, and without prejudice to the provisions of the regulations and directives, public agencies and persons shall undertake to:

- 8-1 Rationalize the use of natural resources to preserve and increase renewable resources and prolong the life of non-renewable ones.
  - 8-1-1 Abide by all procedures designed to protect and rationalize the use of natural resources.
  - 8-1-2 Coordinate and cooperate with the Competent Agency to develop a national plan for protecting, conserving and rationalizing the use of ecological systems and natural resources.
  - 8-1-3 Coordinate and cooperate with the Competent Agency to develop emergency plans for protecting ecological systems and natural resources.
  - 8-1-4 Coordinate and cooperate with the Competent Agency to develop an implementation plan to rehabilitate and restore degraded ecological systems and natural resources.
  - 8-1-5 Coordinate and cooperate with the Competent Agency to utilize ecological systems and natural resources protection, preservation and developing programs planned as part of the programs and activities of the regional and international bodies and organizations.
  - 8-1-6 Encourage and support the use of technologies and practices designed to control and rationalize the use of natural resources while maintaining or increasing production efficiency.
  - 8-1-7 Public, concerned and licensing agencies and the Competent Agency shall cooperate and coordinate, each where concerned, to prevent the degradation of natural resources as a result of human wrongful exploitation.
- 8-2 Align usage patterns and rates to the load capacity of natural resources.
  - 8-2-1 Public agencies and the Competent Agency shall coordinate to make an inventory of all ecological systems and natural resources in the Kingdom with

the purpose of setting up, developing and preparing databases, maps and photographs of such systems and resources to utilize them in developing protection, preservation and conservation plans. Such information shall be updated as required.

8-2-2 Public, concerned and licensing agencies shall incorporate into their development plans and projects procedures, recommendations, and requirements designed to align the patterns and rates of utilization of natural resources to the load capacity of such resources.

8-3 Employ recycling and resources re-use techniques.

8-3-1 Coordinate with the Competent Agency to develop and implement a national plan for recycling wastes and reusing resources.

8-3-2 Encourage agencies that adopt recycling of wastes and reuse of resources.

8-3-3 Coordinate to develop a national media plan on the importance of reusing, development, and preservation of resources and encourage the organization of scientific workshops, forums and conferences on developing recycling technologies, reusing resources and developing hereditary technologies.

8-4 Develop conventional technologies and systems which are consistent with the local and regional environmental conditions.

8-4-1 Encourage and motivate scientific research centers and institutes to conduct scientific studies related to maintaining and developing traditional systems and nurturing environment-friendly alternatives; and adopt the required policies to promote the use of such traditional technologies and systems.

8-5 Develop traditional building technologies.

8-5-1 Encourage scientific research and studies centers and institutes to conduct scientific research on developing traditional building technologies, materials and designs; and adopt the required policies to encourage the use and development of such technologies.

8-5-2 Coordinate with the Competent Agency to carry out scientific studies and research on pollutant sources in traditional building materials and their effect on human beings; and encourage the application and implementation of the outcome of such studies.

- 8-5-3 Coordinate and cooperate to develop terms and controls for the utilization of natural resources in traditional building operations and for protecting and conserving such resources.

## **Article IX**

- 9-1 In coordination with the concerned agencies, the Competent Agency shall develop an environmental disaster plan based on a listing of available local, regional and international capabilities.
- 9-1-1 Public and concerned agencies and persons shall set up and develop environmental disaster plans and the Competent Agency shall cooperate with such agencies in developing and implementing these plans as required.
- 9-1-2 The Competent Agency shall cooperate and coordinate with regional and international organizations, bodies, and programs to utilize environmental disaster-related training programs.
- 9-1-3 In conjunction with the public and concerned agencies, the Competent Agency shall coordinate and mobilize regional and international efforts to respond to environmental disasters and overcome obstacles that impede the combating, following up, monitoring and controlling operations in accordance with bilateral cooperation agreements and effective regional and international agreements and conventions.
- 9-2 Concerned agencies shall set up and develop emergency plans as required to protect the environment from pollution hazards resulting from emergencies caused by their projects during the performance of their activities.
- 9-2-1 The National Plan for Combating Marine Environment Pollution with Oil and Other Harmful Substances in Emergencies, approved by Council of Ministers' decision No 157, dated 20 Dhu al-Qa'dah 1411 [3 June 1991], Appendix 4, shall be considered part of these Rules for Implementation. The Competent Agency, in coordination with the public and concerned agencies specified in the Plan, shall develop implementation plans to activate the Plan.
- 9-2-2 Concerned agencies and persons shall verify, periodically review and coordinate efforts in implementing the necessary emergency environmental protection plans in their projects.
- 9-2-3 Concerned agencies and persons shall provide trained and qualified technical manpower as well as equipment to activate emergency environmental

protection plans in projects under their supervision, and develop and implement the required training plans to activate and implement such plans.

- 9-2-4 Concerned agencies and persons shall immediately report to the Competent Agency any pollution emergency, promptly activate environmental protection emergency plans in pollution emergencies, and make sure that such implementation is effective.
- 9-2-5 In coordination with the Competent Agency, the concerned agencies and persons shall evaluate environmental damages resulting from pollution emergencies.
- 9-3 Each person who supervises a project or a facility with potential adverse impacts on the environment shall prepare emergency plans to prevent or alleviate the hazards of such impacts and have the sufficient means to implement these plans.
- 9-3-1 In projects, persons shall provide trained and qualified manpower as well as the required equipment and technologies to develop and implement emergency plans for preventing or alleviating potential adverse environmental impacts of such projects.
- 9-3-2 In projects, persons shall ensure that emergency plans [are in place] to prevent or alleviate the risks of potential adverse environmental impacts of such projects and comply with environmental standards, criteria and guidelines issued by the Competent Agency (Appendix 1).
- 9-4 In coordination with the concerned agencies, the Competent Agency shall conduct periodical review of the appropriateness of emergency plans.
- 9-4-1 Concerned, public and licensing agencies and persons shall periodically review the emergency plans that protect the environment from pollution or prevent or reduce the potential adverse impacts on the environment in projects operated, supervised or licensed by them; develop such plans as required; and coordinate with the Competent Agency with regard thereto.
- 9-4-2 In conjunction with the concerned, public and licensing agencies, the Competent Agency shall review the emergency plans and make the necessary amendments thereto.
- 9-4-3 Persons supervising projects shall coordinate with the Competent Agency and the concerned agencies to conduct periodical dummy drills on implementing

emergency plans to determine the effectiveness and readiness of equipment and agencies participating in the implementation of such plans.

## **Article X**

Environmental aspects shall be taken into consideration in planning for projects and programs, in developmental plans of the various sectors and in the general development plan in a manner that will achieve sustained development objectives, especially in the following agencies:

- 10-1 In conjunction with the Competent Agency, the concerned agency shall ensure that environmental considerations are incorporated into the health strategy and its required implementation plans.
- 10-2 In conjunction with the Competent Agency, the concerned agencies shall develop the national strategy to manage, develop and conserve natural resources as well as its implementation plans.
- 10-3 In conjunction with the Competent Agency, the concerned agency shall ensure that environmental considerations are incorporated into the industrial strategy and its required implementation plans.
- 10-4 In conjunction with the Competent Agency, the concerned agency shall ensure that environmental considerations are incorporated into the national urban strategy and its required implementation plans.
- 10-5 In conjunction with the Competent Agency, the concerned agency shall ensure that environmental considerations are incorporated into the agricultural strategy and its required implementation plans.
- 10-6 In conjunction with the Competent Agency, the concerned agency shall ensure that environmental considerations are incorporated into the touristic strategy and its required implementation plans.
- 10-7 In conjunction with the Competent Agency, the concerned agency shall ensure that media and environmental awareness are incorporated into the media strategy and that the sense of individual and collective responsibility for conserving, developing and improving the environment and its natural resources is instilled.

- 10-8 The Competent Agency and the concerned agencies shall cooperate and coordinate to prepare and implement national plans to manage, plan for and develop coastal areas as well as such plans' required implementation rules.

## Article XI

- 11-1 Each person responsible for designing or operating any project or activity shall ensure that such design and operation is consistent with the applicable regulations and standards.
- 11-1-1 A project owner shall conduct studies to evaluate the environmental impacts of his project and comply with the outcome of the environmental impact evaluation study in accordance with environmental bases and standards specified by the Competent Agency.
- 11-1-2 Persons charged with operating any projects or activities having, in the Competent Agency's view, a potential adverse environmental impact shall install automated instruments to detect and monitor the environmental elements; provide the Competent Agency with the output and results generated by such instruments as specified by the Competent Agency; keep [such instruments'] records; and make them available to the Competent Agency upon its request.
- 11-1-3 An owner or operator of a project shall comply with environmental specifications, criteria, standards and guidelines prepared by the Competent Agency (Appendices 1, 2, 3, 4 and 5) and any subsequent supplements or amendments thereto.
- 11-2 Any person engaged in an activity with potential adverse environmental impacts shall take the appropriate actions to limit such impacts or reduce the chances of their occurrence.
- 11-2-1 Any person engaged or intending to engage in an activity with potential adverse environmental impacts shall coordinate with the Competent Agency prior to commencing such activity and fully abide by and implement the environmental standards and criteria set forth in the appendices to these Rules.
- 11-2-2 Any person who had performed an act that caused environmental pollution, damages or adverse environmental impacts shall take all necessary actions to immediately halt such pollution; remove the adverse impacts and cure their effects; restore the damaged environment to its previous condition in the manner determined by the Competent Agency, in accordance with these

Regulations and during the specified period of time; and compensate for all damages that have resulted or that will arise in the future from such activity. If such person fails to complete these matters, he shall be charged with all costs resulting from the process of halting the pollution and monitoring, following up on and removing the damages caused by the pollution.

## **Article XII**

- 12.1 All persons performing excavation, demolition or construction works or transportation of wastes or dirt generated as a result thereof shall take the precautions necessary for their storage, safe transportation, treatment and appropriate disposal.
  - 12.1.1 All public agencies and persons engaged in any activity or work causing or generating wastes or dirt shall comply with all the requirements established by the concerned, licensing or public agencies or the Competent Agency regarding the handling, transportation, storage, treatment and disposal of these wastes and dirt.
  - 12.1.2 In conjunction with the Competent Agency, the concerned agencies shall determine the procedures relating to final disposal of wastes generated by excavation, demolition and construction activities and ensure that all the precautions necessary for the protection of the environment and its natural resources have been taken.
- 12.2 When burning any kind of fuel or other substances, either for industrial purposes, power generation, etc., smoke, gases, or vapors emitted by as well as solid or liquid wastes resulting from such burning shall be within the limits permitted by the environmental standards.
  - 12.2.1 When burning any kind of fuel or other substances, the concerned agencies shall require persons doing such burning to use the appropriate means and technologies so that gaseous, solid or liquid wastes generated by burning in stationary or mobile sources shall be within the permitted environmental standards and criteria set forth in Appendices (1) and (4).
  - 12.2.2 When burning any kind of fuel or other substances for any purpose, the concerned agencies and persons shall employ the most appropriate means, technologies and alternatives to minimize adverse environmental impacts.



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- 12.3 A plant owner shall take the necessary precautions and measures to ensure that no air pollutants leak or are emitted into the work place beyond the permitted limits of the environmental standards.
- 12.3.1 The agencies concerned with the work environment shall coordinate and cooperate with the Competent Agency to prepare, review, develop and implement work environment standards as required.
- 12.3.2 The concerned agencies shall require persons and agencies responsible for work places to use all available means and take all possible precautions to comply with work environment standards, improve the work environment and minimize the potentials of pollution.
- 12.3.3 The concerned, public and licensing agencies and the Competent Agency shall coordinate with persons in following up on illnesses resulting from the deterioration and interactions of the work environment.
- 12.3.4 Persons shall bear all costs of treatment for illnesses resulting from the deterioration of the work environment or exposure to pollution inside the project, if so proven as per the related regulations.
- 12.4 Closed and semi-closed public places shall be provided with ventilation means which shall be adequate to the place's area and capacity and the type of activity carried out therein.
- 12.4.1 The public, concerned, licensing agencies shall coordinate and cooperate with the Competent Agency to prepare, review and develop the technical requirements for ventilation means in closed and semi-closed places in a manner that is adequate to the place's area and capacity and the type of activity carried out therein.
- 12.4.2 The public, concerned and licensing agencies shall follow up on the implementation of the technical requirements for ventilation means in all closed and semi-closed places.

Pursuant to the paragraph which reads as follows “the Rules for Implementation shall determine environmental precautions, measures, methods and standards” in Article XII of the General Regulations on the Environment, environmental standards, criteria, guidelines, and procedures, as well as specific instructions, precautions and measures which have been or will be issued and all supplements or amendments thereto shall be considered an integral complementary part of these Rules.

## Article Thirteen

All persons engaging in production, service or other activities shall take the necessary actions to achieve the following:

- 13.1 Prevent direct or indirect contamination of surface, ground and coastal waters with solid or liquid wastes.
  - 13.1.1 Comply with the environmental standards and criteria set forth in the appendices to these Rules and coordinate with the Competent Agency to ensure their application.
  - 13.1.2 Coordinate with the Competent Agency to employ the best available technologies and means; take the necessary precautions to avoid contamination of surface, ground and coastal waters; and control and minimize pollution.
  - 13.1.3 Remove all forms of contamination of surface, ground or coastal waters resulting from the said activities and bear all the costs of the prevention, control and minimization of contamination; rehabilitation of the contaminated environment; and indemnification of affected parties.
  - 13.1.4 Prevent the discharge, in any quantity, of any type of solid or liquid wastes, substance, element, organic or inorganic compound that may be classified as hazardous into surface, ground or coastal waters.
- 13.2 Preserve soil and land and control their degradation and contamination.
  - 13.2.1 Coordinate and cooperate with the Competent Agency to take all precautions required to prevent and control contamination and degradation of soil and land, rehabilitate degraded and contaminated soil and use the appropriate means and technologies in this respect.
  - 13.2.2 Coordinate and cooperate with the Competent Agency to establish the terms, measures and precautions required to ensure compliance with the environmental standards, criteria and guidelines indicated in the appendices to these Rules.
- 13-3 Minimize noise, especially when operating machines and equipment and using horns and microphones, and abstain from exceeding the permitted limits of environmental standards indicated in the Rules for Implementation.
  - 13-3-1 Coordinate and cooperate with the Competent Agency to develop and implement the environmental standards, criteria and guidelines for noise

pollution and employ all appropriate and available means to control and reduce the noise level.

- 13-3-2 Use technologies and equipment with low noise levels in new projects and develop technologies and equipment used in existing activities in order to attain allowable noise levels.

## **Article XIV**

- 14.1 Hazardous, toxic or radioactive wastes may not be entered into the Kingdom of Saudi Arabia, its regional waters or exclusive economic zone.
- 14.1.1 All agencies and persons shall comply with local regulations, standards, guidelines and instructions concerning the production, exchange, storage, treatment, recycling and transportation of hazardous, toxic or radioactive wastes.
- 14.1.2 The Competent Agency and the public and concerned agencies shall abide by the provisions of regional and international agreements and conventions to which the Kingdom has acceded, and their articles; protocols; and appendices on chemicals and toxic, hazardous and radioactive wastes and their cross-border transportation, exchange, storage and disposal methods. Such agreements, conventions, appendices and protocols shall be considered an integral complimentary part of the appendices to these Rules.
- 14.2 Persons responsible for the production, transportation, storage, recycling, treatment or final disposal of toxic, hazardous and radioactive materials shall comply with the procedures and controls established by the Rules and the implementation procedures.
- 14.2.1 In conjunction with the concerned agencies, the Competent Agency shall follow up on the implementation of standards, criteria, rules and procedures that govern the production, transportation, storage, recycling, treatment or disposal of toxic or hazardous materials as indicated in appendix 4.
- 14.2.2 Persons responsible for the production, transportation, storage, recycling, treatment or final disposal of toxic, hazardous and radioactive materials shall comply with the licenses issued to them by the concerned agencies and the Competent Agency. If there is any amendment in the activity's type, volume or owner, coordination shall be made with the concerned and licensing agencies and the Competent Agency to secure the approval required for such amendment.

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- 14.2.3 In conjunction with the concerned agencies, the Competent Agency shall review and develop the standards, criteria, rules and procedures relating to hazardous materials.
- 14.2.4 The concerned agencies and persons shall be fully responsible, as part of their activities and projects, for incidents of environmental pollution with hazardous, toxic or radioactive wastes and materials during the stages of production, transportation, storage or recycling, and for immediately reporting such incidents to the public, concerned and licensing agencies. The party that caused such pollution incidents shall bear all the costs of pollution control, combating, treatment, rehabilitation of the polluted environment and indemnification for damages caused by such incidents.
- 14.2.5 The concerned and public agencies and persons and the Competent Agency shall cooperate and coordinate to develop and implement training programs on the exchange, production, transportation, storage, recycling, treatment and disposal of hazardous, toxic and radioactive wastes and materials.
- 14.2.6 No persons or agencies may dispose of hazardous, toxic or radioactive materials without a license from the Competent Agency in accordance with the procedures and requirements indicated in Appendix (4).
- 14.3 No harmful pollutants or toxic, hazardous or radioactive wastes may be dumped or discharged by vessels or the like in the Kingdom's territorial waters or exclusive economic zone.
- 14.3.1 The Competent Agency and the concerned and public agencies shall cooperate and coordinate efforts to develop and implement a national plan to monitor, follow up and prevent vessels from dumping or discharging any harmful pollutants, or toxic, hazardous or radioactive wastes in the Kingdom's territorial waters or exclusive economic zone.
- 14.3.2 The Competent Agency and the public and concerned agencies shall cooperate and coordinate efforts to implement international and regional agreements and conventions to which the Kingdom has acceded with regard to the dumping or discharging of any harmful pollutants or toxic, hazardous or radioactive wastes in the Kingdom's territorial waters or exclusive economic zone.
- 14.3.3 In conjunction with the concerned agencies, the Competent Agency shall apply the regulations, instructions, agreements and conventions relating to indemnification for environmental damages caused by the dumping or discharging of any harmful pollutants or toxic, hazardous or radioactive materials in the Kingdom's territorial waters or exclusive economic zone and
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charge agencies and persons responsible for contamination for all costs and losses resulting from monitoring, combating and control operations as well as costs of the rehabilitation of the contaminated environment.

## **Article XV**

Projects existing at the time of issuance of these regulations shall be given a maximum grace period of five years as of the effective date of these Regulations to rectify their status in accordance with the provisions hereof. If it becomes apparent that this period is not sufficient for projects with special nature, the grace period shall be extended by a decision of the Council of Ministers based on a proposal by the Competent Minister.

- 15.1 In conjunction with the Competent Agency, the concerned and licensing agencies shall conduct an environmental review of the current environmental situation of existing projects and prepare an execution plan to mitigate or gradually avoid such projects' adverse environmental impacts within the grace period specified by the Regulations.
- 15.2 Existing projects shall implement all execution plans prepared by the concerned and licensing agencies in cooperation and coordination with the Competent Agency to rectify their status in accordance with the Rules for Implementation.
- 15.3 Existing projects shall prepare a phased plan to rectify their status in a manner that guarantees compliance with environmental standards, criteria and guidelines within the specified grace period and shall transmit to the licensing agency and the Competent Agency such plan and a regular report indicating the extent of their compliance with the process of status rectification.
- 15.4 Existing projects shall install environmental elements' auto detection and monitoring instrumentation that can be auto-connected to the Competent Agency pursuant to the requirements of status rectification specified by the Competent Agency.
- 15.5 The concerned and public agencies and persons responsible for or supervising existing projects of special nature shall respect the time limit specified in these Regulations to rectify their status in accordance with the their provisions. However, if it becomes apparent to the Competent Agency, in coordination with the concerned agencies, that the grace period granted to special nature projects is not enough for rectifying their status and meeting the

environmental requirements, the Competent Minister may submit to the Council of Ministers to appropriately extend such grace period.

### **Article XVI**

Lending funds shall consider compliance with environmental protection regulations and standards a basic prerequisite for the payment of loan installments to projects to which they extend loans.

Pursuant to Article XVI of these Regulations, lending funds shall:

- 16.1 Require owners of new projects to submit, as part of feasibility studies, environmental evaluation studies that shall achieve compliance with environmental regulations and standards and be approved by the Competent Agency, and this shall be considered a basic prerequisite for loan approval.
- 16.2 Require project owners to abide by environmental regulations, standards, criteria and guidelines at all stages of preparation, construction and operation of the project and consider this a basic prerequisite for the payment of loan installments.
- 16.3 Require owners of existing projects who request loans for modifying or expanding their projects to submit environmental evaluation studies that achieve compliance with environmental regulations, standards, criteria and guidelines and consider this a basic prerequisite for approving loans and their installments.

## **CHAPTER 3**

### **Violations and Penalties**

#### **Article XVII**

- 17.1 Once the Competent Agency is certain that an environmental standard or criterion has been violated, it shall coordinate with the concerned agencies to require the violator to do the following:
- a) Eliminate, halt and treat the effects of any adverse impacts, in accordance with environmental standards and criteria within a specified period.
  - b) Submit a report on the steps taken to prevent recurrence of any future violations of such standards and criteria, provided that those steps shall be approved by the Competent Agency.

The following cases shall be considered violations and contraventions of the provisions of these Regulations:

- 17.1.1 Violation of any environmental standard, criterion or guideline set forth in Appendix (1).
- 17.1.2 Failure to promptly report pollution incidents, the adverse impacts of project operation or the exceeding of the environmental standards included in Appendix (1).
- 17.1.3 Failure to comply with any of the steps or procedures specified by the Competent Agency to halt, remove, treat the effects and prevent recurrence of violations.
- 17.1.4 Failure to comply with the period specified by the Competent Agency to halt, eliminate adverse impacts and treat the effects of violations.
- 17.1.5 Withholding environmental information from the Competent Agency in the event of violation of any of the standards and criteria or providing incorrect or unreal information or measurements of environmental elements.
- 17.1.6 Impeding or preventing employees designated by a decision of the Competent Agency from performing their duties of monitoring, following up on contamination sources and collecting information and samples.
- 17.1.7 Tampering with the measuring, detection, monitoring and control systems and intervening with their work and operation.

- 17.1.8 Failure to comply with the requirement of developing and activating an environmental disaster plan to respond to pollution accidents; provide the personnel, devices and equipment required for the operation and implementation of disaster plans; or conduct the periodic maintenance programs required for such devices and equipment.
- 17.1.9 Any other cases that may develop or be approved by the Competent Agency.
- 17.2 If the situation is not rectified as mentioned above, the Competent Agency shall coordinate with the concerned or licensing agencies to take the necessary actions to force the violator to rectify the situation in accordance with the provisions of these Regulations.
- 17.2.1 In conjunction with the concerned and licensing agencies, the Competent Agency shall take the necessary actions to force the violator to rectify the situation resulting from the violations mentioned in Article XVII, Paragraph (1), hereof, as well as their environmental impacts and complications and bear all costs resulting from the elimination of such damage.
- 17.2.2 The Competent Minister may define and identify projects of special nature which shall be subject to the required grace period given to rectify their conditions in accordance with the provisions of these Regulations and Rules.

