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#### CONTENT:

This General Instruction (GI) provides the minimum requirements for the implementation of Saudi Aramco's Environmental Protection Policy (INT-5) Statement. It contains the following information:

- 1. PURPOSE
- 2. POLICY
- 3. **RESPONSIBILITIES**
- 4. PROGRAMS
- 5. COMMITTEES
- \* 1. PURPOSE: This GI provides direction to develop and implement programs for facilitating compliance with Saudi Aramco's Environmental Protection Policy (INT-5).
  - 2. POLICY:

The Company will assure that its operations do not create undue risks to the environment or public health, and will conduct its operations with full concern for the protection of the land, air, and water from harmful pollution. The Company will promote environmentally sound waste disposal practices and cost effective waste minimization through source reduction, reuse, and recycling.

In all its activities, the Company will meet the standards specified by the Kingdom's environmental regulations. Where there are no established standards, guidelines will be developed which are compatible with the Kingdom's objective of environmental protection. The Company will cooperate and participate with Government and industry, as appropriate, in the development of cost effective environmental control programs and regulations.

It is the responsibility of each organization to assure that its facilities are designed and operated in compliance with the corporate Environmental Protection Policy and that they do not present unnecessary risks to the environment or public health.

#### 3. RESPONSIBILITIES:

# 3.1. Corporate Management

Ensure that Operating and Business Plans are consistent with Saudi Aramco's Environmental Protection Policy, and incorporate environmental goals and objectives in line with this policy.

#### 3.2. Executive and General Management

Review the environmental performance of facilities within their organizations on an annual basis and provide the required direction in support of the Environmental Protection Policy.

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# \* 3.3. Project Proponents, Engineering Services and Project Management

Ensure that, during the planning, design and construction of new or modified facilities, the requirements of applicable Government and Company environmental and public health policies and standards are complied with. In particular, , "Project Environmental Impact Assessments" shall be prepared for all projects including BI 1900 projects, as required by Saudi Aramco Engineering Procedure, SAEP-13.

### 3.4. Operating Departments and Service Organizations

- 3.4.1 Ensure that their facilities are operated and maintained in accordance with applicable Government and Company environmental and public health policies and standards. Environmental Protection Department can be contacted for a current list of pertinent policies and standards.
- 3.4.2 Implement environmental monitoring programs needed to demonstrate their compliance with pertinent policies, GIs, and standards.
- 3.4.3 Participate in corporate environmental programs including Waste Minimization, Environmental Performance Assessment (EPA), and Environmental Awareness.
- 3.4.4 Prepare action plans to describe and provide a time-frame for the resolution of any findings reported by EPA surveys, and submit such plans to Environmental Protection Department within 30 days from the receipt of the EPA final report.
- 3.4.5 Monitor and ensure that services performed by contractors are in conformity with applicable Saudi Aramco policies, GIs, and standards.
- 3.4.6 Assign an Environmental Coordinator to act as environmental liaison.

#### 3.5. Environmental Protection Department

- 3.5.1 Maintains external contact with national, regional, and international Government and industry organizations, contractors, local businessmen, and the general public, to present Saudi Aramco's position on environmental issues.
- 3.5.2 Participates with national, regional and international oil industry organizations to evaluate current environmental issues, identify emerging issues, assess their potential impacts, and to develop formal oil industry positions on these issues.
- 3.5.3 Advises concerned Company organizations and management regarding significant national, regional, and international developments related to the environment and public health, and recommends appropriate corporate responses as required.
- 3.5.4 Maintains a current data-base of environmental issues including pertinent Company position on these issues.
- 3.5.5 Provides Company-wide environmental and public health consulting and technical support services.