### **Article XVIII**

- 18.1 Subject to Article 230 of the United Nations' Convention of the Law of the Sea, sanctioned by Royal Decree No. M/17, dated 11 Ramadan 1416 [31 January 1996], and without prejudice to any severer penalties imposed by Islamic Shari'ah laws or provided for in other regulations, violators of the provisions of Article XIV hereof shall be imprisoned for a period of not more than five years and/or a fine not exceeding SR500,000. A rule of an appropriate compensation shall be issued and the violator shall be required to eliminate the violation. The plant may be closed or the vessel detained for a period not to exceed ninety days. In case of recurrence, the violator shall be penalized by increasing the maximum imprisonment term, provided that it shall not exceed two times that of the initial term, and/or by increasing the maximum fine, provided that it shall not exceed two times the amount of the initial maximum limit. A rule of an appropriate compensation shall be issued and the violator shall be required to eliminate the violation. The plant may be temporarily or permanently closed or the vessel temporarily detained or confiscated.



- 18.1.1 Violators of the provisions of Article XIV, paragraphs 1 and 3, hereof shall be penalized by imprisonment for a period of not more than five years and the maximum fine stipulated herein. The Competent Agency shall determine the penalty for violating the provisions of Article XIV, paragraph 2, hereof based on the hazardousness, toxicity and quantity of the hazardous, toxic or radioactive wastes according to the schedule attached hereto.
- 18.1.2 If the hazardous, toxic or radioactive wastes brought into the Kingdom or its territorial waters or exclusive economic zone caused any environmental, health or other damages, the violator shall be required to eliminate the violation and bear all the costs arising from its adverse impacts.
- 18.1.3 If the hazardous, toxic or radioactive wastes brought by any means into the Kingdom, its territorial waters or exclusive economic zone cause, directly or indirectly, loss of life, permanent damage to resources, or permanent deformities or disabilities, the party held responsible therefor shall be subject to the maximum fine and imprisonment, and shall be required to eliminate the damage, pay the appropriate indemnities prescribed by the Shari'ah law and be liable for all environmental losses resulting from such act. The means used the said wastes were brought into the Kingdom shall [also] be confiscated.
- 18.1.4 If the concerned agencies conclude that the hazardous, toxic or radioactive materials were brought, or were attempted to be brought, into the Kingdom, its territorial waters or exclusive economic zone with the intent of undermining the Kingdom's national security, or that such act is of criminal nature, the violator shall be turned over to competent security agencies to inflict the penalties set forth in the regulations prevalent in the Kingdom.
- 18.1.5 Violators of the procedures and controls specified in these Rules and prepared by the Competent Agency which regulates the production, transport, storage, recycling, treatment or final disposal of hazardous, toxic or radioactive materials shall be subject to the fine specified in Appendix (6), and shall bear all costs that have resulted or may result from his failure to comply with these procedures and controls. If such act causes loss of life or permanent deformities or disabilities, all the provisions of Paragraph 18.1.3 shall apply to the violator.
- 18.2 Without prejudice to any severer penalty stipulated by any other regulations, all violators of any provision of the other articles of these Regulations shall be fined an amount not exceeding SR 10,000 and be required to eliminate the violation. In case of recurrence, the maximum limit for the fine shall be raised but may not exceed two times that of its [initial] limit and the violator shall be

required to eliminate the violation. The plant may be closed for a period of not more than ninety (90) days.

- 18.2.1 All persons who impede, refuse to provide assistance or prevent employees specified in Article XIX hereof from performing their assigned duties shall be fined as provided for in the attached schedule. In conjunction with the concerned agencies and persons, the Competent Agency shall issue the warning notice to the person causing this and take all necessary actions to prevent its recurrence.
- 18.2.2 Without prejudice to any severer penalty stipulated in any other regulations, violators of any environmental standard or criterion shall be fined an amount not to exceed SR 10,000 for [the violation of] each environmental standard or criterion set forth in Appendix (1).
- 18.2.3 Violators of the provisions of Paragraph 17.1.2 hereof shall be subject to a fine not exceeding SR 10,000 and shall bear all costs and losses resulting from their failure to promptly report pollution incidents, adverse impacts of project operation or to the exceeding of environmental standards and criteria specified in Appendix (1).
- 18.2.4 Violators of the provisions of Paragraph 17.1.3 hereof shall be subject to a fine not exceeding SR 10,000 and shall bear all costs and losses resulting from their failure to comply with the steps and procedures specified by the Competent Agency to eliminate damages or violations of environmental standards and criteria specified in Appendix (1).
- 18.2.5 Violators of the provisions of Paragraph 17.1.4 hereof shall be fined an amount not exceeding SR 10,000 and shall bear all costs resulting from their failure to eliminate wastes, their complications and impacts on the environment.
- 18.2.6 Violators of the provisions of Paragraph 17.1.5 hereof shall pay a fine not exceeding SR 10,000.
- 18.2.7 In case of recurrence of violations specified in Paragraphs 17.1.1, 17.1.2, 17.1.3, 17.1.4 and 17.2.5 [sic], the Competent Agency shall have the right to raise the fine to its maximum limit and require the violator of environmental standards, criteria and instructions to bear all costs of elimination of environmental damages in the manner specified by the Competent Agency and shut down the plant for a period not exceeding 90 days.
- 18.2.8 If the Competent Agency concludes that such violator of environmental standards, criteria and instructions as indicated in the paragraphs of Article XVII hereof is unable to halt, limit or prevent the violations, the Competent

Agency may, in coordination with the concerned agencies, take the necessary and appropriate actions in the most expedient way to shut down the plant for a period to be specified by the Competent Agency, provided, however, that such period shall not exceed 90 days. The violator shall take all the necessary and sufficient actions to halt the environmental damages resulting from violating the environmental standards, criteria and guidelines and bear all costs of elimination of such damages.

18.2.9 Violators of the provisions of paragraphs 2,3 and 4 of Article IX and paragraph 17.1.8 shall pay a fine not exceeding SR 10,000 and be required to comply with and implement the provisions of Article 9 within the period specified by the Competent Agency.

18.2.10 If the Competent Agency concludes that the environmental violation involves several simultaneous violations, the Competent Agency may impose the fines specified for each violation as set forth in the Schedule of Fines attached hereto as Appendix (6).

18.2.11 If the Competent Agency concludes that the violator of environmental measures and standards has continuously or intermittently repeated his violations and was previously penalized and fined for such violations but failed to desist, the Competent Agency shall coordinate with the concerned and licensing agencies to penalize the violator by raising the maximum limit of the fine without exceeding two times its initial maximum limit, requiring the violator to clear the violation and shutting down the plant for a period of time not exceeding ninety days.

## **Article XIX**

Violations of these Regulations and their Rules for Implementation shall be controlled by employees designated by a decision of the Competent Agency. The Rules for Implementation shall specify the procedures for controlling and documenting violations.

## **Control Procedures**

Control procedures shall include several actions; such as:

### **First: Inspection and Monitoring Operations**

These operations shall be conducted by specialized trained groups which include inspection and contamination detection teams and land, marine and air monitoring teams. The Competent Agency shall issue a decision designating such teams and provide them with identification cards and the devices and equipment required to perform their duties.

### **Second: Automatic Detection Operations**

These operations shall be conducted using networks of automatic detection and observation units operated by the concerned agencies or the Competent Agency at facilities and plants. Information shall be automatically transmitted to the Competent Agency to review, determine violations and measure compliance with environmental standards.

### **Third: Notifications**

The Competent Agency shall receive contamination notifications or any other notifications relating to violations of the provisions hereof these Regulations from concerned agencies and persons. The inspection and monitoring teams shall verify such notifications, conduct follow up and monitoring operations, take necessary actions and prepare the required initial evaluation reports.

### **Fourth: International and Regional Reports**

In cases of environmental pollution caused by sources outside Saudi boundaries and territorial waters, the Competent Agency shall receive contamination reports through regional and international organizations, programs and agencies. The Competent Agency shall implement the national pollution emergency plans and air, land and marine monitoring, follow up and detection procedures and take the required actions.

### **Fifth: Detection Using Satellites and Remote Sensors**

The Competent Agency shall receive satellite images and remote sensor output from the concerned agencies and specialized regional and international organizations,

agencies and programs and conduct analysis, comparison and verification of environmental pollution and deterioration cases and sources.

### **Sixth: Control Forms**

**1. Monitoring and detection forms including land, marine and air monitoring forms containing:**

Date; time; place; monitoring and detection means; type of activity; name of the facility, plant or location's manager or shift manager; official permits; observations; type of portable devices; readings; and names and signatures of observers.

**2. Sample collection forms which contain:**

Date; time; place; type of monitored activity; samples type; samples collection point; number of samples; name of samples collector; method of samples collection; samples numbering; samples collection instruments and equipment; and samples preservation devices, equipment and materials.

**3. Samples analysis forms:**

Date; time; place; samples type; number of samples; analyzed elements; method of analysis; cases of exceeding environmental standards; excess percentages; final analysis results; remarks; and the name and signature of the person who conducted the analysis.

**4. Contamination case reports:**

Based on samples analysis results, monitoring and detection forms and instrumentation readings, and after implementing quality control programs for analysis and results, the Competent Agency shall determine the pollution cases of site(s)'s pollution, the sources of pollution therein, the percentages by which environmental standards have been exceeded and the required penalty.

### **Seventh: Detection Records of Environmental Violations and Transportation, Entering and Smuggling of Hazardous Materials across Borders**

These records include the detection [records] of environmental violations; records for the entry into the Kingdom of hazardous, toxic or radioactive materials through land, sea or air inlets, or of materials with no transit permit across the Kingdom's territories from the concerned agencies; and records of

detection of acts of smuggling or entry of hazardous wastes across land or sea borders or dumping or spilling of such materials in Saudi territorial waters.

#### **Eighth: Coordination and Cooperation:**

The Competent Agency shall coordinate and cooperate with the concerned, public and licensing agencies in some or all of the control operations and procedures. The Competent Agency may also authorize public or concerned agencies or persons to implement some of these procedures.

#### **Ninth: Documentation**

The Competent Agency shall develop the databases for documenting environmental data and information and violations and their sources and causes and prepare the files that shall include environmental violations of Article XIV hereof for submission to the Grievance Board to inflict the penalties contemplated by paragraph 1 of Article XVIII hereof.

#### **Tenth- Follow up:**

In cooperation with the concerned and licensing agencies, the Competent Agency shall follow up on environmental violations, their developments, cases of recurrent environmental violations, combating approaches and methods, and rehabilitation operations for damaged environments.

### **Article XX**

- 20.1 The Grievance Board shall have the jurisdiction to inflict the penalties set forth in paragraph 1 of Article XVIII upon violators of the provisions of Article XIV hereof.
- 20.1.1 The Competent Agency shall coordinate with the concerned agencies to detect violators of the provisions of Article XIV hereof and submit details of such violations along with estimated financial penalties for each violation hereof to the Grievance Board to impose the penalties set forth in paragraph 1 of Article XVIII.
- 20.1.2 Penalty recipients under paragraph 1 of Article XVIII for any violation of Article XIV hereof may file a complaint with the Grievance Board within sixty days from the date of their notification of the penalty. If such complaint is not

made within the specified period, their right to grievance shall lapse and the stipulated penalty shall be applicable as of its date of issuance.

- 20.1.3 If it became apparent to the Competent Agency that the violation of Article XIV hereof has permanent and accumulative environmental, health and social impacts, the matter shall be submitted to the Grievance Board to estimate the resulting damages and the penalty or penalties imposed on the violator shall be based on the resulting adverse environmental, health and social impacts.
- 20.2 Subject to the provisions of paragraph 1 of this Article, a committee or more shall be formed by a decision by the Competent Minister, consisting of three members, at least one of whom shall be specialized in regulations, to consider violations and impose the penalties set forth herein. Decisions of such committee(s) shall be made by majority vote and approved by the Competent Minister.
  - 20.2.1 Pursuant to paragraph 2 of Article VXIII hereof, and subject to the provisions of paragraph 1 of Article XVIII, the Competent Agency shall form competent committees to consider violations and determine the penalties as set forth in the Schedule of Penalties attached to these Rules. Such committees shall be formed by a decision by the Competent Minister, and their decisions shall be made by majority vote and approved by the Competent Minister.
  - 20.2.2. Those penalized by a decision of the committee(s) may file a complaint with the Grievance Board within sixty (60) days from the date of their notification of the penalty decision, otherwise their right to grievance shall lapse.

## **Article XXI**

The Committee contemplated in paragraph 2 of Article XX may order, as necessary, the immediate clearance of the violation without waiting for the Grievance Board's decision in the grievance or case.

- 21.1. If the committee contemplated in paragraph 2 of Article XX hereof concludes that the environmental violation committed is of major environmental, health, social and economic impacts, and that failure to promptly and timely clear it will aggravate such impacts, the committee may order the violation cleared immediately as per the environmental provisions it deems appropriate, at the violator's expense and without waiting for the Grievance Board's decision in the grievance or case.

- 21.2 Costs paid or losses incurred by the violator to eliminate the violation at the competent committee's request shall not be considered part of the fines or compensations imposed for the violation. The Competent Agency may coordinate with the concerned agencies to determine the appropriate compensations for environmental, economic, health and social losses caused by the violation.
- 21.3 If the Competent Agency or the competent committee concludes that the violator does not possess the technical capabilities required to clear the violation, the Competent Agency may assign qualified agencies or persons to eliminate the violation in accordance with the provisions stipulated by it and within the prescribed period, and the violator shall pay all costs arising from the clearance of the violation.



## **Chapter 4**

### **General Provisions**

#### **Article XXII**

In coordination with the concerned agencies, the Competent Agency shall develop the Rules for Implementation of the General Regulations on the Environment, which Rules shall be promulgated by a decision of the Competent Minister.

- 22.1. The Competent Agency shall be responsible for the construction of the articles and paragraphs of the Rules for Implementation of the General Regulations [on the Environment] and their appendices.
- 22.2 In coordination with the concerned agencies, the Competent Agency may prepare any development, amendment or modification to any paragraph of the Rules for Implementation and their appendices whenever necessary, which development, amendment or modification shall be promulgated by a decision of the Competent Minister.

# **Environmental Protection Standards**

## **Kingdom of Saudi Arabia**

**Presidency of Meteorology and Environment**

**Document No.1409-01**

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The Meteorology and Environmental Presidency has drafted the following standards in response to High Order No. 7/M/8903, dated 21 Rabi' II 1401 [25 February 1981], tasking the Presidency with the control of pollution and protection of the environment in the order shown in decision No. 86, dated 20 Sha'ban 1399 [14 July 1979], of the Higher Committee on Administrative Reform:

**1-Name:**

These standards shall be called "The Environment Protection Standards"

**2- Purpose:**

The purpose of these standards is to create and introduce appropriate bases for the evaluation and regulation of industrial and urban activities currently existing in Saudi Arabia and provide assistance in the planning, design, implementation, and operation of the facilities to be established [in the future], in a way that would prevent detrimental impacts on man's health, safety and stability and lead to the development of his economic and social life and conservation of the Kingdom's environment in general.

**3- Effective date:**

These standards became effective on 1 Dhu al- Qa'dah 1402 [20 August 1982].

**4- Definitions:**

Except where the text requires otherwise, the words and expressions listed below shall have the definitions given against each:

1. Presidency: shall mean the Meteorology and Environmental Protection Presidency, instituted by Royal Decree No. 7/M/8903, dated 21 Rabi' I 1401 [25 February 1981].
2. Environment Protection General Standards: shall mean the standards that spell out the general policy for elimination of pollution in the Kingdom and which apply to the design and operation of facilities.
3. Environmental quality standards: shall mean the air, water and land pollution limits which cannot be overlooked.
4. Source standards: shall mean pollution control technologies and operational practices that reduce polluted emissions from facilities. They also include discharge of pollutants from sources.
5. Guidelines: guidelines differ from the standards and are applicable in the cases where the basic information is not adequate for the issuance of the related standards at the designated time.
6. Facility: shall mean any installation or activity that is expected to be a source of pollution or environmental degradation of the environment.

7. Major facility: a facility with a capacity large enough to produce tangible impact on the air or water quality.
8. Public facility: shall mean any facility owned or operated by any ministry, presidency, or government or semi government unit, regardless of its volume or functions.
9. Private facility: shall mean any facility owned or operated by a natural or legal person, whether or not such a person has a legal entity.
10. Modification (for facilities): shall mean any modification made in the design or operation of any facility that will likely lead to increased pollution from the facility. For the purposes of this definition, an equivalent replacement in terms of type and capacity shall not be deemed a modification.
11. Major modification: any change in the design or operation of an existing facility that is reasonably likely to produce a tangible impact on the air or water quality. For the purposes of this definition, an equivalent replacement in terms of type and capacity shall not be deemed a modification.
12. High impact: any impact that is reasonably likely to cause the applicable standards to be overlooked, either on its own or in conjunction with the impact of the other facilities.
13. Medium impact: any impact that is likely to cause the applicable standards to be overlooked only in conjunction with the impact of other sources.
14. Minor impact: any impact that is not likely to cause the applicable standards to be overlooked whether on its own or in conjunction with the impacts of other sources.
15. Toxins: shall mean any substance that causes death, [?] or discomfort in man or animal if found in adequate quantities, through touch, inhalation, or oral ingestion, taking into consideration the concentration of such substance in the chain food, or any substance that may cause the plant or animal to perish or be damaged on contact or once it enters its food [sic].
16. Inhalable suspended particles: for the purposes of these standards, the inhalable suspended particles shall be any substance spread in the air in the form of solid or liquid suspended particulates whose diameter is less than 15 micron.
17. Photochemical oxidizers: substances produced in the atmosphere where certain chemically active compounds, the most important of which are hydrocarbons and nitrogen oxide, are exposed to sunlight. For the purposes of these standards, the photochemical oxidizers include the ozone, peroxyacyl [?] nitrates, organic peroxides and other oxidizers which contribute to increasing the volume of oxidizers as measured in the method shown in paragraph c on page 11.
18. Receiving water: shall mean any body of water into which pollutants are or may be directly discharged.

19. Waste water: shall mean any water polluted as a result of industrial or agricultural operations or any other activities with similar environmental impacts, including sewage water.
20. Blending area: shall mean a limited body of water directly adjacent to an area for discharging pollutants and within which the receiving water quality standards may be overlooked. Such area shall be identified as provided for in paragraph H of article 13.
21. Preliminary treatment: shall mean the phase for applying the waste water controls in industrial areas prior to discharge in central treatment facilities.
22. Discharge: addition of pollutants to the ambient air, pollutant receiving water or a central treatment facility.
23. Direct discharge: discharge in to pollutant receiving area, but does not include discharge to a central treatment facility.
24. Best available technology: means the best available standards for pollutants control, compared with the practices in other similar facilities in the Kingdom and other countries.

#### **5- Field of application:**

These standards shall apply to all private and public facilities in the Kingdom, existing or those recently designed, with the exception of the facilities expressly excluded by the Presidency.

#### **6- Scope and interpretation:**

1. These standards comprise all of the rules provided for herein, including any detailed description of the environment protection standards and methods of implementation that may be issued by the Presidency from time to time.
2. The Presidency shall be the sole agency authorized to interpret and define the meaning and scope of these standards.
3. The Presidency reserves the right to amend or otherwise add supplements thereto as needed.

#### **7- General environmental protection standards for new facilities:**

1. All new major facilities as well as major modifications made in existing facilities shall be designed, operated and maintained in such a way as to ensure, at the time of approval of the concerned design, that the environmental quality standards as applicable in the Kingdom are not bypassed.
2. Each new major facility or major modification of an existing facility shall embody the best available technology for control of pollutant leaks and disposal of facility operation wastes.
3. All new facilities as well as major modifications made in existing facilities shall be designed and operated in a way that would ensure the absence of any



toxin leaks in quantities adequate to cause damage to public health, whether or not such substance is provided for in these standards.

### **8- General environmental protection standards for existing facilities:**

1. Existing major facilities shall be operated and kept in such a way as to ensure that the environmental quality standards applicable in the Kingdom are not overlooked, and where necessary additional technological control devices shall be installed to ensure that such standards are not overlooked.
2. All existing major facilities shall be operated and kept in a way that would prevent leakage of any toxins in quantities adequate to cause damage to public health, whether or not such substances are provided for in these standards.

### **9- Exemptions:**

The Presidency reserves the authority to grant certain facilities under special circumstances an exemption from enforcing source or performance standards. The Presidency shall evaluate the application filed by the owner of any facility for an exemption from the application of any specific standard and shall make a decision on a case by case basis after the owner provides the required pertinent information and after ascertaining that such an exemption shall not result in overlooking the environmental quality standards or causing damage to public health.

### **10- Air quality standards:**

10-a Carbon dioxide:

10-a-1- Purpose:

The purpose of these standards is to prevent detrimental impact on man's health and flora.

10-a-2- Standards:

1. Carbon dioxide average concentration in any given hour during a 30 day period shall not exceed 730 microgram/ cubic meter (0.28 ppm) more than two times at any site.
2. Carbon dioxide average concentration in any 24 hours during a 12 month period shall not exceed 365 microgram/ cubic meter (0.14 ppm) more than once at any site.
3. Carbon dioxide average concentration in any period of 12 months during the year shall not exceed 85 microgram/ cubic meter (0.3 ppm) at any site.

10-a-3- Method of measurement:

Pararosaniline method (World Health Organization 1976) shall be used as a reference for measuring carbon dioxide concentration. The Presidency shall be responsible for approving other measurement methods of comparable efficiency.

10-b Inhalable particulates:

10-b-1- Purpose:

The purpose of this standard is to protect the population exposed to suspended particulates from their harmful effects, taking into consideration the compounding effects of the presence of other pollutants.

10-b-2- Standards:

1. Maximum inhalable particles concentration in any given 24 hours during a 12 month period shall not exceed 340 microgram/ cubic meter more than once at any site.
2. Inhalable particles average concentration in any period of 12 months during the year shall not exceed 80 microgram/ cubic meter at any site.

PS: Exceeding the inhalable suspended particles standard in 24 hours or during the year because of unusual concentrations of a natural origin shall not constitute a violation of the commitment to the designated standard.

10-b-3- Method of measurement:

The suspended inhalable particulates concentration shall be determined by a volume sorting device. The specifications of the device and the filtration media must be compatible with the standards acceptable to the Presidency.

10-c- Photochemical oxidizers (such as ozone):

10-c-1- Purpose:

The purpose of this standard is to prevent the significant inconveniences to man's comfort and damages affecting flora and substances.

10-c-2- Standards:

Photochemical oxidizers average concentration in any given hour during a 30 day period shall not exceed 295 microgram/ cubic meter (0.15 ppm) more than two times at any site.

10-c-3- Method of measurement:

The chemiluminescence method (WHO 1976) shall be the method used in measuring photochemical oxidizers, such as ozone. The Presidency shall be responsible for approving comparable methods of measurement.

10-d- Measurable Nitrogen oxides (such as nitrogen dioxide):10-d-1- Purpose:

The purpose of this standard is to prevent accumulation of nitrogen dioxide which may lead to damages to health or production of hazardous concentrations of photochemical oxidizers.

10-d-2- Standards:

1. Nitrogen dioxide average concentration in any given hour during a 30 day period shall not exceed 660 microgram/ cubic meter (0.35 ppm) more than two times at any site.
2. Nitrogen dioxide average concentration in any period of 12 months during the year shall not exceed 100 microgram/ cubic meter at any site.

10-d-3- Method of measurement:

The nitrogen dioxide analyzer designed on a chemiluminescence basis of nitrogen monoxide and oxygen concentrations with ozone shall be the basis of measurement. The specifications of the device must conform with the standards acceptable to the Presidency.

10-e Carbon monoxide:10-e-1-Purpose:

The purpose of this standard is to protect the population groups in general and the susceptible categories in particular from the short term impacts that are detrimental to health.

10-e-2- Standards:

3. Carbon monoxide average concentration in any hour during a 30 day period shall not exceed 40 milligram/ cubic meter (35 ppm) more than two times at any site.
4. Carbon monoxide average concentration in any 8 hours during a 30 day period shall not exceed 10 milligram/ cubic meter (9 ppm) more than two times at any site.

10-e-3- Method of measurement:

Non-Dispersive Infrared ray (NDIR) is the approved method for measuring carbon monoxide (WHO, 1972). The Presidency shall be responsible for approving other comparable methods of measurement.

10-f- Hydrogen sulfides:10-f-1- Purpose:

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The purpose of this standard is to protect man and animal and prevent the damage resulting from exposure to hydrogen sulfide. Since these standards will not completely eliminate potential damage to materials, special arrangements must be made to protect them in the areas with potentially high concentrations of hydrogen sulfide.

#### 10-f-2- Standards:

1. Hydrogen sulfide average concentration in any hour during any 12 month period shall not exceed 40 microgram/ cubic meter (0.14 ppm) more than once at any site.
2. Hydrogen sulfide average concentration in 24 hours during any 12 month period shall not exceed 40 microgram/ cubic meter (0.03 ppm) more than once at any site.

#### 10-f-3 Method of measurement:

Peppler- methylene blue [?] (APHA. 1972) is the method used as a basis for measuring the volume of hydrogen sulfide. The Presidency shall be responsible for approving comparable methods of measurement.

#### 10-g- fluorides:

##### 10-g-1- Purpose:

The purpose of this standard is to protect grazing plants from the harmful effects of fluorides.

##### 10-g-2- Standard:

The monthly average of fluoride concentrations during any 30 day period shall not exceed 1 microgram/ cubic meter (0.001 ppm) at any site.

##### 10-g-3- Method of measurement:

Specific ion electrode method (Thomson et al, 1971) shall be used to measure fluoride volumes. The Presidency shall be responsible for approving comparable methods of measurement.

### **11-Air pollution source standards:**

#### 11-a- Facilities operated by burning:

An appropriate apparatus shall be used to clean up and remove gas in all boilers fired by organic fuel and all kilns whose internal temperature amounts to 20 megawatt (100 MBTU/ hour) or more to reduce leaks to the following values:

1. 43 nanogram/ joule (0.1pound/ MBTU) of suspended particles.
2. 1 microgram/joule (2.3pound/ MBTU) of carbon dioxide.

3. 130 nanogram/joule (0.3pound/ MBTU) of nitrogen oxides for oil burning facilities.
4. 86 nanogram/joule (0.2pound/ MBTU) of nitrogen oxides for gas burning facilities.

#### 11-b-Petroleum and petrochemical facilities:

##### 11-b-1- petroleum liquid tanks:

Volatile organic compounds tanks with a storage capacity of 1000 barrels (5614 cubic feet) or more shall be fitted with vapor leak control system in the following methods:

1. Organic compound storage vessels with vapor pressure above 570 mm Hg (millimeter of mercury) shall be fitted with vapor recovery devices or similar systems. Floating roof tanks are deemed appropriate for crude oil storage on the proviso that the owner should provide a fixed valve inspection system and that a permanent reporting program should be in place.
2. Organic compound storage vessels with vapor pressure in excess of 78 mm Hg (PSI 1.5) and less than 570 mm Hg (PSI 11) shall be equipped with dual plug floating roofs or any similar systems.

##### 11-b-2- Catalyst renewal units (in FCC units):

The following shall be used in these units:

1. High temperature carbon monoxide boilers to reduce the volume of carbon monoxide to 500 ppm.
2. Appropriate air cleaners to reduce 1 suspended particles leakage to 1 kg per metric ton of coke burned.

##### 11-b-3- Fuel gas burning operations:

In fuel gas burning operations, amino washers or other suitable operations should be used to clean up gas for the purpose of reducing the volume of hydrogen sulfide in discharged gases to 230 milligram per dry standard cubic meter (150 ppm).

##### 11-b-4- Klaus sulfur recovery plants:

Klaus process must be employed in sulfur recovery plants for dual or trio phases to recover at least 95% of the total volume of sulfur.

##### 11-b-5- Vapors leaking from organic compounds:

Organic compound vapors leaking from petroleum or petrochemical operations must be minimized through proper maintenance and inspection procedures, in addition to monitoring of the potential exit points of leaking organic vapors.

#### 11-c- Fertilizers plants:

Gas leak outlets in fertilizer plants must be controlled by flaring or any other appropriate cleaning method that would ensure removal of 99% of organic compound vapors.

11-d- Cement factories:

11-d-1 Cement kilns:

Substances leaking from cement kilns must be controlled by means of electrostatic sedimentation and fabric filters or any other appropriate devices that limit the volume of leaking suspended particles to not more than 0.15 kg per metric ton.

11-d-2- Clinker coolers:

Substances leaking from clinker coolers must be controlled by means of fabric filters or any other appropriate devices that limits the volume of leaking suspended particles to not more than 0.05 kg per metric ton.

11-e- Aluminum initial reduction installations:

11-e-1- Reduction vessels:

Substances leaking from aluminum reduction vessels shall be controlled by means of an appropriate air cleaning device that limits the volume of leaking fluorides to not more than 1.25 kg per metric ton.

11-e-2- Anode heating installations:

Substances leaking form anode heating installations shall be controlled by means of an appropriate air cleaning device that limits the volume of leaking fluorides to not more than 0.05 kg per metric ton.

11-f- Iron and steel plants (electrical spark kilns):

Substances leaking form electrical kilns shall be controlled by means of an appropriate gas cleaning device that limits the volume of leaking fluorides to 12 mg. per dry standard cubic meter.

11-g- Lime production plants (revolving kiln):

Substances leaking form revolving kilns shall be controlled by means of an appropriate gas cleaning system that limits the volume of leaking suspended particles to not more than 0.2 kg per metric ton of raw lime.

11-h- Visible emissions from industrial activities:

Visible emissions (excluding water vapor) leaking from all activities shall be controlled so that the maximum turbidity shall not exceed 20%, excluding a duration of 3 minutes from any continuous period of sixty minutes [?].

**12- Special instructions on pollution receiving waters:**

**12-a- Purpose:**

The purpose of these special guidelines on pollution receiving waters is to provide guidance on the positioning, design and operation of existing facilities pending the development of standards for pollution receiving waters.

**12-b- Guidelines:**

The following guidelines relative to the quality of pollution receiving waters on the edge of the blending area (EBA) shall apply to the coastal water discharge source [?]. Unless otherwise provided for, each of these provisional guidelines refers to the average value with a period of 30 successive days.

**12-b-1- Physiochemical properties:****Property**

a-Floating matter

b-Acidity (pH)

c-Total suspended solid matter

d-Thermal variation

e- Oils and greases

f-Dissolved oxygen

g-Turbidity

**Guidelines on the EBA**

discharge of such matters is not allowed

R. acidity unit (maximum change compared with local basic conditions) [?]

5% (all percentages referred to in this and the following paragraphs indicate the maximum allowable variations in comparison with local basic circumstances)

one degree C (maximum variation in comparison with local basic conditions)

To be controlled using appropriate procedures

5%

5%

**12-b-2- Chemo organic properties:****Property**

a- chemical oxygen demand

b- total organic carbon

c- total nitrogen kjal [?]

d- chlorinated hydrocarbons

e- oils and greases

f- phenols

**Guidelines on the EBA**

5%

5%

5%

5%

5%

5%

12-b-3- Non organic chemical properties:

<b><u>Property</u></b>	<b><u>Guidelines on the EBA</u></b>
a- ammonia	5%
b- arsenic	5%
c- cadmium	5%
d- chloride	5%
e- residual chlorine	5%
f- total chrome	5%
g- copper	5%
h- total cyanide	5%
i- lead	5%
j- mercury	5%
k- nickel	5%
l- total phosphate	5%
m- zinc	5%
n- dissolved oxygen	5%

12-b-4- Biological properties:

<b><u>Property</u></b>	<b><u>Guidelines on the EBA</u></b>
a-total coliform	MPN 70/ 100mg (engineering [?] average rate for 30 consecutive days)

**13- Direct discharge performance standards:**13-a- Purpose:

The direct discharge performance standards purpose is to require the facilities to apply the best available technology to control pollution.

13-b- Scope:

The direct discharge performance standards apply to sewage and surface effluent (excluding fire water), cooling water discharges, boiler conditioning water, waste water used in any industrial processes and any other refuse water.

13-c- Performance general standards:

Waste water of different characteristics shall be sorted out as much as possible. Unpolluted surface water and the cooling water used only once may be discharged without treatment into receiving water.

13-d- Performance special standards:

the following standards shall apply to waste water at the end of the flow but before discharge in coastal waters or any waste water canal.



13-d-1- Physiochemical properties:

<b><u>Property</u></b>	<b><u>Allowable discharge levels</u></b>
a-Floating matter	None
b-Acidity (pH)	6-9 acidity units (maximum limit)
c-Total suspended solid matter	15 mg/liter)
d-Thermal variation	The Presidency will determine the thermal quality of the discharged water to suit the conditions of the receiving water on a case by case basis)
e-Turbidity	NTU 75

13-d-2- Chemo organic properties:

<b><u>Property</u></b>	<b><u>Allowable monthly Discharge averages</u></b>
a- biochemical oxygen demand	25 mg/liter
b- chemical oxygen demand	150 mg/liter
c- total organic carbon	50 mg/liter
d- total nitrogen klaydal [?])method	5 mg/liter
e- total chlorinated hydrocarbons	0.01 mg/ liter
f- oils and greases	8 mg/liter (must not exceed 15 mg/liter in any individual discharge event)
g- phenols	0.5 mg/ liter

13-d-3- Non organic chemical properties:

<b><u>Property</u></b>	<b><u>Allowable monthly discharge averages</u></b>
a- ammonia (as nitrogen)	1 mg/ liter
b- arsenic	0.1mg/liter
c- cadmium	0.02 mg/liter
d- residual chlorine	0.5 mg/liter
e- total chrome	0.1mg/liter
f- copper	0.2 mg/liter
g- total cyanide	0.05 mg/liter
h- lead	0.1mg/liter
i- mercury	0.001mg/liter
j- nickel	0.2 mg/liter
k- total phosphate	1 mg/liter
l- zinc	1 mg/liter

13-d-4- Biological properties:

<b><u>Property</u></b>	<b><u>Allowable monthly discharge averages</u></b>
a-total coliform	MPN 1000/ 100mg

13-e- Blending area:

Each process involving direct discharge shall be appropriately distributed and blended with the receiving water. The blending area shall be properly delineated to minimize detrimental effect on the areas designated for restricted use. The Presidency shall designate an appropriate blending area on a case by case basis.

**14- Guidelines for initial treatment prior to discharge in central treatment facilities:**

The following guidelines on initial treatment shall apply to wastewater prior to discharge into a central treatment facility. The guidelines indicate maximum allowable limits of pollutants in the discharge:

14-d-1 Physiochemical properties:

<b><u>Property</u></b>	<b><u>Guidelines</u></b>
a-Total suspended solid matter	2000 mg/liter (maximum)
b-Acidity (pH)	5-10 acidity units
c-Thermal variation	60 degrees centigrade

14-d-2- Chemo organic properties:

<b><u>Property</u></b>	<b><u>Guidelines (maximum limit)</u></b>
a- chemical oxygen demand	150 0 mg/liter
b- total organic carbon	1000 mg/liter
c-oils and greases	120 mg/liter
d- phenols	150 mg/ liter
c- total chlorinated hydrocarbons	0.5 mg/ liter

13-d-3- Non organic chemical properties:

<b><u>Property</u></b>	<b><u>Guidelines (maximum limit)</u></b>
a- arsenic	1mg/liter
b- cadmium	0.5 mg/liter
c- total chrome	2 mg/liter

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d- copper	1 mg/liter
e- total cyanide	1 mg/liter
f- lead	1mg/liter
g- mercury	0.01mg/liter
h- nickel	2 mg/liter
i- zinc	10 mg/liter

### **15- Obligations:**

1. Owners, planners and operators of new facilities and modifications made in existing facilities shall be required to position, design and operate subject facilities in accordance with these standards.
2. Owners and operators of existing facilities shall be required to operate subject facilities in accordance with these standards.
3. With due regard to other statutory requirements, owners and operators who plan to construct new facilities shall contact and submit to the Presidency the required information, including planning and design details that show pollution control and prevention arrangements to be made. The Presidency shall review such data and issue written permits of approval prior to implementation of these constructions, within a maximum period of 3 months as of the date of receipt of such information from the other agencies and facilities.
4. Owners and operators of existing facilities shall submit to the Presidency the required information upon receipt of a notification to that effect. The Presidency reserves the right to demand that tests, investigations or analyses be made to ascertain that existing facilities do comply with and apply these standards. Owners and operators of existing facilities shall be held responsible for submittal of the information related to the existing facilities even in the absence of notification by the Presidency requesting such information.

### **16- Enforcement:**

1. The Presidency reserves the right to ensure that these standards are complied with and implemented by all facilities in the Kingdom.
2. Each application submitted to the competent agency for a license to establish a new facility or introduce some major modification in an existing facility shall enclose certification to the effect that the Presidency has performed an evaluation of the existing facility or the plans of the new facility and has satisfied itself as to that facility's compliance with these standards.
3. If the Presidency concludes that the design of a new facility to be constructed does not provide for appropriate environment protection arrangements in conformity with these standards, it shall notify both the competent licensing agency as well as the project proponents and direct it to refrain from licensing

that facility pending review and remedy of the defect identified by the Presidency.

4. If the Presidency determines that an existing facility is not in compliance with these standards, it shall notify the concerned facility accordingly and instruct it to address the defect in line with a specific schedule. In case of persistent non compliance, the Presidency may serve a final warning and if such warning yields no positive results, the Presidency shall notify and ask the concerned licensing agency to suspend or otherwise withdraw the license of the facility.
5. The Presidency reserves the right to field inspect, without advance notice or warning, any facility to ascertain compliance with these standards and permanent commitment to implementing them.

### **Violations and financial fines: air quality**

<b><u>NO.</u></b>	<b><u>Type of violation</u></b>	<b><u>Fine amount</u></b>
1	Failure to comply with the self imposed emission source monitoring program	not more than 10000
2	Tampering with monitoring and surveillance devices	not more than 10000
3	Open incineration of domestic and agricultural wastes	not more than 10000
4	Release of pollutant emissions without advance notice	not more than 10000
5	Failure to report shutdowns resulting in pollutant gas emissions	not more than 10000
6	Remissness in the maintenance of pollution control and surveillance and monitoring equipment	not more than 10000
7	Failure to submit periodic reports	not more than 5000
8	Submittal of incorrect or inaccurate information on the type and quantity of emissions	not more than 10000
9	Failure to comply with the procedures related to the handling of emissions and leaks in cases of emergency	not more than 10000
10	Dumping of wastes and dust and ash accumulations in pollution curbing equipment at other than designated areas	not more than 10000
11	Failure to comply with the repairs and rehabilitation of quarry and excavation areas	not more than 10000
12	Failure to operate pollution control, monitoring and surveillance equipment at the required level. Of efficiency	not more than 10000
13	Failure to comply with the type of fuel designated for the activity	not more than 10000
14	Failure to submit the monthly data and reports required by the Presidency in accordance with the designated format	not more than 5000
15	Vehicular emissions of smoke, carbon oxide and HC particulates	150
16	Excessive noise pollution from vehicles and machinery engines and motors	200
17	Excavations and construction works at other than designated hours	not more than 5000
18	Engaging in an activity without a license by the competent agency	not more than 10000
19	Failure to maintain and document measurement analysis and copies of the information and data at the organization's offices	not more than 5000
20	Use of controlled or prohibited materials, technologies or devices	not more than 10000
21	Failure to recruit the competencies, qualifications and expertise provided for in the qualification and licensing requirements	not more than 5000

22	Violation of the job descriptions for experts, technicians and workers in the monitoring, surveillance and analysis activities and air quality data generation and reporting	not more than 5000
23	Failure to make available and supply the requirements of sampling from industrial and service facilities	not more than 5000
24	Use of spent oils or hazardous wastes or substances as fuel in any industry without obtaining the approval of the competent agency	not more than 10000
25	Failure to comply with the continuous operation or periodic maintenance of the pollution control technologies	not more than 10000

### **Violations and penalties-General**

<b><u>NO.</u></b>	<b><u>Type of violation</u></b>	<b><u>Fine amount</u></b>
1	Failure to fence off landfills and excavations resulting from exploration activities or failure to maintain them regularly, thereby exposing passersby to hazards	Rectification of the status of the fence and excavations and their maintenance and a fine of not more than SR10000
2	Failure to comply with the undertakings, conditions and specifications listed in the study submitted for obtaining the environmental certificate.	not more than SR10000
3	Failure to level and rehabilitate the site upon termination of utilization in accordance with the sound environmental plan developed in advance upon completion of the construction	not more than SR 10000
4	Failure by environmental technology suppliers with the specifications approved upon issuance of the environmental certificate	not more than SR 10000

**All types of violations and financial fines**  
**Violations and fines involving development of environmental**  
**Studies and consultations**

<b>Violation</b>	<b>Penalty</b>
Failure by the proprietor of the office to provide environmental specialists in the areas of the office accreditation	Warning to annul the certification and a fine of not more than SR 10000
Failure by the proprietor of the environmental studies office to comply with the requirement of providing a Saudi environmentalist	Imposition of a fine not exceeding SR 3000 and requiring the office proprietor to provide a Saudi environmentalist
Failure to have the environmental analyses performed by an approved environmental laboratory at the time the environmental study is being developed	Rejection of the analysis findings, requiring that the analysis be redone by an approved environmental laboratory, and a fine ranging between SR 3000 to SR 5000
Failure to submit two copies of the environmental assessment study	The proprietor is to be notified to submit two copies and refrain from proceeding with the review of the study
Lack of credibility of the analysis findings or environmental study components	Resubmittal of the study and imposition of a fine of SR 5000 to SR 10000
Failure to submit the periodic reports in accordance with the accreditation conditions	Suspension of renewal of the accreditation granted and imposition of a fine up to SR3000
Failure to apply for renewal of the accreditation two months ahead of its expiration date or some time after its expiration	Denial of renewal and notifying the licensing authority of the revocation and a fine of SR!000 pending renewal of the accreditation
Failure to submit proposals for the study prior to its development	A fine ranging from SR 1000 to SR 3000
Development and submittal of the study by an unaccredited agency that has not been approved by the Presidency	Rejection of the study and a fine of up to SR 5000
Failure to comply with the enforcement of the undertakings, conditions and specifications listed in the study to obtain the environmental certificate	A fine of SR10000

**Violations and fines involving preparation of the hazardous wastes disposal site**

<b>Violation</b>	<b>penalty</b>
Failure by the project proponent to prepare the disposal site in accordance with the conditions of the license issued by the Presidency is considered a punishable violation	A fine of SR10000 and requiring the owner of the facility to retrofit the site in accordance with the approved specifications
Failure to allow the Presidency's specialists to be acquainted with the stages of the treatment or disposal site preparation	Warning and a fine of SR5000
Failure to fence off the landfills, dumps and excavations resulting from the extraction activities and failure to periodically maintain them, thereby exposing workers and pedestrians to the risks	Rectification of the status an maintenance of the wall and excavations and imposition of a fine of SR5000 to SR10000
Failure to sort out the hazardous wastes according to their classifications in the appropriate cells in the dump	Addressing the resulting problem and imposition of a fine of SR10000
Failure to maintain the ventilation gas exhaust system, or when such failure causes risks or explosions	Imposition of a fine of SR1000 to 5000
Continued use of a site after expiration of its validity	Imposition of a fine of up to SR10000
expanding or modifying the site or use of technologies and devices without the Presidency's approval	Suspension of accreditation and work at the site until the Presidency's approval is obtained and imposition of a fine of up to SR10000
Failure to regularly take readings of test wells or ambient air quality	Imposition of a fine up to SR5000
Failure to level and rehabilitate the site upon termination of utilization in accordance with the predeveloped sound environmental plan at the time of construction	Requiring the violator to enhance the leveling and mitigate the damage and imposition of a fine of SR5000



**Violations involving importation and operation of  
environmental technologies**

<b>Violation</b>	<b>Penalty</b>
Failure to supply sampling and testing specialists and specialists on result analysis at the time of application for the environmental certificate	Imposition of a fine of SR10000 and requiring the laboratory owner to provide the specialist
Failure by environmental technology suppliers with the specifications approved at the time of issue of the environmental certificate	Suspending the importation of the technology and imposition of a fine of SR1000
Failure to install an integrated system for the suppression of pollutants, making do with only the importation of technology and lack of the appropriate maintenance and parts	Imposition of a fine in the amount of SR10000
Start up of the technology prior to certification of the technology	Discontinuing the use of the technology and imposition of a fine of SR10000
Failure to commit to continuous operation or periodic maintenance of the pollutant suppression technology	Suspension of work and imposition of a fine of SR10000
Sustained use of the technology beyond its useful life or because of its obsolescence for one reason or another	Discontinuing the use of the technology, revocation of the approval of the technology and imposition of a fine of SR10000
Failure to commit to the periodic renewal of the environmental accreditation certificate and submittal of the required periodic reports	Non renewal of the certificate upon application and imposition of a fine of SR10000 prior to renewal

### **Proposed penalties for certain violations**

<b>Violation</b>	<b>Penalty</b>
Handling of hazardous wastes without the benefit of a license from the competent agency	A fine in the amount of SR3000 and elimination of the violation at the violator's expense in accordance with the Presidency's instructions
Dealing with hazardous wastes without being licensed by the competent agency	A fine from SR3000 to SR5000
Failure to submit correct information when applying for a license for hazardous wastes management	A fine from SR3000 to SR5000 and cancellation of the license application
Handling of hazardous wastes not included in the license	A fine from SR3000 to SR5000, warning to cancel the license application and requiring the violator to have the wastes disposed of by another agency licensed to handle such trash
Assignment of the license to engage in the field of hazardous wastes management to an unqualified person without the permission of the licensing agency	A fine from SR10000 to SR20000 and cancellation of the license
Modification of the waste management facility without the permission of the licensing agency	A fine from SR10000 to SR20000, cancellation of the license and removal of the modification
Unauthorized operation of a facility that the competent agencies have decided to shut down or remove	A fine from SR10000 to SR50000, detention for three months, or both penalties and closure of the facility
Relocation, without the approval of the competent agency, of the contents of a facility that has been earmarked for closure or removal	A fine from SR10000 to SR50000, detention for three months, or both penalties and restoration of the contents to the facility
Violation of the license conditions set forth by the competent agency	Cancellation of the license
If, upon engaging in the activity, mismanagement triggers Environmental impacts which have not been anticipated at the time of licensing	Cancellation of the license
Violations by the licensee of the hazardous waste storage conditions and specifications	Fine from SR10000 to SR20000 and license cancellation warning
Failure to pack hazardous wastes in appropriate shockproof and anti spill containers	Fine from SR5000 to SR10000 and license cancellation warning
Failure to place conspicuous labels on storage vessels, indicating the type and hazards rating, characteristics and UN number of the stored material	Fine from SR5000 to SR10000, requiring the violator to repack the material in accordance with the specifications and license cancellation warning
Failure to establish a timetable for collection of hazardous wastes so that such	Fine from SR2000 to SR10000, requiring the violator to develop a timetable in concert with the

wastes may not be left for lengthy periods in storage containers	licensing agency and license cancellation warning
Failure to wash the storage vessels after use	Fine from SR2000 to SR10000, requiring the violator to rewash and position at the designated location [?] and license cancellation warning
Transportation of hazardous wastes to the waste collection facility using a means of transportation unauthorized by the competent agencies	Fine from SR10000 to SR20000, and license cancellation warning
Transportation of hazardous wastes with incompatible characteristics and qualities to the hazardous waste management facility in one or the same means of transportation	Fine from SR10000 to SR20000, and license cancellation warning
Failure of the means of transportation to satisfy safety requirements	Fine from SR2000 to SR10000 and license cancellation warning
The capacity of the means of transportation is not adequate for the hazardous wastes being hauled, or exceeding the loads provided for in the specifications and standards developed by the Ministry of Communications	Fine from SR2000 to SR10000 and license cancellation warning
Having persons who are unlicensed, unqualified or untrained on dealing with cases of emergency drive the hazardous wastes means of transportation	Fine from SR2000 to SR10000 and license cancellation warning
Failure to place labels indicating the type, hazardous rating, UN number and optimal course of action in the event of an emergency involving the materials being transported	Fine from SR10000 to SR20000 and license cancellation warning
Failure to identify the itinerary of the truck and to notify and secure the approval of Civil Defense adequately in advance prior to proceeding with the transportation process, or change the route without advance approval	Fine from SR2000 to SR10000 and license cancellation warning
Failure to notify Civil Defense with the address of the facility to which the carrier will transport the hazardous wastes	Fine from SR2000 to SR10000 and license cancellation warning
Hauling of hazardous wastes to an agency or facility not authorized by the competent licensing agency.	Fine from SR2000 to SR10000 and license cancellation warning
Failure to obtain an identification code from the licensing agency	Fine from SR2000 to SR10000 and license cancellation warning
Hauling of unauthorized hazardous wastes or hauling of hazardous material other than the material specified in the transportation documentation	Fine from SR10000 to SR20000 and license cancellation warning
Failure to carry the documentation which	Fine from SR10000 to SR20000 and license

provides information on the wastes being transported	cancellation warning
Violation of the approved and required method for the treatment and disposal of hazardous wastes	Fine from SR10000 to SR20000 and license cancellation warning
Failure to secure a license for the treatment and disposal facility	Fine from SR2000 to SR10000 and license cancellation warning
Treatment and disposal of the hazardous wastes in a way that may cause damage to the environment	Fine from SR2000 to SR10000 and license cancellation warning
Acceptance of hazardous wastes that are incompatible with the wastes indicated in the documentation	Fine from SR2000 to SR10000 and license cancellation warning
Disposal of hazardous wastes other than the wastes that the facility is licensed to process	Fine from SR2000 to SR10000 , returning the hazardous wastes to their producer and requiring the producer to have the wastes disposed of by a facility licensed to accept such wastes, and warning to suspend the operations of the facility which accepted such wastes
Failure to fully treat and dispose of the hazardous wastes in an appropriate manner	Fine from SR2000 to SR10000 and requiring the facility to dispose thereof in the appropriate manner designated by the licensing agency
Having the hazardous wastes deposited in a treatment facility be processed by another facility without the advance approval of the licensing agency	Fine from SR2000 to SR10000 and requiring the facility to dispose thereof in the appropriate manner designated by the licensing agency
Acceptance of hazardous wastes in excess of the facility's licensed or actual capacity	Fine from SR2000 to SR10000 and requiring the facility to return the wastes to the producer and notifying the licensing agency accordingly
Failure to notify the licensing agency in advance of contracting with the waste generator to dispose thereof in his facility	Fine from SR2000 to SR10000 and requiring the facility to return the wastes to the producer and notifying the licensing agency accordingly
Failure to establish a periodic program for monitoring the impacts on the environment, air, water and soil in the treatment and disposal site, either through landfills or thermal treatment	Fine from SR2000 to SR10000 and requiring the facility to return the wastes to the producer and notifying the licensing agency accordingly
Failure to provide information on the results of periodic monitoring by the licensing agency and covering up the necessary information in the event of occurrence of harmful impacts on the environment	Fine from SR2000 to SR10000, requiring the facility to correct the situation and treat the ensuing environmental damages, notification of the licensing agency, disposal of the hazardous wastes deposited at the facility in an environmentally sound and closure of the facility pending rectification of the situation and obtaining final approval by the licensing agency.
Failure to apply the engineering specifications for the construction of landfills, storage, loading or unloading sites, or the appearance of a future defect as a result of non compliance with the	Fine from SR10000 to SR20000, requiring the proponent to redesign the facility in accordance with the engineering specifications, full treatment of any damages to the environment, disposal of the hazardous wastes deposited at the facility in an

engineering specifications or violation of the safety requirements at the facility	environmentally sound in concert with the licensing agency and closure of the facility pending rectification of the situation and obtaining final approval by the licensing agency.
Failure to install safety, security, alarm, protection and first aid equipment in the appropriate numbers and quantities.	Fine from SR10000 to SR20000 and requiring the proponent to provide safety, security, alarm, protection and first aid equipment in the appropriate numbers and quantities
Failure to have in place an emergency plan approved by the licensing and competent agencies	Fine from SR10000 to SR20000 and requiring the proponent to have in place a contingency plan and train facility employees thereon
Failure to submit personnel to periodic medical check ups	Fine from SR1000 to SR5000, requiring the proponent to have the employees examined and submit the examination findings to the licensing agencies for verification, and, in the event of damage, have the employees treated at the employer's expense
Failure to maintain records on the hazardous waste received and disposed of, the agencies with which it has concluded contracts and the accidents suffered by the facility and its personnel	Fine from SR5000 to SR15000 and requiring the facility to submit the records. In the event of failure or submittal of falsified information, the penalties of fine, imprisonment for a period of not less than two months and permanent closure of the facility will be imposed

### **Schedule of violations and fines- Water quality**

<b>violation</b>	<b>Amount of fine(SR)</b>
Disposal of untreated sanitary drainage water on water bodies and surfaces (seas, valleys, dams, sabkha)	10000
Disposal of untreated sanitary drainage water on dry areas [?]	10000
Discharge (injection) of untreated sanitary drainage water into underground water	10000
Disposal of untreated sanitary drainage water on open spaces, valley courses and non compliance with the environmental standards and criteria	5000
Disposal (dumping) of untreated sanitary drainage water that does not conform to environmental standards and criteria	2000
Discharge (injection) of untreated sanitary drainage water that does not conform to environmental standards and criteria in underground water	10000
Disposal of sludge in the seas	7000
Disposal of sludge onto water bodies other than marine	10000
Disposal of sludge in areas that are not designated for it	5000
violations involving sample collection procedures that are inconsistent with the specifications and criteria	2000
violations involving measurement and analysis procedures that are inconsistent with the specifications and criteria	2000
Pollution of underground or surface water with hazardous or toxic (harmful) substances	500000
Pollution of underground or surface water with high concentrations of non hazardous pollutants	250000
Use of unsuitable (licensed) means of transportation for hauling polluted water (sanitary, industrial)	5000
Disposal of treated industrial drainage water onto water bodies (such as seas, dams, sabkha water) and failure to comply with the environmental standards and criteria	5000
Disposal of untreated industrial drainage water onto water bodies (such as seas, dams, sabkha water)	10000
Disposal of untreated industrial drainage water at other than designated areas	10000
Disposal of treated industrial drainage water at other than designated areas	5000
Disposal of agricultural drainage water in a manner inconsistent with environmental criteria and standards	5000

**The National Emergency Plan for Combating Marine Environment  
Pollution by Harmful Substances**

**As approved by Council of Ministers' Decision No 157, dated  
20 Dhu al-Qa'dah 1422 [3 June 1991]**

**Article I: Definitions:****Definitions:**

For all purposes and intents of this plan, the following terms shall have the meaning ascribed against each:

**Plan:** shall mean The National Emergency Plan for Combating Marine Environment Pollution by Harmful Substances.

**Pollution:** shall mean pollution by oil and other harmful substances in cases of emergency.

**Department:** shall mean Meteorology and Environmental Protection Presidency.

**Article II: General Policies and objectives:****General Policies:**

The Kingdom's general policy in the area of oil exploration, production and use and transportation of oil and other harmful substances calls for and advocates minimization of environmental, health and economic damages arising therefrom, confining such damages as much as possible and taking immediate actions in case of any pollution to limit potential damage to the environment and man's health and welfare.

**Objectives:**

The plan is intended to develop an immediate response and coordination system to protect the Saudi marine environment and coasts from the impacts of pollution through maximum utilization of resources available regionally and globally, including mobilization and coordination of all available capabilities, such as the equipment, human forces and expertise required to confront cases of pollution.

The plan also targets fulfillment of the Kingdom's obligations as provided for in regional and international agreements, conventions and protocols for the protection of marine environment and any other related agreements that the Kingdom is party thereto.



**Article III:****Response levels:****Response processes for control of pollution at the national level:**

a- In concert with the agencies concerned with identification of pollution control emergency operations, the Presidency shall undertake the following actions:

- Development of the in-Kingdom marine environment pollution control policy.
- Enforcement of the provisions of the protocols on regional and global pollution control cooperation as well as any other regional or international obligations of a similar nature to which the Kingdom has subscribed.
- Survey, monitoring and performance of the necessary studies for tracking oil spills as well as environmental studies for determination of pollution impacts.
- Administration of the plan and coordination of implementation procedures.
- Identification of the plan's equipment requirements.

**b- Pollution control response operations in the Red Sea and the Arabian Gulf areas:**

An operation committee shall be set up in the Red Sea and the Arabian Gulf areas comprising response officials in the following agencies:

1. Ministry of Defense and Aviation (Meteorology and Environmental Protection Presidency area coordinator to serve as chairman of the committee)
2. Ministry of Interior (Coast Guard, Civil Defense)
3. Ministry of Petroleum and Mineral Resources
4. Ministry of Municipal and Rural Affairs
5. Seaports Authority

Area operations committee may solicit participation by representatives of any other agents and shall coordinate the response processes in both areas in cases of pollution requiring the combined efforts of the entire area. The committee shall be tasked with the following duties:

1. Review of the local emergency plans of marine and littoral installations and facilities (paragraph b, article IV).
2. Identification of the human resources and equipment required to control the pollution which may be available with the facilities and installations in the concerned area in line with any agreement that may be reached with those agencies.
3. Supervision of the plan implementation.

4. Drawing up and development of a comprehensive emergency plan covering the entire area (paragraph b, article IV), comprising the package of local plans, and taking the necessary action to combat pollution.
5. Follow-up on reports on cases of pollution on the area level.
6. Identification and evaluation of the operating condition of the control and protection equipment.
7. Follow-up on the training of response operations personnel
8. Taking the necessary precautions to supply medical care to the parties affected by the pollution incidents in cooperation with the Ministry of Health.
9. Any other functions and duties that the environment protection committee may deem appropriate to incorporate.

**c- Local pollution control response operations:**

The agencies indicated below shall undertake the activities related to minimization of pollution, protection and control in the marine and coastal areas and their ancillary facilities and installations. Each of the agencies shall appoint an official of pollution response operation in each of its facilities and installations or area attached to it.

1. Ministry of Defense and Aviation (Meteorology and Environmental Protection Presidency and Royal Navy Forces).
2. Ministry of Interior (Frontier Guard).
3. Ministry of Petroleum and Mineral Resources and the companies and organizations attached to it.
4. Ministry of Industry and Electricity.
5. Ministry of Municipal and Rural Affairs (municipalities of coastal cities).
6. Seaports Authority.
7. Saline Water Conversion Corporation.
8. Royal Commission for Jubail and Yanbu'
9. Any other agency that may have marine or coastal facilities and installations.

**Article IV:**

**Area plans and local plans:**

The plan shall be implemented through the development and implementation of an area pollution control plan for the Kingdom' exclusive economic Zones on both the Arabian Gulf and the Red Sea as well as local plans for the marine and littoral installations and facilities as follows:

### 1- Area plan:

The area operations committee shall develop an area plan in consultation with the other agencies listed under paragraph c, article III. Such plan shall incorporate the executive guidelines and procedures required for responding to cases of pollution at the area level and shall include the following:

- The package of the area local plans.
- The survey, monitoring and control system to detect and report pollution in the Saudi waters and coasts in the area.
- Area operations committee mobilization plan.
- Guide on the duties and jurisdictions of the area response officers.
- Identification of the local support agencies concerned with the pollution response operations and identification of their senior officers.
- Identification of the pollution response resources available in the area, including the manpower and equipment of both government and non government agencies.
- Procedures pertaining to communications and outfitting or the equipment and manpower among installations and facilities providing support in pollution control pending elimination of the hazard,
- Identification of sensitive installations which use seawater, ecologically sensitive zones and the devices required for their protection.
- Identification of potential pollution sources and estimation of the maximum potential quantity of oil from each source.
- Instructions for obtaining marine data, metrological marine information and projections of oil slick route shifts.
- Data records and instructions on their collection in cases of pollution and documentation procedures.
- Identification of the best possible oil pollution containment, clean up and disposal methods, including methods for obtaining the required permits.
- Identification and definition of the financial costs arising from any local pollution incident requiring the use of other agency's equipment and resources and compensation of the agency for control of the pollution in accordance with arrangements to be agreed upon between the two parties.

### 2- Local plans:

The agencies listed under paragraph c of article III shall be required to develop, in consultation with the Presidency, and shall submit to the area operations committee local pollution control plans within the sphere of their jurisdiction. Such plans shall provide for the executive guidelines required for response operations, including:

- Guide on the duties and tasks of pollution response officers, including the names of officers and methods and ways of contacting them.
- Procedures related to communications and distribution of human powers and equipment.
- Procedures identifying methods of contacting the Presidency, area operations committee and other concerned agencies.

## **Article V:**

### **Responsibilities:**

The various activities related to emergency pollution response shall be assigned to the Presidency and the competent agencies having marine or coastal activities or facilities. In addition to the activities assigned to it under this plan, the Presidency shall draft, deploy and monitor application of the policies, regulations and procedures related to the pollution control.

### **Coordination:**

The Presidency shall coordinate the activities of all other agencies involved in the pollution response operations in accordance with the arrangements to be agreed upon in advance between the Presidency and the agencies concerned.

### **Survey, monitoring and control:**

The Presidency shall use the financial resources available in the plan budgetary appropriations and shall in cases of emergency seek the help of the Ministry of Petroleum and Mineral Resources, the Seaports Authority, Directorate General of Civil Defense and the Frontier Guard to perform the surveillance, monitoring and control operations in the waters of the Kingdom's exclusive economic zone in accordance with the arrangements to be agreed upon between the Presidency and the agencies mentioned above. The survey shall include:

- Aerial survey
- Marine survey
- Coastal survey
- Remote survey
- Surveillance reports from military, civilian and private aircraft and ships
- Any other available devices

### **Protection:**

All agencies which have the marines and coastal installations and facilities mentioned in paragraph c, article III, shall be required to provide the required protection for such facilities and installations, including the manpower, tools and equipment. Such

equipment must be in good working order and ready for immediate uses in case of any emergency case of pollution.

**Control:**

All agencies which have the marine and coastal installations referred to in paragraph c, article III shall be responsible for the control operations in their respective areas and shall provide the necessary equipment and manpower required for this purpose. Such operations shall be in accordance with the criteria to be defined in agreement between the Presidency and the concerned agency. The Presidency shall be responsible for the control operations outside these areas on the understanding that the Frontier Guard shall provide all necessary facilities with their available resources.

**Clean-up:**

All agencies which have the marine and coastal installations referred to in paragraph c, article III shall be responsible for the clean-up operations in their respective areas and shall provide the necessary equipment and manpower and equipment required for this purpose. Such operations shall be undertaken in accordance with the criteria to be defined in agreement between the Presidency and the concerned agency. The Presidency and the concerned municipalities, each where concerned, shall be responsible for the clean-up operations outside these areas on the understanding that the Frontier Guard shall provide all necessary facilities with their available resources.

**Disposal of oil:**

The Presidency shall set in coordination with the competent agencies the appropriate locations and methods for disposal of the accumulated oil and the pollutant wastes in it.

**Studies:**

The Presidency shall conduct the appropriate scientific studies as well as the other studies related to the said activities in cooperation with national universities and research centers. The agencies undertaking such studies on the pollution in marine and littoral areas shall coordinate with the Presidency for the purpose of making use of previous studies in this field and shall furnish the Presidency with copies of such studies.

**Article VI:**

**Executive procedures:**

The executive procedures to be taken in response to pollution incidents shall depend on a number of factors, such as the magnitude and location of the incident, and the

type of pollutant. The executive response procedures shall include the following stages:

First stage- Notification:

All agencies responsible for marine and coastal areas or agencies which have marine activities, such as the Coast Guard, the Royal Navy Forces, fishery companies, ship captains, airplane pilots and others shall be required to report any pollution they may see to the area coordinator or the Presidency so that the necessary actions may be taken. The Presidency in turn shall circulate clarification guidelines.

Second stage- Assessment:

Upon receipt of notification from the area coordinator of a case of emergency, the area operations committee shall convene to assess the situation, which shall include the following:

- Classification of the pollution as provided for in the plan's appendix.
- Determination of the need for containment and clean-up operations.
- Determination of the viability of the various containment and clean-up alternatives.
- Proceeding with the necessary procedures to initiate the control processes in accordance with the area plan. The area coordinator shall notify the Presidency if the response to the pollution would require resources that are not locally available or whether it has regional or global impacts.

Third stage- containment and preventive measures:

If the situation calls for undertaking containment action, response officers shall unite their efforts to perform the preventive measures each where concerned, taking into consideration as a top priority ensuring the safety of both the persons in charge of the operations and the public. Such procedures shall include the following:

- Attempts to stem the pollution at source.
- Deployment of containment booms and barriers to prevent oil from spreading and to protect sensitive installations and sites.
- Attempts to mitigate pollution damages.
- Use of dispersants as may be determined by the Presidency and agreed upon in advance with the concerned agencies.

Fourth stage- clean-up and disposal operations:

With due regard to the importance of collection of oil and other harmful substances from seawater or coastal areas, the response officers in local areas shall, if necessary, attempt as much as possible to use appropriate devices such as scrapers, absorbent

materials, bulldozers and other implements with the boundaries of their respective installations. Local response officers shall be guided by the area plan to determine the priorities where the areas to be cleaned are concerned and identify the areas for disposal of collected substances. The area operations committee shall be in charge of supervision and follow up.

**Fifth stage- Documentation:**

The response officers in the area operations committee shall gather the necessary data and documents to identify the agency responsible for the pollution incidents. They shall assess the control processes, estimate the costs and conduct the environmental impact studies. The documentation shall be in the form of films and pictures, if possible, eyewitness reports, completed information forms, letters, cables, contracts, field records, samples, analysis findings, data, press reports, communications recordings and other media. Upon winding up of the response to a pollution incident, the area coordinator shall submit, within 30 days thereof, adequate reports to the Presidency, indicating the developments of the incident, the actions taken, the resources used, the financial cost, as well as the problems and the obstacles that the response operations have encountered.

**Article VII:**

**Financing:**

Spending on the pollution control activities defined in the plan shall be within the budgetary appropriations of the Presidency and the other agencies participating in the pollution control as set forth in the plan.

To set off cases of emergency that cannot be overcome with national resources and existing contacts and agreements, and after agreement between the Environment Protection Committee President and the Minister of Finance and National Economy, the Presidency shall conclude agreements and contracts to be implemented on demand with Saudi or foreign individuals, government and non-government institutions, organizations, agencies, and regional and international specialized organizations to provide the required prompt support on an as needed basis for the monitoring, survey, control, protection, combating, cleaning up, disposal, and the assessment studies needed to confront such cases and identify their impacts.

**Article VIII:**

**The National Committee for Combating Marine Environment Pollution:**

For implementation of the plan, a taskforce shall be formed to review pollution issues and issuance of recommendations on the pertinent policies and directions that must be taken. The committee shall be set up from the following agencies:

- 1-Ministry of Defense and Aviation (Meteorology and Environmental Protection Presidency, as chairman and the Royal Navy Forces).
- 2-Ministry of Interior (Directorate General of Frontier Guard, Directorate General of Civil Defense, and the Secretariat General of the Supreme Commission for Industrial Security).
- 3-Ministry of Petroleum and Mineral Resources
- 4- Ministry of Municipal and Rural Affairs
- 5- Ministry of Finance and National Economy
- 6-Ministry of Industry and Electricity.
- 7-Seaports Authority.
- 8-Saline Water Conversion Corporation.
- 9-Royal Commission for Jubail and Yanbu'

The committee may invite from time to time any other concerned agencies to participate as consultants or observers.

Key tasks of the committee:

1. Review of the policy related to oil and other harmful substances pollution control.
2. Review of the plan.
3. Approval of the area plan.
4. Follow-up on the plan implementation procedures and management.
5. Auditing of the plan expenditure.
6. Issuance of recommendations on equipment procurement.
7. Review of the status of the training programs required for the plan.
8. Discussion of the issues related to marine pollution.
9. Identification of the parties responsible for the pollution, taking the necessary action to press compensation claims, and follow-up on securing the compensation. The committee shall convene periodically and on an out of policy basis at the request of a member.

**Article IX:**

Issuance of executive decisions:

HRH the Chairman of the Environment Protection Coordination Committee shall have the powers to ratify the decisions of the National Committee for Combating Marine Environment Pollution and issuance of the executive decisions of this plan.



**Addendum:****Classification of pollution incidents:****1-Limited pollution incident:**

This is a pollution incident that occurs within an area belonging to an agency responsible for combating pollution in accordance with article V of this plan and that has marine or coastal installations or facilities and which can be controlled and contained using the agency's own resources without requesting aid from the other agencies. In such event, the local plan shall apply.

**2- Major pollution incident:**

This is a pollution incident occurring within an area belonging to an agency responsible for combating pollution in accordance with article V of this plan and that has marine or coastal installations or facilities but which does not have adequate pollution control equipment and requests aid to combat the pollution. In such event, help may be requested from the concerned area operations committee through the area coordinator.

## **Appendix-2**

### **Fundamentals and procedures for assessment of environmental impacts of industrial and developmental projects**

#### **First: Individual projects:**

1. The licensing agency shall classify the project for which a license is being sought in accordance with the industrial and developmental projects classification guide (appendix No. 2.1) issued by the competent agency.
2. Based on the classification of the project, the licensing agency shall:

##### **First category:**

Provide the project proponent with the initial environmental assessment form (first category form, appendix 2.2)

##### **Second category:**

Provide the project proponent with the initial environmental assessment form (second category form, appendix 2.3)

##### **Third category:**

Inform the project proponent that the project is classified as a category three project which calls for a comprehensive project environmental impact assessment in triplicate by a qualified consulting office approved by the licensing agency or a university research center. The proponent shall be given copy of the general guidelines for the generation of the environmental impact assessment of industrial and developmental projects (appendix 2.4) and shall be required to check with the licensing agency to coordinate the development of the study.

- 3- The project proponent shall implement the project (as per the classification) as follows:

##### **First category:**

Complete the initial environmental assessment form for the first category projects (first category project form, appendix No.2.2) and generate a preliminary simplified report on the project.

**Second category:**

Have a qualified consulting office approved by the licensing agency of a university research center complete the initial environmental assessment form for the second category projects (second category project from, appendix No.2.2) as well as generate a summary environmental report on the project.

**Third category:**

Retain a qualified consulting office approved by the licensing agency of a university research center to conduct an environmental assessment study for the project in accordance with the guidelines for the development of environmental impact assessment for industrial and developmental projects (appendix No.2.4) in coordination with the competent agency which must be contacted to coordinate the development of the study.

- 4- The competent agency shall receive from the licensing agency, the project proponent, an approved and qualified consulting office or a university research center the following according to the classification of the project:

**First category:**

The initial environmental assessment form for the first category projects completed by an environmentalist and the initial simplified report on the project.

**Second category:**

The initial environmental assessment form for the second category projects completed by a qualified consulting office approved by the licensing agency or a university research in addition to two copies of the summary environmental technical report, the project drawings and equipment and instrumentation catalogs.

**Third category:**

Three copies of the project environmental impact assessment prepared by a qualified consulting office approved by the licensing agency or a university research center in accordance with the guidelines for the development of environmental impact assessment for industrial and developmental projects after coordination with the competent agency.

5- According to the classification of the project, the competent agency shall:

**First category:**

Review and scrutinize the information contained in the first category project form which has been completed by an environmentalist, the simplified initial report on the project and all of the attached information. Based on this study and the findings of the review of the forms, reports and attached information, the following actions shall be taken:

a. In the event of unconditional approval:

The project proponent shall be issued an unconditional approval on the understanding that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the licensing and other concerned agencies. Copy of the approval shall be forwarded to the licensing agency.

b. In the event of conditional approval:

The project proponent shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all standards and criteria issued by the Presidency as well as the rules and instructions of the licensing and other concerned agencies. Copy of the approval shall be given to the licensing agency.

c. In the event a partial environmental study is requested:

The project proponent shall be informed of the requirement to develop a partial environmental study that should focus on specific environmental concerns depending on the type of the project and the associated activity. Copy of the letter will be forwarded to the licensing agency.

d. In the event the project is rejected.

The proponent will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated. Copy of the letter will be forwarded to the licensing agency.

**Second category:**

a. In the event of unconditional approval:

The project proponent shall be issued an unconditional approval on the proviso that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the licensing and other concerned agencies. Copy of the approval shall be forwarded to the licensing agency.

b. In the event of conditional approval:

The project proponent shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all standards and criteria as well as the rules and instructions of the licensing and other concerned agencies. Copy of the approval shall be given to the licensing agency.

c. In the event an environmental study is requested:

The project proponent shall be informed of the requirement to have a comprehensive environmental study be developed in triplicate by a qualified consulting office approved by the competent agency or a university research center (occasionally, a partial environmental study may be requested, focusing on specific environmental concerns depending on the type of the project and the associated activity). Copy of the letter will be forwarded to the licensing agency.

d. In the event the project is rejected.

The proponent will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated. Copy of the letter will be forwarded to the licensing agency

**Third category:**

a. In the event of unconditional approval:

The project proponent shall be issued an unconditional approval on the proviso that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the licensing and other concerned agencies. Copy of the approval shall be forwarded to the licensing agency.

b. In the event of conditional approval:

The project proponent shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all environmental standards and criteria set by the Presidency as well as the rules and instructions of the licensing and other concerned agencies. Copy of the approval shall be given to the licensing agency.

d. In the event the project is rejected.

The proponent will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated. Copy of the letter will be forwarded to the licensing agency.

### **Second: Projects of public, concerned and licensed agencies:**

1-The public, concerned, or licensed agencies which own, implement or operate the project shall, in cooperation with the competent agency, identify the category of the project.

2- Based on the project classification (appendix 2.1), the competent agency shall take the following actions:

#### **First category:**

Provide the public, concerned or licensed agency which owns, implements or operates the project with the initial environmental assessment form (first category project form, appendix 2.2)

#### **Second category:**

Provide the public, concerned or licensed agency which owns, implements or operates the project with the initial environmental assessment form (second category project form, appendix 2.3)

#### **Third category:**

Inform the public, concerned or licensed agency which owns, implements or operates the project that its project is classified as a category three project which calls for a comprehensive project environmental impact assessment in triplicate by a qualified consulting office approved by the licensing agency or a university research center. The agency shall be given copy of the general guidelines for the generation of the environmental impact assessment of industrial and developmental projects (appendix 2.4) and shall be required to check with the licensing agency to coordinate the development of the study.

3- The public, concerned or licensed agency which owns, implements or operates the project shall implement the project (as per the classification) as follows:

#### **First category:**

Complete the initial environmental assessment form for the first category projects (first category project form, appendix No.2.2) and generate a preliminary simplified report on the project.

**Second category:**

Have a qualified consulting office approved by the competent agency of a university research center complete the initial environmental assessment form for the second category projects (second category projects, appendix No.2.3) as well as generate a summary environmental report on the project.

**Third category:**

Retain a qualified consulting office approved by the competent agency of a university research center to conduct an environmental assessment study for the project in accordance with the guidelines for the development of environmental impact assessment for industrial and developmental projects (appendix No.2.4) in coordination with the competent agency which must be contacted to coordinate the development of the study.

4- The competent agency shall receive from the public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) or from a consulting office approved and qualified by the competent agency or a university research center the following according to the classification of the project:

**First category:**

The initial environmental assessment form for the first category projects completed by an environmentalist and the initial simplified report on the project.

**Second category:**

The initial environmental assessment form for the second category projects completed by a qualified consulting office approved by the competent agency or a university research center in addition to two copies of the summary environmental technical report, the project design drawings and equipment and instrumentation catalogs.

**Third category:**

Three copies of the project environmental impact assessment prepared by a qualified consulting office approved by the competent agency or a university research center in accordance with the guidelines for the development of environmental impact assessment for industrial and developmental projects after coordination with the competent agency.

5- According to the classification of the project, the competent agency shall:

**First category:**

Review and scrutinize the information contained in the first category project form which has been completed by an environmentalist, the simplified initial report on the project and all of the attached information. Based on this study and the findings of the review of the forms, reports and attached information, the following actions shall be taken:

a- In the event of unconditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued an unconditional approval on the understanding that such agency shall observe and comply with all environmental standards, criteria, rules and instructions issued by the licensing and other concerned agencies.

b-In the event of conditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued a conditional approval by which such undertakes to carry out the required conditions attached thereto and to comply with all environmental standards and criteria issued by the competent agency as well as the rules and instructions of other concerned agencies.

c- In the event a partial environmental study is requested:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be informed of the requirement to develop a partial environmental study that should address specific environmental concerns depending on the type of the project and the associated activity.

d- In the event the project is rejected.

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated.

**Second category:**

a. In the event of unconditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the



project) shall be issued an unconditional approval on the proviso that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the competent and other concerned agencies.

b. In the event of conditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all environmental standards and criteria as well as the rules and instructions of the licensing and other concerned agencies. Copy of the approval shall be given to the licensing agency.

c. In the event an environmental study is requested:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be informed of the requirement to have a comprehensive environmental study be developed in triplicate by a qualified consulting office approved by the competent agency or a university research center (occasionally, a partial environmental study may be requested to address specific environmental concerns depending on the type of the project and the associated activity).

d. In the event the project is rejected.

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated.

**Third category:**

a. In the event of unconditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued an unconditional approval on the proviso that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the competent and other concerned agencies.

b. In the event of conditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all environmental standards and criteria as well as the rules and instructions of the competent and other concerned agencies.

c- In the event the project is rejected.

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project with the public, concerned or licensed agency which owns or operates the project) will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated.

## **Appendix 2.1**

### **Guide for classification of industrial and developmental projects**

#### **Key principles of project environmental assessment:**

The auditing process for the environmental impact assessment shall be based on the following key principles:

- Nature and magnitude of the intended activity and the existence of similar projects at the site or similar sites.
- Extent of depletion by the installation of the natural resources, particularly agricultural lands and mineral resources.
- Location of the installation and the nature of the surrounding environment and nearby residential clusters.
- Type of power used.

The method of assessment will also depend on the classification of the various types of projects based on the anticipated level of the project impacts into three categories as follows:

#### **First category: Projects with limited environmental impacts:**

This category covers projects which are not expected to have tangible negative environmental impacts, such as:

- Textile and ready wear factories located inside industrial parks and which do not have tinting or coloring processes.
- Rubber and plastic factories located inside industrial parks and which rely on heating processes which do not produce harmful gas emissions ( such as furan gas resulting from heating raw PVC).
- The various foodstuff and beverages processing and canning factories located inside industrial parks.
- Leather, shoe and bag factories located inside industrial parks and which do not involve any tannery processes.
- Minor expansions of power lines not exceeding 10% of their total lengths.
- Expansion of existing roads not exceeding 15% of the expansion
- Modification or expansion of an existing marine berth which does not involve any pollution or effective dredging of the site.

- Expansion of irrigation and drainage installations by not more than 10% of their capacity.

### **Second category: Projects with significant environmental impacts:**

This category covers the projects that may or are expected to have some significant environmental impacts requiring the generation of a specific environmental assessment report addressing certain environmental or technical concerns. Such projects include:

- Steel and iron mills and metal foundries whose production is less than 150 tons per day.
- Metal and iron treatment and galvanization plants with a production of less than 25 tons per day.
- Engine, shops, machine, pipes and boiler works.
- Auto and vehicle fabrication and assembly works.
- Glass factories.
- Blocks, bricks, ceramics, china and porcelain factories.
- Chemicals, drugs, paints, detergents, and glue plants with capacities of less than 25 tons per day.
- Quarry, crushing, asphalt and ready concrete batching plants and mixers.
- Chemicals blending and packing works outside the industrial parks.
- Paper and carton factories.
- Fabric tinting works, less than 10 tons per day.
- Fabric, weaving and cellulose factories located outside the industrial parks.
- Rubber and plastic plants located outside the industrial parks.
- Foodstuff and vegetable canning plants with a capacity in excess of 1000 tons per year.
- Livestock and poultry abattoirs and shops.
- Broiler poultry breeding projects and abattoirs of less than 20000 birds per cycle.
- Tannery works for less than one million square feet annually or 750 animal hides per day.
- Fish and sea products processing plants for more than 1000 tons per year.
- Fodder fabrication and production projects.
- Chemical non petroleum products storage and sites.
- Leather, bag and shoe factories not involving tannery operations located outside industrial parks.
- Industrial and petroleum wastes recycling and reuse facilities.

- Offshore and onshore pipeline projects, less than 50 km.
- Petroleum, gas and petroleum products storage facilities (other than gas stations).
- Thermal power stations, less than 30 megawatts.
- Power transmission lines and transformer stations.
- New or expanded hospitals.
- Drug and medical chemicals factories.
- Construction of divided roads less than 50 km, excluding highways, tunnels, causeways and railroads.
- Expansion and modification of existing roads, not exceeding 15%
- Agricultural projects
- Fish farm projects.
- Expansions and modifications of irrigation and drainage projects and systems, less than 10%.
- Grain mills

**Third category: Projects with serious environmental impacts:**

These are projects whose construction and operation are expected to have serious effects on man and the environment and thus require performance of a comprehensive environmental impact assessment. They include the following:

- Steel and cast iron factories with a production capacity of more than 150 tons per day.
- Metal electroplating factories with a capacity in excess of 25 tons per day.
- Cement factories.
- Metal extraction.
- Major chemical petrochemical industries, such as fertilizers, petroleum products, drugs...etc.
- Paint, lacquer, and detergent industries which produce more than 50 tons per day.
- Pesticides factories.
- Major paper pulp production factories.
- Textile tinting works producing 10 tons per day.
- Tannery works producing more than a million square feet per year.
- Lead foundries.
- Plant, animal and other oil refineries.
- Exploration, extraction and petroleum and gas development operations.
- Offshore and onshore pipeline more than 50 km.

- Oil and gas separation and treatment facilities.
- Petroleum and petroleum products storage facilities, more than 15000 cubic meter capacity.
- Oil refining installations.
- Petrochemical industries.
- Power stations, more than 30 megawatts.
- Nuclear power plants.
- International cross- country power transmission lines and stations.
- Water desalination plants.
- Major conveyance systems, such as causeways, underground transport, railways, express ways and roads, more than 50 km.
- Civilian and military airports.
- Ports, and expansions in quays, yards...etc.
- Tourist resorts and projects in the vicinity of sensitive ecosystems, archeological sites, sanctuaries, residential developments and sea coasts.
- Public irrigation and sanitary drainage systems and their expansions, including dams ...etc.
- Waste water treatment plants.
- Effluent products treatment discharges in seas and valleys.
- Model cities and industrial parks construction projects.
- Urban developments and plans projects, their expansions and public residential complexes.
- Consolidated crushers and cement and asphalt batching complexes in cities and provinces.
- Facilities of domestic trash and liquid wastes dumps (in the absence of processing plants in the area).
- Medical wastes disposal projects (transportation, collection, technologies and dumps).
- Domestic wastes treatment and public municipal dumps.
- Toxic and hazardous wastes storage, treatment and disposal facilities.
- Sugar refineries.

### **Auditing procedures for projects of the first category:**

1. Upon receipt by the Presidency of copy of the project license from the issuing government agency, or when the project proponent applies for environmental certification for any reason whatsoever, the proponent will be provided with the preliminary information form for the first category projects if the project is classified as such.

2. The project proponent will submit the completed preliminary information form in addition to two copies of an initial report, indicating the project site and the related technical data, as well as the type and quantities of raw materials, work steps, production and its capacity for producing projects).
3. The application will be logged with the Environmental Assessment and Habilitation Department and the information provided will be evaluated and reviewed in coordination with the other divisions of the Environment Protection Department for the necessary feedback, comments and proposals or recommendations to provide further information. These procedures will be completed within a maximum period of two working months as of the date of submittal of the application.
4. The applicant will be advised of either of the following decisions:
  - a. Approval, subject to compliance with the environmental standards and requirements approved by the Presidency or any other conditions.
  - b. Non-approval (indicating the reasons, even if not environmentally motivated).
  - c. Need to follow the procedures for the second and third categories.

**Auditing procedures for projects of the second category:**

1. Upon receipt by the Presidency of copy of the project license from the issuing government agency, or when the project proponent applies for environmental certification for any reason whatsoever, the proponent will be provided with the preliminary information form for the second category projects if the project is classified as such, enclosing list of the environmental offices or agencies approved by the Presidency.
2. The project proponent will submit the completed preliminary information form completed by an environmental office in addition to the technical and environmental reports and the project's drawings and catalogs.
3. The application will be logged with the Environmental Assessment and Habilitation Department and the information provided will be evaluated and reviewed in coordination with the other divisions of the Environment Protection Department for the necessary feedback, comments and proposals or recommendations to provide further information. These procedures will be completed within a maximum period of two working months as of the date of submittal of the application and a date will be set for the applicant to check with the Presidency.
4. The applicant will be advised of either of the following decisions:
  - a. Approval, subject to compliance with the environmental standards and requirements approved by the Presidency or any other conditions.

- b. Need to submit and have an institution approved by the Presidency prepare a specific environmental assessment report addressing certain areas and characteristics of the project or the environmental concerns identified by a specialist of the Environment Protection Department
5. The project proponent shall submit to the Presidency two copies of the designated report, which will be logged and forwarded to the various departments for concurrent review. The process of review and submittal of the recommendations and conditions for approval of the project will be completed within two months.
6. The applicant will be advised of either of the following decisions:
  - a. Approval, subject to compliance with the environmental standards and requirements approved by the Presidency.
  - b. Non-approval (indicating the reasons, even if not environmentally motivated).

**Auditing procedures for projects of the third category:**

1. The Presidency will receive copy of the project license from the issuing government agency which directly supervises this activity or the project proponent will apply for environmental certification for any reason whatsoever, the project will be classified as a category three project in accordance with the standing practice.
2. The application will be logged with the Environmental Assessment and Habilitation Department and the preliminary information provided will be evaluated and reviewed in coordination with the other divisions of the Environment Protection Department for the necessary feedback, comments and proposals related to the environmental assessment study that must be developed for the major points of the project. These procedures will be completed within a maximum period of one working month as of the date of submittal of the application and a specific date will be set for the applicant's for checking and inquiries.
3. The applicant will be advised that its activity has been classified as an activity with anticipated tangible negative impacts according to the Presidency- applicable criteria, which will require that a comprehensive environmental assessment be made to address specific aspects depending on the type of activity. Such study shall be performed by agencies and institutions approved by the Presidency in this field.
4. The project proponent shall submit to the Presidency two copies of the designated report, which will be logged and forwarded to the various



departments for concurrent review. The process of review and submittal of the recommendations and conditions for approval of the project will be completed within two months.

5. The applicant will be advised of either of the following decisions:
  - a. Approval, subject to compliance with the environmental standards and requirements approved by the Presidency.
  - b. Non-approval (indicating the reasons, even if not environmentally motivated).

## **Appendix 2.2**

### **Environmental assessment of developmental projects**

#### **Information form for the first category projects**

For ( ) project  
Under license by ( Ministry/ commission) No.  
Dated:

Prepared by:

Directorate General of Environmental Appraisal and Habilitation

#### **Instructions:**

- 1-All questions must be answered and other attachments may be added as needed with a cross reference to them in the corresponding paragraph in the form.
- 2- The form shall be stamped and signed by a responsible person or the project's official representative.
- 3- Upon completion, the form shall be forwarded to the following address:

Meteorology and Environmental Protection Presidency  
Directorate General of Environmental Protection  
P.O.Box 1358  
Jiddah 21431, Saudi Arabia

#### **Applicant's data:**

Name of the applicant: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone and fax numbers: \_\_\_\_\_  
E-mail: \_\_\_\_\_

#### **General information:**

Type of project: (industrial, agricultural, residential, commercial, tourist, other)  
 New installation ( ) Expansion of existing facility ( )

Description of the activity:

Location: inside ( ) outside ( ) the limits of City.

Name of industrial city or park:

Estimated number of residents within 250 meters around the project:

Area of the project site: \_\_\_\_\_hectares\_\_\_\_\_square meters

(Please attach a location map showing the distance form residential clusters)

Construction activities:

Date of commencement and duration:

The area to be developed:

Description of the construction work:

This section is to be completed for industrial and agricultural projects:

- Brief description of the products and their production rates:
  
- Brief description of the raw materials, their quantities, sources and state (liquid, powder, solid):
  
- Number of workers:                      production hours:                      shifts:
  
- Brief description of the preparation and production phases (attach additional papers, drawings, technical catalogs and reports, if any):

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Permits and licenses:

(List and attach copies of all licenses and approvals obtained from the agencies concerned):\_\_\_\_\_

\_\_\_\_\_  
Declaration:

I declare that the information provided in this form is true and correct. In the event subsequent amendments are required, the Presidency will be notified prior to proceeding therewith.

\_\_\_\_\_  
Declarant

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Stamp

## **Appendix 2.3**

### **Environmental assessment of developmental projects**

#### **Information form for the second category projects**

For ( ) project  
Under license by ( Ministry/ commission) No.  
Dated

Prepared by:

Directorate General of Environmental Appraisal and Habilitation

#### **Instructions:**

- 1-All questions must be answered and other attachments may be added as needed with a cross reference to them in the corresponding paragraph in the form.
- 2- This form shall be completed by an institution or agency qualified by the Presidency (list of agencies is attached hereto)
- 3- The form shall be stamped and signed by a responsible person or the project's official representative.
- 4- Upon completion, the form shall be forwarded to the following address:

Meteorology and Environmental Protection Presidency  
Directorate General of Environmental Protection  
P.O.Box 1358  
Jiddah 21431, Saudi Arabia

#### **Applicant's data:**

Name of the applicant: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone and fax numbers: \_\_\_\_\_  
E-mail: \_\_\_\_\_

#### **General information:**

Type of project: (industrial, agricultural, residential, commercial, tourist, other)  
 New installation ( ) Expansion of existing facility ( )

Description of the activity:

Location: inside ( ) outside ( ) the limits of City.

Name of industrial city or park:

Estimated number of residents within 250 meters around the project:

Area of the project site: \_\_\_\_\_hectares\_\_\_\_\_square meters

(Please attach a location map showing the distance form residential clusters)

Construction activities:

Date of commencement and duration:

The area to be developed and graded:

Description of the roads to be constructed inside and outside the facility:

Description of the construction works and methods of construction used:

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Brief description of the project:

Key characteristics of the project:

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Objectives of the project:

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Justifications of the project:

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Major components of the project:

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Technologies used (Please attach copies of the descriptive technical reports and catalogs):

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Volumes of inputs and consumables during construction and operation:

<b>Inputs</b>	<b>Construction (cubic meter per day)</b>	<b>Operation (cubic meter per day)</b>
Water for sanitary purposes		
Water for industrial purposes		
Water for other uses(_____)		
Energy (fuel)		
Raw materials (producing projects), types and quantities in detail		
other		

Volumes of outputs, emissions and wastes:

<b>Outputs and emissions</b>	<b>In construction</b>	<b>In operations</b>
Aerial SO <sub>2</sub>		
Aerial(suspended particles)		
Aerial NO <sub>x</sub>		
Aerial (other _____)		
Sanitary drainage water		
Industrial drainage water		
Domestic solid wastes		
Industrial solid wastes		
hazardous solid wastes		
Construction material wastes		

This section is to be completed for industrial and agricultural projects:

- Brief description of the products and their production rates:
- Brief description of the raw materials, their quantities, sources and state (liquid, powder, solid):
- Number of workers:                      production hours:                      shifts:
- Brief description of the preparation and production phases (attach additional papers, drawings, technical catalogs and reports, if any):

Specifications of the stacks:

Height:                      Diameter:

Gas emission rate:                      cubic meter/ hour

Temperature:

C

Velocity:                      meter/second

Water vapor content:                      %

Drainage outlet specifications:

Flow amount:                      cubic meter/day

Discharge conduit diameter:

Temperature in the blending area:                      C

Description of the ambient environment:

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Most significant biological properties of the area, notably sensitive areas (including fauna, flora, sanctuaries, antiquities, agricultural areas- please provide details in other attachments as needed):

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Initial analyses of the environmental impacts (please indicate the most significant impacts and provide details in subsequent attachments as needed):

<b>Affected environment</b>	<b>air pollution</b>	<b>Water pollution</b>	<b>Pollution by wastes</b>	<b>Soil pollution and other impacts</b>
Site due to construction work				
Surrounding areas due to construction work				
Surrounding areas due to operations				
Across the site boundaries				
Sanitary and public services				
fauna resources				
Flora resources				
Fisheries and marine resources				
Tourism and recreation				
Historical antiquities				
Sanctuaries				
other				

Description of the control and mitigation procedures and technologies for the various impacts:

<b>Impact</b>	<b>Control, mitigation procedures and technologies used</b>
Air pollution	
Water pollution	
Pollution by wastes	
Soil pollution	
Emergency and safety cases	
Other cases	

### Permits and licenses

(List and attach copies of all licenses and approvals obtained from the agencies concerned): \_\_\_\_\_

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Declaration:

I declare that the information provided in this form is true and correct. In the event subsequent amendments are required, the Presidency will be notified prior to proceeding therewith.

---

Declarant

---

Title

---

Date

---

Stamp

Applicant's authentication (project proponent)

---

Name

---

Job title

---

Date

---

Stamp

## **Appendix 2.4**

### **Guidelines for the performance of the environmental impact assessment study**

#### **First: Presentation of the project:**

#### **Second: Description of the project and its objectives:**

- Objectives
- Need for the project
- Components of the project (onsite facilities attached to the project such as water treatment plants, water desalination plants, electrical power plants, etc)
- Project construction phases
- The workforce required for implementation of the project (minimum and maximum values)
- The workforce required for operation of the project (minimum and maximum values)
- Alternatives and options

#### **Third: status of the environment around the facilities, including the following:**

- Air quality
- Soil and topography
- Oceanology
- Surface and underground water
- Land environment (fauna-flora)
- Marine environment (fauna-flora)
- Uses of the selected site land and environs
- Land ownership (original owner)

#### **Fourth: the environmental assessment, including:**

- Identification of the potential general impacts of the project and definition of the alternatives.
- Identification of essential impacts of the project.
- Analysis of the impacts on:
  - ❖ Air quality
  - ❖ The natural environment of the sea and coast
  - ❖ Surface and underground water

- ❖ Flora and fauna environment
- ❖ Land uses and urban developments
- ❖ Residential clusters
- ❖ The overall aesthetic view
- ❖ Other

**Fifth: Assessment of the essential impacts:**

- Arrangement in the order of their impact on the natural resources.
- Estimation of the percentage of damage to the area and the extent of potential expansion.
- Useful life of the facilities.
- Studies on the mitigation of anticipated impacts.

**Sixth: Summary of the significant impacts after the mitigation processes:**

### **Appendix 3**

#### **Guide to environmental accreditation procedures**

##### **Phase-I: Reception of applications and satisfaction of requirements:**

1. The competent agency receives the correspondence, applications and files related to applications for environmental accreditation or applications for endorsement of environmental technologies from companies, establishments, consulting offices and individuals.
2. The competent agency forwards a letter to the applicant, requesting identification of the activity for which certification is sought and completion of the environmental accreditation application form (appendix 1.1).
3. The transaction file will be dated, entered in the computer, and a copy of the action letter will be placed in the application file kept by the competent agency.
4. The competent agency receives the environmental accreditation application from the applicant after completion and identification of the activity for which certification is sought, the nature of the area, the site where the activity and expertise will be exercised and the existing appurtenances and equipment, amplified by all required documents.
5. Upon verification of the activity for which accreditation is sought, the competent agency transmits the accreditation requirements form for the required activity as shown in the Environmental Services Accreditation Requirements Guide (Appendix 1.2). in the event an environmental assessment study is required for the activity to be engaged in or the site and facilities where the activity will be undertaken, the application will be routed to the competent agency's Environmental Assessment Department so that it may take the applicable routine procedures for requesting an environmental impact assessment, auditing of the study and reporting the findings to the Environmental Accreditation Department for completion of the accreditation formalities.
6. The transaction file will be dated and fed in the computer and a copy of the action letter will be placed in the application file kept by the competent agency.

##### **Phase- II: Auditing of the information and documents attached to the applications:**

1. The competent agency receives the answers forwarded by the applicants, which incorporate all of the required information, documents and attachments (in accordance with the accreditation requirements for the activity to be engaged in as shown in the Environmental Services Accreditation Requirements Guide).

2. The specialists of the competent agency's Environmental Accreditation Department will audit and review, within a maximum period of three weeks as of the date of receipt of the application, the answers received from the applicants, which incorporate all of the required information, documents and attachments (in accordance with the accreditation requirements for the activity to be engaged in as shown in the Environmental Services Accreditation Requirements Guide).

### **Phase III: Approval of registration:**

1. The following action shall be taken in the light of the review and auditing:
  - a. **In the event of unconditional approval:**

1. The competent agency transmits a letter to the Ministry of Commerce' branch in the area where the commercial register will be issued, where the applicant is registered, or where the applicant will engage in the activity, advising that after review and auditing of the application in the light of the information, documents and attachments (as per the activity that the applicant is to be certified to engage in and in accordance with the criteria set forth in the Environmental Services Accreditation Guide), the competent agency approves registration of the activity in the commercial register of the applicant on the proviso that the applicant comply with all environmental standards and criteria issued by the Presidency and that the applicant be allowed to engage the activity only after obtaining environmental certification from the licensing agency. Copy of the letter will be forwarded to the applicant.
2. The transaction file will be dated, entered in the computer and a copy of the action letter will be placed in the pertinent file kept by the Department.

#### **b. In the event of conditional approval:**

1. The competent agency sends a letter to the applicant, advising that following review and auditing of the application in the light of all of the information, documents and attachments (as per the activity that the applicant is to be certified to engage in and in accordance with the criteria set forth in the Environmental Services Accreditation Guide), the competent agency approves registration of the activity in

the commercial register of the applicant subject to the condition that the applicant undertake in writing to full comply with all of the conditions related to engaging in the activity for which accreditation is sought as well as all of the environmental standards and criteria set forth by the competent agency. Copy of the undertaking will be transmitted to the applicant.

2. The transaction file will be dated and entered in the computer and copy of the action letter will be placed in the pertinent file kept by the competent agency.
3. The competent agency receives the applicant's letter undertaking to comply with the conditions of the activity for which accreditation is sought as well as all environmental standards and criteria set forth by the Presidency.
4. The competent agency a letter to the Ministry of Commerce' branch in the area where the commercial register will be issued, where the applicant is registered, or where the applicant will engage in the activity, advising that after review and auditing of the application in the light of the information, documents and attachments (as per the activity that the applicant is to be certified to engage in and in accordance with the criteria set forth in the Environmental Services Accreditation Guide, the applicant's undertaking to comply with the conditions of the activity for which accreditation is sought as well as all environmental standards and criteria set forth by the competent agency), the competent agency approves registration of the activity in the commercial register of the applicant on the proviso that the applicant comply with all environmental standards and criteria issued by the competent agency and that the applicant be allowed to engage the activity only after obtaining environmental certification from the competent agency. Copy of the letter will be forwarded to the applicant.
5. The transaction file will be dated and entered in the computer and copy of the action letter will be placed in the pertinent file kept by the competent agency.

**c. In the event of rejection of the application:**

1. A letter will be forwarded to the applicant advising that following review and auditing of the application in the light of all of the information, documents and attachments (as per the requirements of the activity that the applicant is to be certified to engage in and in accordance with the criteria set forth in the Environmental Services Accreditation Guide), the competent agency recommends

that approval be denied, indicating the reasons even if they were not environmentally motivated.

2. The transaction file will be dated and entered in the computer and copy of the action letter will be placed in the pertinent file kept by the competent agency.

#### **Phase IV: Approval of accreditation:**

1. The competent agency receives from the applicant the letter advising that the activity has been entered in the commercial register and that all requirements and conditions have been fully satisfied.
2. The competent agency's specialists pay a field visit to the site of the activity for which accreditation is sought (if the type of activity warrants such visits) to verify that all conditions and requirements imposed on the applicant have been fully satisfied.
3. following verification that all environmental accreditation requirements have been met, the competent agency shall proceed as follows:

##### **a. In the event of unconditional approval:**

1. The competent agency sends a letter to the applicant, advising that following review and auditing of the application in the light of all of the information, documents and attachments (as per the activity that the applicant is to be certified to engage in and in accordance with the criteria set forth in the Environmental Services Accreditation Guide), the competent agency approves that the applicant be issued an environmental accreditation certificate to engage in the activity for which accreditation is sought provided that the applicant comply with all of the environmental standards and criteria set forth by the competent agency.
2. The transaction file will be dated and entered in the computer and copy of the action letter will be placed in the pertinent file kept by the competent agency.

##### **d. In the event of conditional approval:**

1. The competent agency sends a letter to the applicant, advising that following review and auditing of the application in the light of all of the information, documents and attachments (as per the activity that the applicant is to be certified to engage in and in accordance with the criteria set forth in the Environmental Services Accreditation Guide), the competent agency approves that the applicant be issued and environmental accreditation certificate to engage in the activity for



which accreditation is sought on the condition that the applicant undertake to full comply with all of the environmental standards and criteria set forth by the competent agency as well as the attached conditions relative to the activity for which accreditation is sought.

2. The transaction file will be dated and entered in the computer and copy of the action letter will be placed in the pertinent file kept by the competent age

**Appendix 3.1**  
**Form No. 1**

**Application for accreditation to engage in environmental services**

**First: Personal data:**

Commercial name:

Commercial register No.:

Date of expiration:

Headquarters:

Name of competent official:

Job title:

Address of the company:

City: P.O.Box

Postal code:

Tel. & fax Nos.

Partner companies:

Current activity:

Activity to be added:

**Environmental studies and research:**

- ☐ Environmental assessment
- ☐ Environmental monitoring
- ☐ Environmental consultations and surveys

**Municipal solid waste management:**

- ☐ Recycling
- ☐ Final disposal

**Hazardous waste management:**

- ☐ Transportation
- ☐ Storage
- ☐ Treatment
- ☐ Final disposal

**Polluted water and soil treatment:**

- ☐ Wastewater treatment
- ☐ Underground water treatment
- ☐ Polluted soil rehabilitation

**Non hazardous industrial waste management:**

- Liquid wastes
- Air pollutants

**Surveillance and analysis services:**

- Water quality measurements
- Air quality measurements
- Supply of surveillance and analysis units

**Marine environment services:**

- Oil pollution control
- Chemical pollution control
- Collection and hauling of polluted wastes
- Supply of dispersants and absorbents
- Disposal of polluted wastes
- Salvation and floating of vessels
- Supply of control equipment
- Beach cleaning services
- Response and rescue in the high seas.
- Unloading and reclamation of oil in the high seas

**Second: Required attachments:**

1. Statement on major equipment and instruments and their specifications.
2. Schematic drawing of the various facilities of the activity.
3. Description of the proposed work plan and technology used.
4. Curricula vitae of the technicians showing their work related experience.
5. Organizational and administrative chart of the organization.
6. Record of experience of the organization and each participating party.
7. Copy of the last annual report of the organization and each participating party.
8. Copy of the commercial register.
9. Copy of the certificate of the Department of Zakah and Income Tax.
10. On the job safety plan.
11. Quality plan.
12. Copies of previous accreditation letters obtained from the Presidency.

## **Appendix 3.2**

### **Environmental services accreditation requirements guide**

#### **First: Types of accreditation:**

The Meteorology and Environmental Protection Presidency issues the following certificates of accreditation:

1. Environmental accreditation certificates for the agencies operating in the area of industrial waste disposal and other environmental non industrial fields.
2. Environmental laboratory accreditation certificate.
3. Technology accreditation certificate.
4. Accreditation certificate for importation of pollution control equipment
5. Environmental accreditation certificate for offices operating in the field of preparation of environmental impact assessment studies.

#### **Second: Classification of environmental services activities and accreditation requirements:**

The activities that fall under the environmental services can be classified as follows:

1. **Environmental research and studies:** This activity involves development of environmental impact assessments of industrial and developmental activities and comprises:
  - a. Environmental assessment studies
  - b. Environmental consultation services

#### **Requirements for certification to engage in this activity are as follows:**

- Provide the Presidency with the company's technicians CV which must cover all environmental media (air, water and soil), states (gaseous, liquid and solid), and types (fauna and flora). Academic qualifications shall not be less than a doctorate or master's degrees and minimum experience of 3 years or bachelor's degree with minimum experience of 5 years.
- Provide a Saudi employee with environmental qualifications.
- Have all environmental investigations performed by laboratories prequalified by the Presidency.

**2-Municipal solid waste management:** This activity involves collection, transportation, disposal and recycling of non hazardous municipal wastes and comprises:

- Collection, hauling and storing.
- Recycling and reuse.
- Final disposal.

**Requirements for certification to engage in this activity are as follows:**

- Provide the Presidency with [a statement on] the sanitation fleet of vehicles.
- Detailed description of the waste storage site.
- Presentation of the technology used and extent of its suitability and efficiency.
- Prepare the disposal site so as to prevent seepage of pollutants into underground water aquifers.
- Supply the disposal site with a fire system and draw up a safety and contingency plan.

**Requirements for recycling shall be as follows:**

- ✚ Identify the site of the recycling plant.
- ✚ Describe the treatment, sorting and recycling stages and the recycling method and technology.
- ✚ Identify with exactitude and stick to the field of work and the materials to be recycled.
- ✚ Identify the means for disposal of residual non- recyclable wastes.
- ✚ Prepare the floor of the plant so as to avoid any seepage into the underground water aquifer.

**3- Hazardous waste management:** This activity involves collection, transportation, storing and disposal of industrial hazardous wastes in an environmentally sound manner, such as sanitary landfill, biological processing and other methods. The activity comprises:

- Transportation.
- Storing.
- Treatment and final disposal.

**Requirements for certification to engage in this activity are as follows:**

- Identify and describe the work site and surrounding environment, and, if necessary, submit the site's environmental impact assessment.

- Drill, depending on the volume and location of the project, test wells and submit investigation findings.
- Describe the waste transportation fleet and its appurtenances.
- Identify the method of waste disposal and the technologies used for this purpose.
- Identify the type of trash and its composition and draft a report defining the risks associated with exposure to such substances.
- Identify the pollution control technologies to be used.
- Prepare the disposal site in such a way as to prevent pollution seepage into underground water aquifer.
- Supply the site with safety and fire systems.
- Develop a plan to handle emergencies while in transit and within the site.
- Submit detailed statements on the drivers' capabilities and identify the applicable itinerary and shipment times.

#### **Site preparation requirements:**

- a. Select a suitable site far from populated areas.
- b. Line the collection cells to prevent seepage of liquids into the underground water aquifers, using HDPE geomembrane consisting of two layers of mud and calcium rich mud, a leachate collection layer over the main layer and a leach detector layer sandwiched between the two layers. The applicant shall install the type suitable for the local environment, including the soil type and salinity and the type of the wastes received.
- c. Have the Presidency's representative attend the above applications and review the results.
- d. Implement a system of wells to extract, collect, and haul the leach for proper treatment and processing to avoid contaminating underground water.
- e. Install barriers around the installation and provide only one entrance to the facility. Upon completion of the site, develop a safety, health and emergency plan and training on the use of emergency equipment.
- f. Pave the access roads to the site to avoid raising dust from traffic and cover the landfill with dirt to dispel and eliminate insects and noxious smells.
- g. Perform the necessary study to ensure that the drainage system's capacity is adequate for handling the treatment and disposal of the pollutants in the filtered liquids extracted from the filtration system. It should be pointed out here that it is imperative to verify the system's capacity to process these pollutants and the need for the liquid wastes to be free from the substances, such as PCB, which must not in the first place be dumped in landfills or discharged into the sanitary drainage network.

- h. Clarify and explain the method used by the company to inhibit carbon dioxide and methane emissions from the landfill.
- i. Establish a dedicated laboratory or deal with a laboratory with the Presidency's environmental accreditation to define the following properties of the wastes:
  1. Ignition point.
  2. Corrosion point.
  3. Reactivity.
  4. Toxicity. This shall include concentration of recognized heavy toxic metals and toxic organic matters.

**4- Water treatment:** This activity involves treatment and purification of polluted water and comprises:

- a. Treatment of industrial drainage water.
- b. Treatment of underground water.
- c. Treatment of sanitary drainage water.

**Requirements for certification to engage in this activity are as follows:**

- Identify the location of treatment plant for the industrial and sanitary drainage systems, or the location of the polluted water treatment plant or that of the underground water treatment plant, indicate their proximity to any coasts, water bodies or valleys and submit an environmental impact assessment study on these sites or projects.
- Clarify the means for transporting water to the site (drainage systems, water tank trucks... etc).
- Describe in detail the technologies used in the treatment and the method of post –treatment drainage.
- Indicate the degree of purification (initial, secondary, tertiary) of the industrial and sanitary drainage plants.
- Identify the purposes of the water discharged after treatment.

**5- Polluted soil treatment:** This activity relates to analysis and treatment of soil contaminated by oil and chemical spills and cases of seepage from poorly prepared landfills.

**Requirements for engaging in this type of work are as follows:**

- Supply machinery and equipment for collection and removal of contaminated soil.

- Provide a dedicated soil analysis laboratory manned by qualified specialists and provided with the necessary chemical analysis and measurement substances.
- Provide measurement and analysis instruments and appropriate sampling containers capable of performing the following analyses on the samples of contaminated soil: acidity, water soluble salts, oils, greases, chlorinated hydrocarbons, total concentrations of the following elements: Cu, PAH, As., V., Hg, Ni, Pb., Mn., Zn, Co, Cr, Cd, in addition to other pollutants.
- In the event a company dedicated laboratory is not provided, submit evidence of having contracted laboratories accredited by the Presidency.
- Describe in details the technologies used in the treatment as well as the method of treatment and disposal of pollutants after treatment and the qualified agencies which the company will deal with in this regard.
- Provide the necessary equipment and man power required to rehabilitate and enhance the affected sites after removal of the pollution.

**6- Medical waste management:** This activity relates to the management of the medical wastes of medical centers, laboratories and hospitals and disposal thereof in an environmentally sound manner using technologies such as microwave, autoclave, and sanitary incinerators. The activity comprises the following:

- a. Collection and hauling.
- b. Storing.
- c. Treatment and final disposal.

**Requirements for working in the field of medical wastes are as follows:**

- Supply a fleet for transportation of medical wastes equipped with appropriate refrigeration, preservation and prevention systems, submit evidence of the truck drivers having received training on how to handle accidents and define transportation itinerary and times on public roads.
- Submit sorting and collection plans and evidence of having the prerequisite experience, knowledge and training of the workers who handle such wastes and provision of dedicated equipment and clothing.
- Provide the appropriate technical and scientific expertise to handle such technologies onsite.
- Submit the specifications of the vessels and containers used for collection of wastes and label such containers with distinctive marks.
- Submit safety and emergency response plans.



- Identify, as part of the required environmental impact assessment of the treatment and disposal, the location of treatment which must be positioned far from residential areas.
- Prepare the storage site.
- Identify environmentally suitable methods for disposal of the ashes resulting from sanitary incineration or from materials treated by other technologies.
- Obtain accreditation for the technology used in the treatment.
- Indicate the emission control systems and equipment that are different from the treatment and incineration technologies.

**7- Marine environment services:** This activity is concerned with all aspects of marine pollution operations and comprises the following:

- a. Oil pollution control
- b. Chemical pollution control
- c. Collection and hauling of polluted wastes
- d. Supply of dispersants and absorbents
- e. Disposal of polluted wastes
- f. Salvation and floating of vessels
- g. Supply of control equipment
- h. Beach cleaning services
- i. Response and rescue in the high seas
- j. Unloading and reclamation of oil in the high seas
- k. Other services

**Requirements for working in the field of marine services are as follows:**

- Supply appropriate control equipment and instruments depending on the type of coasts and seas and provide means for transporting them to the scenes of the accidents.
- Provide appropriate storage facilities for the equipment and instruments.
- Provide workers trained on all related specialties and adequate for performing control operations.
- Provide appropriate marine craft for the control and vessel floating operation.
- Obtain accreditation for the technologies used in the control, bacterial and biological dispersants and absorbents.

**8- Pollution control technologies:** This activity is concerned with the importation, installation and maintenance of pollution control equipment and comprises:

- a. Importation
- b. Installation and operation
- c. Maintenance

**Requirements for engaging in importation of environmental technologies are as follows:**

- Submit the specifications of the technology and obtain the appropriate accreditation for each technology separately.
- Submit authenticated certification for the efficiency of the technology by the environmental agencies in the country of manufacture and the country where the technology has been installed and is operating.
- Give a presentation to the Presidency to demonstrate the efficiency and appropriateness of the technology.
- Obtain the required permits from the concerned agency.

**9- Environmental monitoring and laboratory services:** This activity is concerned with performing environmental pollution monitoring and establishment and preparation of dedicated environmental laboratories and comprises the following:

- a. Monitoring and analysis of water quality.
- b. Monitoring and analysis of air quality.
- c. Establishment of environmental laboratories.

**Requirements for engaging in the monitoring and laboratory services are as follows:**

- Provide mobile and stationary monitoring, control, measurement and analysis instruments to perform environmental surveys and measurements.
- Provide appropriate sampling equipment and vessels.
- Provide the required analysis and measurement substances.
- Construct a well fitted environmental laboratory building.
- Provide a chemical analysis technician and sampling technician with appropriate qualifications and expertise.
- Provide a data analysis technician.

**10- Spent oil management:** This activity involves environmentally sound methods for the collection, gathering, exportation and processing of spent oils and hydrocarbon oils and comprises the following:

- a. Transportation.
- b. Storing.

c. Treatment/disposal, recycling and exportation.

**Requirements for engaging in spent oil management:**

- Provide a fleet for the transportation of spent oils.
- Select and prepare a suitable storage site and submit an environmental impact assessment study, if required.
- Line treatment cells
- Fence off the site.
- Identify the method and technology for processing and recycling of spent oils.
- Identify environmentally sound methods for disposal of residual wastes after separation and treatment of used oils and hydrocarbons.

**Preparation of cells:**

- Line cells with an impermeable membrane to avoid leaching into underground water.
- Construct a pooling area for leaching materials in the middle of the cell.

**Kingdom of Saudi Arabia**  
**Ministry of Defense and Aviation**  
**Presidency of Meteorology and Environment**

**Hazardous Wastes Control Rules and Procedures**

**Document 01- 1423**

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**Introduction:**

Wastes can be defined as the substances which have been discarded or neglected and which cannot be put to good or beneficial use directly. Hazardous waste is a type of wastes with characteristics that render them hazardous to man's health and to the environments. They are toxic, highly reactive, flammable, explosive, corrosive, infectious or radioactive matters. The issue of hazardous wastes pollution has become one of the sources of great concerns and attention of the national and international organizations concerned with the protection of the environment due to the havoc and health and environmental risks that such wastes can cause in the event of unsound seepage into the environment.

The existence of an effective national hazardous waste management plan and minimization of their risks has become a matter of utmost urgency and necessity in order to control pollution by this type of wastes and consequently preserve man's health, safety and welfare, environmental health and conservation of natural resources.

Based on this premise, and out of its jurisdictions, duties and responsibilities for protecting the environment, enhancing its quality and shielding it against pollution, and pursuant to article II [of decision] No.86, dated 20 Sha'ban 1399 [14 July 1979], of the Supreme Commission for Administrative Reform, sanctioned by High Order No. 7/M/8903, dated 21 Rabi'II 1401 [25 February 1981], the Meteorology and Environmental Protection Presidency has developed environmental protection standards, including, among other things, control of hazardous wastes, as follows:

**Article I:**

These environmental protection standards (control of hazardous wastes) are designed to institute appropriate procedures to control the processes of production, transportation, storage, treatment and final disposal of hazardous wastes in the Kingdom of Saudi Arabia in ways that would exclude the detrimental impacts on man's health, safety and welfare and that would preserve intact the Kingdom's environment and resources in general. The plan also aims at the encouragement and development of waste recycling processes in ways that would take into account the protection of man and the environment alike.

**Article II:**

For all intents and purposes of these procedures, the following terms and expressions shall have the meaning assigned against each, except where the context requires otherwise:

**Presidency:** Means the Meteorology and Environmental Protection Presidency, established by High Order No. 7/M/8903, dated 21 Rabi'II 1401 [25 February 1981].

**Storage pond:** Means any hole in the ground or depressed or reserved area basically made of soil matter to retain the accumulated liquid-containing wastes.

**Storage:** Means retaining or containing wastes in a manner that does not target final disposal or treatment of wastes.

**Disposal:** Means incineration, sedimentation, injection or discharge of any wastes thereby causing the wastes or one of their components to be introduced into an environmental medium (soil, air, or water, including underground water)

**Discharge:** Means deliberate or inadvertent leaching, pumping, emitting or dumping a substance, including hazardous wastes, to, onto or into land, water or air.

**Environmental impact assessment report:**

Means the study(ies) performed prior to licensing of the project to identify the potential environmental impacts as well as the appropriate procedures and methods for prevention or mitigation of the negative impacts or maximization of the project's positive returns on the environment.

**Lethal dose for 50% of the species:**

Means the dose of a chemical matter administered orally or absorbed through the skin and which may lead to the death of 50% of the experimentation animals treated with this substance.



- Container:** Means any vessel used to keep or transport hazardous wastes.
- Sludge:** Means any solid, semi solid or liquid wastes resulting from the treatment processes of domestic, commercial and industrial drainage water, or any other contaminated water, or resulting from drinking water treatment processes or air pollution control instruments, but does not cover processed water from treatment plants.
- Outside the site:** Means any portion falling outside the land surrounding the facility and attached to it.
- Identification code:**  
Means the number designated by the Presidency for any hazardous waste generator or removalist or any facility for the storage, treatment or disposal of hazardous wastes.
- Person:** Means any establishment, firm, commission, ministry, municipality or any governmental or non governmental agency.
- Wastes impoundments:** Means impoundments of non- liquid wastes not placed in containers and which are not landfills or collection and storage ponds.
- Operating owner:** Means the person who owns the facility or part thereof or the person in charge of the facility management.
- Landfill:** Means any facility where wastes are disposed of using an environmentally safe method and by placing such wastes on or under ground provided that such land is neither a ground treatment facility nor a collection pond.
- Facility:** (hazardous waste management facility) means any facility, including the land on which it is established and any modifications introduced therein used to store , treat and dispose of hazardous wastes.  
Means the in-Kingdom hazardous waste management facility to which the hazardous wastes indicated on the transportation documents are shipped, and which has an identification code and permits to operate issued by the Presidency and the competent government agencies.

**Ground treatment facility:**

Means any facility where wastes are deposited or blended into the soil as a waste treatment method.

**Treatment:**

Means the method or technology used to alter the physical, biological or chemical property or composition of wastes. It is used to neutralize the wastes to allow utilization of the substances or energy in them or to convert hazardous wastes to non hazardous, less hazardous or safer wastes upon transportation, storage, disposal or preparation of wastes for the purpose of storage or volume reduction.

**Enclosed internal treatment:**

Means the process in which wastes treatment is directly linked to the industrial production process and which is used to avoid leakage of wastes or any of their components into the environment during the treatment process.

**Environmental protection standards:**

Means the standards issued by the Presidency to elucidate the overall policy for elimination of pollution in the Kingdom and which apply to the design and operation of the facility.

**Hazardous waste characteristics:**

Means the chemical, physical and biological properties of the wastes which correspond to one or more units of the hazardous wastes properties listed in schedule IV.

**Producer:**

Means the person who generates or is the principal cause for the generation of hazardous wastes to which these standards apply.

**Underground water:**

Means the water found underground within the zone of a saturated area ( less than one atmospheric pressure ?].

**Removalist:**

Means the person who is engaged or intends to be engaged in providing land, air and marine transportation of hazardous wastes outside the site.

**Safety data bulletin:**

Means comprehensive lists of all facts and information related to a specific type of hazardous wastes, including safety and emergency procedures and methods of disposal.

**Wastes:** Means the wastes identified in paragraph a, article VI.

**Hazardous wastes:**  
Means the hazardous wastes identified in paragraph b, article VI.

**Transportation documents:**  
Means the form identified by the Presidency to track hazardous wastes from the point of generation to the point of storage, treatment or final disposal.

### **Article III:**

**Scope:**  
These environmental protection standards (hazardous wastes control) shall apply to any and all producers and persons involved in the transportation, storage, treatment and disposal of hazardous wastes.

**Scope:**

- a) The Presidency shall be the sole agency with the right to interpret, construe and define the scope of these standards.
- b) The Presidency reserves the right to amend and add supplements to these standards whenever needed.

**Article IV:****The concept of hazardous wastes:**

This article defines the concepts of wastes and hazardous wastes that are subject to the environmental protection standards for control of hazardous wastes as well as the exclusions thereto.

a- wastes:

- (1) Wastes are discarded or abandoned substances not excluded under article IV which must be disposed of for any of the reasons listed under schedule I by exercising any of the processes listed under schedule II. They include discarded substances as well as substances to be recycled if gathered and collected prior to the recycling process, or otherwise incinerated to generate energy or used as feedstock to produce fuel.

b- hazardous wastes:

Wastes are deemed to be hazardous in the following events:

- I. If they belong to any of the categories listed under schedule III or if characterized by any of the properties listed under schedule IV.
- II. If they are a mix of hazardous wastes with other substances.
- III. If the Presidency decides to consider them specifically hazardous.

c- Exclusions from article VI (paragraphs a and b)

**1- The following shall not be deemed wastes:**

1. Domestic sanitary drainage water and other wastes passing through the sanitary drainage network to the treatment facility. This exclusion does not cover sludge resulting from the sanitary drainage treatment facility.
2. Final discharge of industrial waste water. This exclusion does not cover pre final discharge waste water.
3. Agricultural drainage runoff.
4. Mining residuals remaining at their natural location in the mines during extraction.

**2- The following shall not be classified as hazardous wastes:**

- a- If they do not belong to one of the categories listed in schedule III, do not answer to any of the descriptions given in schedule IV or are not subject to the description given in paragraph b, article IV.
- b- Domestic wastes: means any wastes generated in homes, including individual and group residences, hotels, residential complexes and recreational facilities.
- c- Inert wastes: means any substance that is not chemically or biologically reactive in the natural environment. They usually come in the form of glass, concrete, construction debris, plastic, wood, rubber, wires, metal sheets or uncontaminated soil.
- d- Commercial and industrial trash: means commercial and industrial garbage similar to domestic inert wastes. This exclusion does not cover wastes containing solvents, degreasers, oils, inks, sludge pastes, acids, alkali, or any types of wastes other than non domestic.
- e- Wastes resulting from agricultural activities which are returned to the soil as fertilizer, but do not include pesticides, weeds and chemical fertilizers.
- f- Wastes resulting from animal breeding which are returned to the soil as fertilizer.
- g- The soil returned to mines upon completion of the mining operations.
- h- Wastes that have been recycled in an acceptable manner.

**Article V:****Producers of hazardous wastes:****a-Scope of application:**

The hazardous wastes standards apply to all producers of wastes including the various commercial, industrial and occupational institutions, companies and establishments, but do not apply to domestic wastes.

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**b- Standards for waste generators:**

1. Waste generators are generally held responsible for identification of the types of wastes and hazardous wastes they generate, as well as for ensuring that such wastes are stored, treated and disposed of in an environmentally sound manner that does not cause the wastes to be scattered all over the place or have a detrimental effect on man's health, safety and welfare or the environment and the natural resources.
2. All commercial, industrial and occupational producers of wastes shall be required to:
  - a. Check with the Presidency as provided for in article VIII to find out whether or not they generate hazardous wastes. There will be no need to check with the Presidency if the wastes are categorically excluded under paragraph b, article IV.
  - b. Refrain from hauling wastes that are not excluded under paragraph b, article VI, outside the facility until they check with the Presidency and shall meanwhile store such wastes in an environmentally sound manner.

**c-Standards for hazardous waste generators:**

1. Based on the review provided for in paragraph b article IV, the Presidency shall assign an exclusive identification code for the producer once it determines that the producer does generate hazardous wastes.
2. The producer of the hazardous wastes shall be required to:
  - a. Have a physical, chemical and biological description and analysis for all of the hazardous wastes it produces.
  - b. Store, treat or dispose of hazardous wastes only after obtaining an identification code from the Presidency.
  - c. Refrain from delivering hazardous wastes to a removalist or facility which does not have a license to operate from the Presidency.
  - d. Refrain from delivering any consignment of hazardous wastes for transportation outside the facility without being accompanied by an approved transportation document.
  - e. A hazardous waste generator who stores hazardous wastes at the site where the wastes are generated for more than three months shall be deemed operator of a storage facility and shall be required to comply with the standards for the facilities of hazardous waste management as set forth in article VII.

d-Exclusion of minor quantities:

1. A producer shall be considered a minor producer if the facility generates less than 100 kg or less than half a barrel a month (thirty days).
2. Excluding the provisions of paragraphs d-4, 5 and 6, article V, minor quantities of hazardous wastes shall not be subject to the provisions of articles VI, VII, and VIII of these standards.
3. The minor producer shall deliver the quantities generated to a facility licensed to store, process and disposal of hazardous wastes.
4. A minor producer who stores hazardous wastes at the site where they are generated for more than six months shall be deemed a storage facility operator and shall be required to comply with the standards for the facilities of hazardous waste management set for the in article VII.
5. If the minor producer generates more than 100 kg of hazardous wastes a month, it shall be required to comply with all of the provisions of this article, including checking with the Presidency to obtain an identification code and generate a hazardous waste transportation document.
6. This exclusion shall not apply to extremely hazardous wastes, i.e. lethal to man in small doses or doses lethal to 50 % of the species (oral for rats less than 50 mg per kg of body weight or through the skin for rabbits in amounts less than 200 mg per kg of body weight) or in concentrations lethal to 50 % if the species (inhalation for rats in amounts less than 2 gm per cubic meter of the body volume) or which cause intractable or chronic diseases.

e-Shipping outside the site:

Prior to shipping any hazardous wastes outside the facility, the generator of hazardous wastes shall comply with the following:

1. Pack, package, and place warning labels on each package of hazardous wastes in a proper and sound manner in accordance with the specifications and standards applicable in the Kingdom.
2. Accurately fill in the product data on the appropriate section of the hazardous waste transportation document in accordance with the instructions provided in the document.
3. Ensure, by checking with the Presidency, that the storage, treatment or disposal facility designated in the transportation document is capable of managing the wastes that will be shipped to it.
4. Make the necessary arrangements with both the removalist which will carry the wastes and the facility designated in the transportation documents for acceptance of the wastes which will be shipped to it (such as providing the

- facility with full and detailed information on the wastes or samples thereof for analysis).
5. Provide the removalist with the transportation document and copy of the safety data sheets for each type of hazardous wastes to be shipped.
  6. Comply with the hazardous wastes shipping instructions provided in the shipping document.

**f- Keeping of records and reports:**

The hazardous waste generator shall, where keeping of records and reports is concerned, shall comply with the following:

1. Keep one copy of each shipping document it has generated pending receipt of the signed copy from the facility designated in the document. It shall also keep the signed copy for at least 5 years as of the date of receipt of the wastes by that facility.
2. Retain, for at least five years from the last date of handling of such wastes, copies of the results of all testes and analyses performed on hazardous wastes as well as copies of all pertinent reports, correspondence and documents.
3. Submit to the Presidency an annual report on all hazardous wastes generated during the year. Copies of such reports shall be retained for at least five years from the date of completion of such reports.
4. Submit on demand to the Presidency or the agencies designated by it all documents, records and reports related to the wastes.

**g- Special conditions:**

1. Producers of hazardous wastes, excluding producers of minor quantities, who store, treat or dispose of hazardous wastes shall comply with the standards for hazardous waste management set forth in article VII.
2. Producers of hazardous wastes who export or intend to export for any reason whatsoever hazardous wastes across the Kingdom's borders shall be required to comply with the procedures developed by the Presidency for transportation of hazardous wastes across the borders and in accordance with Basel Convention on the Control of Transboundary Movements of Hazardous Wastes.

**Article VI:**

Standards for removalists of hazardous wastes



a-Scope of application:

The hazardous wastes removalist standards shall apply to any person who removes or intends to remove or relocate hazardous wastes outside the site. These standards, however, shall apply neither to the wastes excluded under paragraph c of article IV nor to the relocation of hazardous waste within the site by the waste generators or owners and operators of the hazardous waste management facilities.

1. The removalist who stores documented shipments of hazardous wastes for more than five days shall be deemed an storage facility operator and shall be required to comply with the standards of the hazardous wastes management facilities set forth in article VII
2. The removalist who mixes hazardous wastes of different shipping requirements inside a single container shall be required to comply with the standards for the hazardous waste generators set forth in article V.
3. Each removalist who exports or intends to export for any reason whatsoever hazardous wastes across the Kingdom's borders shall be required to comply with the procedures set forth by the Presidency for transboundary transportation of hazardous wastes

**Article VII**Standards for hazardous wastes management facilities:a- Scope of application:

This article sets forth the minimum environmental protection standards applicable to hazardous wastes storage, processing and disposal facilities as well as to the operators of such facilities, but not to the following:

1. Management of the wastes excluded under article IV (Para c.2).
2. Closed internal treatment operations.
3. Wastewater treatment operations.
4. Recycling operations per se, excluding storage or treatment of hazardous wastes prior to recycling or the hazardous wastes produced during and after recycling.
5. Treatment and disposal of hazardous wastes inside the site performed by small quantity producers as defined in Para. D article V, on the proviso that the accumulated quantity at any time should not be more than 100 kg.

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b- Standards for hazardous wastes management:

1. Producers and owners of hazardous waste management facilities shall be responsible for identifying the type of wastes that the facility deals with and for making sure that the facility's operating processes have no adverse effect on man's health, safety and welfare or on the environment and natural resources.
2. Each hazardous waste management facility shall be required to secure a license from the competent agency as well as an identification code and engagement in business from the Presidency. This shall be done by applying to the Presidency as set forth in article VIII.
3. Each operator or owner who transports or ships wastes shall be required to comply, beginning with the facility, with the standards for producers of hazardous wastes as provided for in article V.

c-Acceptance and taking delivery of wastes:

Each owner and operator of a hazardous waste management facility shall be required to:

- 1- Refrain from accepting any hazardous wastes that are not accompanied by an approved shipping document.
- 2- Refrain from accepting any hazardous wastes that are not accompanied by the pertinent safety data sheets.
- 3- Refrain from accepting any hazardous wastes from a removalist who has not been licensed by the Presidency.
- 4- Comply with the instructions contained in the shipping documents of the hazardous wastes.

d- Reporting and keeping of records:

The owner and operator of a hazardous waste management facility shall:

1. Keep records of the facility's operating processes comprising the following:
  - a. Description of the type, quantity and method of storage, treatment and disposal of each shipment of hazardous wastes received at the facility.
  - b. The location and quantity of each hazardous waste shipment in the facility.
  - c. Results, records and analysis of the wastes.
  - d. Summary and results of the inspection operations performed.
  - e. Details of any programs for monitoring air or underground water quality.

- f. Details of the cases requiring initiation of the emergency plan procedures.
- g. The net results of the surveillance program data.
- h. Copies of the waste shipment data and related reports.
- i. Copies of all safety data sheets related to the wastes.
- j. Any memos or reports prepared in connection with the hazardous wastes processes at the facility.

- 2- Immediately submit upon demand all of the records set forth in paragraph d.1, article VII, or otherwise make them available within a maximum period of 30 days as of the date such records are requested by the Presidency or the agency designated by the Presidency.
- 3- Retain all of the records set forth in paragraph d.1 pending the shut down of the facility at which point copies of the records showing the quantities and final disposal locations of the wastes shall be surrendered to the Presidency.
- 4- Submit to the Presidency an annual activity report providing the following information:
  - a. Name, address and the Presidency-designated identification code of the facility and the period covered by the report.
  - b. The identification codes of hazardous waste generators and removalist from which wastes have been received.
  - c. Description of the type and quantity of each shipment of hazardous wastes received from each producer separately.
  - d. Method of storage, treatment or disposal of each shipment of hazardous wastes.
- 5- Submit to the Presidency every three months the air quality information set forth in paragraph h.4, article VII. Such information shall provide a summary on each incidence of deviation from the air quality standards established by the Presidency.
- 6- Submit to the Presidency copy of each completed shipping document for each consignment of hazardous wastes in accordance with the instructions contained in the shipping documents.
- 7- Have all reports, records and information mentioned in this article authenticated by the owner, operator or their assigns in the facility.

e- The programs required for the facility:

**1- General Programs:** All owners and operators of hazardous waste facilities shall be required to develop the following general programs and plans (and provide copies thereof):

- a. A waste analysis plan indicating the methods of physical, chemical and biological analysis for each type of hazardous wastes handled in the facility.
- b. A plan detailing the inspection procedures for the safety and security instruments and the operation, monitoring and emergency equipment in the facility and a schedule showing the frequency of inspections and the type of troubleshooting.
- c. A plan for training facility personnel on the hazardous wastes management processes, inspection and emergency procedures and use of emergency equipment.
- d. A security plan showing the method of denying unknown and unauthorized persons access to the hazardous wastes management zone in the facility.
- e. Procedures describing methods of how to avoid ignition of flammable and reactive wastes and sudden reaction and ways to avoid mixing of incompatible wastes.
- f. Emergency plan describing the emergency equipment and the detailed processes for controlling explosions and leaks of hazardous wastes, evacuation procedures and emergency exits for the facility personnel.
- g. Plan showing the shutdown procedures of the hazardous wastes units, pollution cleanup operations, maintenance and monitoring of units and facilities as may be required after each shutdown. Care of each unit should begin immediately after shutdown and continue for thirty years. The post shutdown maintenance and surveillance standards shall be coordinated with the Presidency.
- h. Occupational health and safety program and a plan describing personnel medical check up procedures.

**2- Special programs:** The owners and operators of hazardous wastes management facilities shall implement the appropriate special programs for the facility operations designated by the Presidency which shall include the following:

- a. Design, construction, operation and maintenance of hazardous waste management units in an environmentally sound manner that would ensure absence of leaks of hazardous wastes and any of their components into the environment.
- b. Specifications of the hazardous waste storage, treatment and final disposal processes.
- c. Periodical monitoring and inspection of the hazardous waste management units and operation equipment.

- d. Decontamination of the facility and the used equipment and instruments at the time of shutdown and for the duration required to retain the site of the shutdown facility.
- e. Any other environmental conditions and considerations that the Presidency deems necessary and binding.

### **3-Underground water observation programs:**

- a. Owners and operators of storage ponds, waste impoundments, landfills and similar facilities shall be required to design and install underground water monitoring programs that would allow immediate detection and identification of the impacts of the hazardous wastes storage and treatment processes on underground water resources and consult with the Presidency relative to the applicable technical standards and criteria.
- b. The underground water monitoring program requirements may be waived if the Presidency rules out the possibility of leaks into the underground water aquifer based on the facility design parameters and the geological and hydrological data.
- c. If the underground water surveillance data indicate high water table, the Presidency may demand institution of additional procedures, including:
  - 1. Detailed description of the characteristics of the impact.
  - 2. Modification of the surveillance programs.
  - 3. Study and implementation of a program for removal and addressing any underground water contamination by hazardous wastes.
  - 4. Any other procedures that the Presidency deems necessary for the protection of man's health and the environment.
- d. Information on the underground water quality gathered under this paragraph shall be submitted to the Presidency every six months during the facility operation period and annually during the post shutdown period. Such reports and information shall indicate any possible impact on the underground water.

### **4- Air quality control programs:**

- a- Owners and operators of storage ponds, waste impoundments, landfills and similar facilities shall be required to install appropriate air quality monitors as the Presidency deems necessary. Such monitoring of air quality shall be undertaken in consultation with the Presidency.
- b- The air quality monitoring program requirements may be waived if the Presidency rules out the possibility of negative impacts on the ambient air quality standards based on corroborative data (such as facility design parameters)

e. If the air quality surveillance data indicate a progressive negative impacts on the ambient air quality standards, the Presidency may demand institution of additional control procedures, including:

1. Installation of emission control instruments.
2. Modification of the surveillance programs.
3. Modification of the procedures used the facility for handling, storage, treatment and disposal of hazardous wastes.
4. Any other procedures that the Presidency deems necessary for the protection of man's health and the environment.

d-The ambient air quality information gathered under this paragraph shall be submitted to the Presidency at least quarterly during the facility operation period. The information report shall include a summary on each incidence of deviation from the air quality standards and the steps taken by the facility to minimize emissions.

### **Article VIII:**

The owner, operator or official of the establishment or company shall be required to authenticate all and any information submitted to the Presidency. The Presidency reserves the right to request more information, tests or analysis to verify the accuracy of the information provided to it and the extent of compatibility with the environmental protection standards.

a) Procedures related to waste generators:

1. Under paragraph b, article V, producers of wastes from commercial, industrial or occupational facility, other than the exclusions, shall submit the following information when they check with the Presidency:
  - a. Name, address and telephone number or the producing facility owner and operators.
  - b. Name, telephone number, mailing address and contact of the producing facility.
  - c. Location and area of the facility, enclosing a map depicting the site in an appropriate scale.
  - d. Nature of the facility (brief profile).
  - e. Description of the waste- generating activities and operations.
  - f. Type, properties and monthly quantities of all wastes generated by the facility.

- g. Brief description of the facility's waste storage, treatment and disposal activities and the equipment used for these purposes, enclosing a map depicting the location of each in an appropriate scale.
  - h. Identification of the hazardous wastes produced in the facility in accordance with the definition set forth in article IV.
  - i. Description of the methods used for processing and disposal of hazardous wastes (inside and outside the facility).
  - j. Identification of any other environmental discharges or emissions in the facility (such as waste water, air emissions and others).
- 2-The Presidency will notify the operating public facilities that generate hazardous wastes and require them to check with the Presidency to provide the information set forth paragraph 1, article VIII within 90 days as of the date of notification.
- 3- Proposed facilities (under establishment or construction) which produce hazardous wastes shall be required to check with the Presidency and submit to it the information set forth in paragraph a.1, article VIII within 60 days from the date of issue of the license by the competent government agency.

b- Procedures related to hazardous waste removalist:

- 1-Under paragraph b, article VI, hazardous waste removalists shall be required to submit a written application to obtain both an identification code and a work permit from the Presidency and to this end shall submit the following information:
- a- Name, address and mobile telephone number (of the owner and operator) and the location of the head offices.
  - b- Description of the means of transportation and the equipment used as well as the locations where the wastes are kept.
  - c- Lists of the emergency equipment and their capabilities.
  - d- Designation of stations and facilities for cleaning and maintenance of the equipment and means of transportation.
  - e- Inspection plan for the equipment, means of transportation and waste collection locations.
  - f- The contingency plan to be used in cases of emergency and the events of hazardous waste leaks during delivery, acceptance and transit operations.
  - g- Description of the personnel training program.
  - h- Identification of the service areas and itinerary of the means of transportation.

- i- Identification of the type and volume of the anticipated hazardous wastes that can be hauled and accommodated.
- j- Any other information that the Presidency deems appropriate and necessary.

c. Procedures related to hazardous wastes management facilities:

1. Under paragraph b, article V, all hazardous waste management facilities shall be required to obtain an identification code and work permit from the Presidency. Owners and operators of such facilities shall submit a written request to the Presidency amplified by the following information:

- a. Name, address and telephone number or the facility's owner and operators.
- b. Name, telephone number, mailing address and contact of the producing facility.
- c. Location and area of the facility.
- d. Detailed description of the technologies and methods used in the hazardous wastes storage, treatment and disposal processes, including the design and engineering specifications.
- e. Number of facility personnel and the specialty of each of them.
- f. Identification of the types of hazardous wastes that can be stored, processed and disposed of in the site and the facility's operating capacity.
- g. Identification of any other environmental discharges or emissions in the facility.
- h. The precautions taken at the facility with respect to occupational health and safety.
- i. Any other additional information that the Presidency deems necessary.

2-The following information shall be provided by the Hazardous Wastes Department in consultation with the Presidency, to enable the latter to issue the required license:

- a. The facility's environmental impacts report.
- b. The facility's overall programs set forth in article VII (h.2)
- c. The underground water and air quality control programs set forth in article VII (h.3.4).

d. Procedures related to modification of existing facilities:

owners and operators, be they hazardous waste generators, removalists or management facilities, who wish to introduce major modifications in an existing



facility (including installation or change of storage, processing or disposal units, or addition of waste flow line, type or volume), which have not been reviewed by the Presidency yet, shall be required to submit the full and detailed information relative to such modifications, including the designs and engineering specifications.

e. Procedures related to the change of ownership or management of existing facilities:

1. The Presidency shall be notified of any change in the ownership, management or operation of any existing facility, whether such a facility is a produce, removalist or hazardous waste management facility and the new owner or operator shall submit to the Presidency the appropriate information required under article VIII (paragraphs a, b and c) at least sixty days ahead of the date of such change.
2. Immediately upon effecting the change of title, management or operation, all provisions of these standards and any decisions or conditions issued in response thereto shall be transferred and conveyed to the new owner or operator of the facility.

**Article IX:**

Any person who is subject to the environment protection standards (hazardous wastes control) may apply to the Presidency for exemption from or modification of any of the provisions of these standards.

a. How to apply for exemption:

An application shall be submitted to the Presidency providing the following information:

- Name and address of the applicant.
- Identification of the provisions of the standards for which exemption or modification is sought.
- Substantiation of the fulfillment of the provisions listed under article IX (paragraph a.2) will result, based on the special circumstances of the applicant's case, in assuming substantial financial or technical burdens or any other safety related obligations to be borne by the applicant or the public.
- If the application is approved, the applicant shall be required to submit evidence that the proposed activity will have no serious impacts on man's health, safety and welfare or on the environment and natural

resources and that it will be consistent with the objectives of the environmental protection standards for hazardous waste control [sic].

b. Obligations:

If any application for modification or exemption is granted, the Presidency reserves the right to impose any specific conditions that the Presidency deems necessary to ensure that the applicant's activity will have no detrimental impacts on man's health, safety and welfare or on the environment and natural resources.

**Article X:**

All information submitted to the Presidency under the provisions of the environmental protection standards for hazardous wastes control shall be deemed publishable on an as need basis.

Any person may apply to the Presidency to request that the information provided by him under the provisions of these standards be treated as strictly confidential. If such request is granted, the Presidency guarantees that such information shall be disclosed or published only with the express written consent of the person who provided that information.

a. Confidential information:

Information of a confidential nature covers any plans, concessions, specimens, technologies, client lists, production data or classified information, subject to the conditions that such information be used in the invention, production, or installation of a unit, deal or service of a commercial value that gives its owner an opportunity to realize a commercial advantage over his competition.

c. Identification of the confidential information:

The applicant under these standards shall submit a written request to the Presidency to identify the information to be classified as confidential under the information confidentiality clause.

## **Appendix I**

### **Materials classified by the Presidency as wastes:**

- a. Products with expired validity.
- b. Spilled, lost substances or those exposed to accidents, including all materials and tools contaminated as a result of an accident.
- c. Substances contaminated as a result of a deliberate act, such as cleaning operations wastes, packaging materials... etc.
- d. Unusable materials or parts, such as spent batteries, consumed catalysts... etc.
- e. Materials that no longer serve the intended purpose, such as contaminated acids, contaminated solvents, spent salts...etc.
- f. Industrial processes waste, such as slag, distillation residues...etc.
- g. Residues of pollution control processes, such as sludge resulting from gas scrubbers, stack dust collection bags, used filters...etc.
- h. Wastes of automated operations and final complementary processes, such as lathe shavings, mill chaffs...etc.
- i. Raw material use and fabrication, such as mining residues and oil field sludge.
- j. Fraudulent or fake materials.
- k. Substances and products banned under the rules and regulations.
- l. Products whose use is no longer required, such as agricultural, home, commercial and office refuse.
- m. Byproducts of contaminated soil reclamation and cleaning .
- n. Substances or products whose owners wish to discard or dispose of, including the above items.
- o. Other production and consumption refuse not listed above.

## **Appendix II**

### **Methods of waste disposal:**

- a. The processes which impede possible recovery, recycling, extraction or reuse of materials in direct or alternative applications practiced in actual reality are:

- D1- deposit wastes into or onto land, (e.g. landfill, etc)
- D2- land treatment, (e.g. biodegradation of liquid or sludgy discards in soils, etc)
- D3- Deep injection, (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc)
- D4- Surface impoundment, (e.g. placement of liquid or sludge discards into pits, ponds or lagoons, etc)
- D5- Specially engineered landfills, (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc)
- D6- Release into a water body except seas and oceans.
- D7- Release into seas and oceans, including sea-bed insertions.
- D8- Biological treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this section.
- D9- Physiochemical treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this section (e.g. evaporation, drying, calcinations, neutralization, sedimentation, etc)
- D10- Incineration on land.
- D11- Incineration at sea.
- D12- Permanent storage, (e.g. placement of containers in a mine, etc)
- D13- Blending and mixing prior to submission to any of the operations listed in this section.
- D14- Repackaging prior to submission to any of the operations listed in this section.
- D15- Storage pending submission to submission to any of the operations listed in this section.

**b-Recovery operations:** The processes which may result in possible recovery, recycling, extraction or reuse of materials in direct or alternative applications such as:

- R1** Use as a fuel (other than in direct incineration) or other means to generate energy.
- R2** Reclamation and regeneration of solvents.
- R3** Recycling and reclamation of organic substances which are not used as solvents.
- R4** Recycling and reclamation of metals and metal compounds.
- R5** Recycling and reclamation of non organic materials.
- R6** Regeneration of acids or bases
- R7** Recovery of elements and components used for pollution abatement.
- R8** Recovery of components from catalysts.
- R9** Used oil re-refining or other reuses of previously used oil.
- R10** Land treatment resulting in benefit to agriculture, ecological improvement or protection of wildlife.
- R11** Uses of residual materials obtained from any of the operations numbered R1 to R10.
- R12** Exchange of wastes for submission to any of the operations numbered R1 to R11.
- R13** Accumulation of material intended for any of the operations mentioned in this section.

### **Appendix III**

#### **Hazardous wastes:**

##### **a- Waste Streams:**

- Y1** Clinical wastes from medical care in hospitals, medical centers and clinics
- Y2** Wastes from the production and preparation of pharmaceutical products, drugs and medications
- Y3** Wastes from the production, formulation and use of biocides and phytopharmaceuticals
- Y4** Wastes from the manufacture, formulation and use of wood preserving chemicals
- Y5** Wastes from the production, formulation and use of organic solvents
- Y6** Wastes from heat treatment and steel tempering operations containing cyanides
- Y7** Waste mineral oils unfit for their originally intended use
- Y8** Waste oils/water, hydrocarbons/water mixtures, emulsions
- Y9** Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs) and/or polychlorinated terphenyls (PCTs) and/or polychlorinated biphenyls (PBBs)
- Y10** Waste tarry residues arising from refining, distillation and any pyrolytic treatment
- Y11** Wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish
- Y12** Wastes from production, formulation and use of resins, latex, plasticizers, glues and adhesives
- Y13** Wastes chemical substances arising from research and development or teaching activities which are not identified and/or are new and whose effects on man and/or the environment are not yet known
- Y14** Wastes of an explosive nature not subject to other legislation
- Y15** Wastes from production, formulation and use of photographic chemicals and processing materials
- Y16** Wastes resulting from surface treatment of metals and plastics
- Y17** Residues arising from industrial waste disposal operations

**b. Wastes having as constituents:**

- Y18** Metal carbonyls
- Y19** Beryllium and beryllium compounds
- Y20** Hexavalent chromium compounds
- Y21** Copper compounds
- Y22** Zinc compounds
- Y23** Arsenic and arsenic compounds
- Y24** Selenium and selenium compounds
- Y25** Cadmium and cadmium compounds
- Y26** Antimony and antimony compounds
- Y27** Tellurium and tellurium compounds
- Y28** Mercury and mercury compounds
- Y29** Thallium and thallium compounds
- Y30** Lead and lead compounds
- Y31** Inorganic fluorine compounds excluding calcium fluoride
- Y32** Inorganic cyanides
- Y33** Acidic solutions or acids in solid form
- Y34** Basic solutions or bases in solid form
- Y35** Asbestos (dust and fibres)
- Y36** Organic phosphorus compounds
- Y37** Organic cyanide compounds
- Y38** Phenols and phenol compounds, including chlorophenol compounds
- Y39** Ether compounds
- Y40** Halogenated organic solvents
- Y41** Organic solvents other than halogenated solvents
- Y42** Any congener of polychlorinated dibenzo-furan
- Y43** Any congener of polychlorinated dibenzo-p-dioxin
- Y44** Organic halogen compounds other than substances referred to in this Annex (e.g. Y38, Y40, Y42, and Y43)

**c. CATEGORIES OF WASTES REQUIRING SPECIAL CONSIDERATION**

- Y45** Domestic wastes containing hazardous wastes
- Y46** Residues arising from the incineration of household wastes

UN Class	H Code	Characteristics	Description
1	H1	Explosive	Substances, wastes or mixture of substances or solid and liquid wastes capable in themselves of producing chemical reaction, gas of high temperature, under a pressure and a velocity leading to damage to the surrounding medium.
3	H3	Inflammable liquids	Substances, mixture of liquids or liquids containing solids in a solution or suspension, such as paints, varnishes, lacquers, etc that emit flammable vapours in temperatures not more than 60 C
4.1	H4.1	Inflammable solids	Solid substances or wastes, other than those classified as explosives, which are flammable in transit and which may cause or contribute through friction to ignition of fires
4.2	H4.2	Spontaneous combustion	Substances or wastes that are spontaneous and self heating under normal circumstances in transit or capable of heating in contact with air whereupon it becomes flammable
4.3	H4.3	Materials emitting inflammable gas in contact with water	Substances and wastes exposed when they react with water to becoming spontaneously flammable and to emitting flammable gases
5.1	H5.1	Oxidizing	Substances and wastes that may not necessarily be spontaneously flammable, but may generally cause or contribute to the ignition of other substances through production of oxygen.
5.2	H5.2	Organic peroxides	Organic substances and wastes which are thermally unstable containing 1-1
6.1	H6.1	Poisonous (acute)	Waste substances that may cause death or seriously hurt or cause damage to man's health if ingested, inhaled or came in contact with the skin
6.2	H6.2	Infectious	Substances or wastes containing micro organisms or their toxins, known or suspected of causing diseases in man or animals
8	H8	Corrosive	Substances or wastes which cause, through chemical reactions, serious damage on contact with live tissues or cause in the event of leak material damage to or even destruction of and other risks to goods or means of transportation
9	H10	Liberation of toxic gases in contact with air or water	Substances and wastes which may emit toxic gases in large quantities when they react with air or water
9	H11	Toxic (delayed or chronic)	Substances or wastes which yield delayed or chronic effects, including cancer, when they are inhaled or ingested or if they penetrate the skin
9	H12	Ecotoxic	Substances or wastes which may cause when released direct or delayed damage to the environment due to accumulation in living organisms or their toxic effects on biosystems
9	H13		Substances capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above.

Corresponds to the hazardous waste classification system provided in the UN's recommendations on the transportation of hazardous wastes (ST/SG/AC.10/1/REV.5, UN, New York, 1988).



## **Appendix-2**

### **Fundamentals and procedures for assessment of environmental impacts of industrial and developmental projects**

#### **First: Individual projects:**

3. The licensing agency shall classify the project for which a license is being sought in accordance with the industrial and developmental projects classification guide (appendix No. 2.1) issued by the competent agency.
4. Based on the classification of the project, the licensing agency shall:

##### **First category:**

Provide the project proponent with the initial environmental assessment form (first category form, appendix 2.2)

##### **Second category:**

Provide the project proponent with the initial environmental assessment form (second category form, appendix 2.3)

##### **Third category:**

Inform the project proponent that the project is classified as a category three project which calls for a comprehensive project environmental impact assessment in triplicate by a qualified consulting office approved by the licensing agency or a university research center. The proponent shall be given copy of the general guidelines for the generation of the environmental impact assessment of industrial and developmental projects (appendix 2.4) and shall be required to check with the licensing agency to coordinate the development of the study.

- 3- The project proponent shall implement the project (as per the classification) as follows:

##### **First category:**

Complete the initial environmental assessment form for the first category projects (first category project form, appendix No.2.2) and generate a preliminary simplified report on the project.

##### **Second category:**

Have a qualified consulting office approved by the licensing agency or a university research center complete the initial environmental assessment form

for the second category projects (second category project from, appendix No.2.2) as well as generate a summary environmental report on the project.

**Third category:**

Retain a qualified consulting office approved by the licensing agency of a university research center to conduct an environmental assessment study for the project in accordance with the guidelines for the development of environmental impact assessment for industrial and developmental projects (appendix No.2.4) in coordination with the competent agency which must be contacted to coordinate the development of the study.

- 4- The competent agency shall receive from the licensing agency, the project proponent, an approved and qualified consulting office or a university research center the following according to the classification of the project:

**First category:**

The initial environmental assessment form for the first category projects completed by an environmentalist and the initial simplified report on the project.

**Second category:**

The initial environmental assessment form for the second category projects completed by a qualified consulting office approved by the licensing agency or a university research in addition to two copies of the summary environmental technical report, as well as the project drawings, equipment and instrumentation catalogs.

**Third category:**

Three copies of the project environmental impact assessment prepared by a qualified consulting office approved by the licensing agency or a university research center in accordance with the guidelines for the development of environmental impact assessment for industrial and developmental projects after coordination with the competent agency.

- 5- According to the classification of the project, the competent agency shall:

**First category:**

Review and scrutinize the information contained in the first category project form which has been completed by an environmentalist, the simplified initial report on the project and all of the attached information. Based on this study and the findings of the review of the forms, reports and attached information, the following actions shall be taken:

e. In the event of unconditional approval:

The project proponent shall be issued an unconditional approval on the understanding that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the licensing and other concerned agencies. Copy of the approval shall be forwarded to the licensing agency.

f. In the event of conditional approval:

The project proponent shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all standards and criteria issued by the Presidency as well as the rules and instructions of the licensing and other concerned agencies. Copy of the approval shall be given to the licensing agency.

g. In the event a partial environmental study is requested:

The project proponent shall be informed of the requirement to develop a partial environmental study that should focus on specific environmental concerns depending on the type of the project and the associated activity. Copy of the letter will be forwarded to the licensing agency.

h. In the event the project is rejected.

The proponent will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated. Copy of the letter will be forwarded to the licensing agency.

**Second category:**

a. In the event of unconditional approval:

The project proponent shall be issued an unconditional approval on the proviso that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the licensing and other concerned agencies. Copy of the approval shall be forwarded to the licensing agency.

b. In the event of conditional approval:

The project proponent shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all standards and criteria as well as the rules and instructions of the licensing and other concerned agencies. Copy of the approval shall be given to the licensing agency.

c. In the event an environmental study is requested:

The project proponent shall be informed of the requirement to have a comprehensive environmental study be developed in triplicate by a qualified consulting office approved by the competent agency or a university research center (occasionally, a partial environmental study may be requested, focusing on specific environmental concerns depending on the type of the project and the associated activity). Copy of the letter will be forwarded to the licensing agency.

d. In the event the project is rejected.

The proponent will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated. Copy of the letter will be forwarded to the licensing agency

**Third category:**

a. In the event of unconditional approval:

The project proponent shall be issued an unconditional approval on the proviso that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the licensing and other concerned agencies. Copy of the approval shall be forwarded to the licensing agency.

b. In the event of conditional approval:

The project proponent shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all environmental standards and criteria set by the Presidency as well as the rules and instructions of the licensing and other concerned agencies. Copy of the approval shall be given to the licensing agency.

d. In the event the project is rejected.

The proponent will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated. Copy of the letter will be forwarded to the licensing agency.

**Second: Projects of public, concerned and licensed agencies:**

1-The public, concerned, or licensed agencies which own, implement or operate the project shall, in cooperation with the competent agency, identify the category of the project.

2- Based on the project classification (appendix 2.1), the competent agency shall take the following actions:

**First category:**

Provide the public, concerned or licensed agency which owns, implements or operates the project with the initial environmental assessment form (first category project form, appendix 2.2)

**Second category:**

Provide the public, concerned or licensed agency which owns, implements or operates the project with the initial environmental assessment form (second category project form, appendix 2.3)

**Third category:**

Inform the public, concerned or licensed agency which owns, implements or operates the project that its project is classified as a category three project which calls for a comprehensive project environmental impact assessment in triplicate by a qualified consulting office approved by the licensing agency or a university research center. The agency shall be given copy of the general guidelines for the generation of the environmental impact assessment of industrial and developmental projects (appendix 2.4) and shall be required to check with the licensing agency to coordinate the development of the study.

3- The public, concerned or licensed agency which owns, implements or operates the project shall implement the project (as per the classification) as follows:

**First category:**

Complete the initial environmental assessment form for the first category projects (first category project form, appendix No.2.2) and generate a preliminary simplified report on the project.

**Second category:**

Have a qualified consulting office approved by the competent agency of a university research center complete the initial environmental assessment form for the second category projects (second category projects, appendix No.2.3) as well as generate a summary environmental report on the project.

**Third category:**

Retain a qualified consulting office approved by the competent agency of a university research center to conduct an environmental assessment study for the project in accordance with the guidelines for the development of

environmental impact assessment for industrial and developmental projects (appendix No.2.4) in coordination with the competent agency which must be contacted to coordinate the development of the study.

4- The competent agency shall receive from the public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) or from a consulting office approved and qualified by the competent agency or a university research center the following according to the classification of the project:

**First category:**

The initial environmental assessment form for the first category projects completed by an environmentalist and the initial simplified report on the project.

**Second category:**

The initial environmental assessment form for the second category projects completed by a qualified consulting office approved by the competent agency or a university research center in addition to two copies of the summary environmental technical report, the project design drawings and equipment and instrumentation catalogs.

**Third category:**

Three copies of the project environmental impact assessment prepared by a qualified consulting office approved by the competent agency or a university research center in accordance with the guidelines for the development of environmental impact assessment for industrial and developmental projects after coordination with the competent agency.

5- According to the classification of the project, the competent agency shall:

**First category:**

Review and scrutinize the information contained in the first category project form which has been completed by an environmentalist, the simplified initial report on the project and all of the attached information. Based on this study and the findings of the review of the forms, reports and attached information, the following actions shall be taken:

a- In the event of unconditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project

by the public, concerned or licensed agency which owns or operates the project) shall be issued an unconditional approval on the understanding that such agency shall observe and comply with all environmental standards, criteria, rules and instructions issued by the licensing and other concerned agencies.

b-In the event of conditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued a conditional approval by which such undertakes to carry out the required conditions attached thereto and to comply with all environmental standards and criteria issued by the competent agency as well as the rules and instructions of other concerned agencies.

c-In the event a partial environmental study is requested:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be informed of the requirement to develop a partial environmental study that should address specific environmental concerns depending on the type of the project and the associated activity.

d- In the event the project is rejected.

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated.

### **Second category:**

a. In the event of unconditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued an unconditional approval on the proviso that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the competent and other concerned agencies.

b. In the event of conditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all environmental standards and criteria as well as the rules and instructions of the licensing and other concerned agencies. Copy of the approval shall be given to the licensing agency.

c. In the event an environmental study is requested:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be informed of the requirement to have a comprehensive environmental study be developed in triplicate by a qualified consulting office approved by the competent agency or a university research center (occasionally, a partial environmental study may be requested to address specific environmental concerns depending on the type of the project and the associated activity).

d. In the event the project is rejected.

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated.

**Third category:**

a. In the event of unconditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the project) shall be issued an unconditional approval on the proviso that the proponent shall observe and comply with all environmental standards, criteria, rules and instructions issued by the competent and other concerned agencies.

b. In the event of conditional approval:

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project by the public, concerned or licensed agency which owns or operates the



project) shall be issued a conditional approval by which the proponent undertakes to carry out the required conditions attached thereto and to comply with all environmental standards and criteria as well as the rules and instructions of the competent and other concerned agencies.

c- In the event the project is rejected.

The public, concerned or licensed agency which owns, implements or operates the project (or the person contracted to implement the project with the public, concerned or licensed agency which owns or operates the project) will be informed of the rejection of the project, indicating the reasons, even if they were not environmentally motivated.