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- 3.5.6 Implements the Waste Minimization Program to ensure cost effective waste minimization through source reduction, reuse and recycling.
- 3.5.7 Implements the Environmental Performance Assessment Program to confirm compliance with Government and Company environmental and public health policies and standards, and follows-up on the status of facility EPA action plans.
- 3.5.8 Elevates any environmental concerns through successive management levels including Business Line Heads, as appropriate.
- 3.5.9 Reports annually to the Management Committee on the status of Company-wide environmental compliance.
- 3.5.10 Develops and maintains GIs, guidelines and standards to promote environmentally sound practices and to ensure that appropriate and cost effective technology is utilized.
- 3.5.11 Reviews pertinent Government standards and regulations to ensure that relevant Saudi Aramco standards and guidelines are in compliance.
- 3.5.12 Reviews project proposals, design basis scoping papers and detailed engineering design/calculations, and environmental impact assessments to ensure compliance with the Company's standards and guidelines.
- 3.5.13 Implements the Environmental Awareness Program to ensure that organizations are informed and aware of environmental and public health issues.
- 3.5.14 Implements Company-wide environmental and public health programs through field inspections, surveys, sampling and field tests.
- 3.5.15 Disseminates environmental information from within the Company to the Government and outside organizations, as appropriate.
- 3.5.16 Conducts environmental due diligence surveys for newly acquired or integrated facilities.

# \* 3.6. Research and Development Center

- 3.6.1 Conducts research studies to support corporate environmental objectives.
- 3.6.2 Reviews, recommends and develops analytical and QA/QC procedures and methodologies for use by Company laboratories in environmental monitoring activities.
- 3.6.3 Provides specialized analytical services for the chemical characterization of air, water and waste contaminates.

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# 3.7. Other Company Laboratories

Provide analytical services for ground and surface water quality assessment, hazardous waste characterization, and air and marine monitoring activities.

### \* 3.8. Marine Department

- 3.8.1 Responsible for activities related to prevention and/or control of marine and inland oil spills resulting from Company operations or facilities.
- 3.8.2 Ensures that Company response to oil spills is prompt, efficient and cost effective, and clean-up operations are conducted in accordance with established Company procedures.
- 3.8.3 Monitors, evaluates and advises on the development and implementation of national and international oil spill legislation that may impact Company operations.
- 3.8.4 Assures the continual development and revision of the Company's oil spill contingency plans, as directed by national and international legislation.
- 3.8.5 Ensures that the Company's state of preparedness for oil spill response is maintained through continued development of training courses and by conducting oil spill drills.
- 3.8.6 Maintains contact with pertinent industry groups related to national and international oil spill issues.
- 3.8.7 Maintains and operates all offshore oil spill combating and recovery equipment.

#### 3.9. Loss Prevention Department

- 3.9.1 Aims to prevent or mitigate situations where an accident could occur, which may result in losses of hydrocarbons or other materials that adversely affect the environment and public health.
- 3.9.2 Provides technical support to Company organizations in matters related to the development and review of Company and Government standards and regulations on emergency response to chemical spills, control and clean-up.

### 3.10. Aviation Department

- 3.10.1 Responsible for maintaining the capability of rapid aerial dispersant application.
- 3.10.2 Assists in the air transportation of oil spill response personnel and equipment, as required.

CHANGE	**ADDITION	NEW INSTRUCTION □	COMPLETE REVISION

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### \* 3.11. Dhahran Materials & Logistics Department

- 3.11.1 Responsible for activities related to the handling and disposal of expired, redundant chemicals and associated wastes.
- 3.11.2 Operates the Company's Reclamation Chemicals Storage & Handling Facility (RCS&HF) which is the principal controlled storage area for expired and redundant chemicals.
- 3.11.3 Provides personnel training on the handling and disposal of hazardous materials.

#### 4. PROGRAMS:

In addition to those listed below, programs shall be developed as required to minimize or eliminate environmental and public health impacts of Company operations and facilities, and to demonstrate compliance with Saudi Aramco's Environmental Protection Policy. Programs covered by existing GIs are not included in the list shown below.

Annual summary reports shall be prepared by proponents of environmental programs and distributed to concerned Company organizations. Distribution of appropriate reports to pertinent Government authorities shall be coordinated through Government Affairs.

### **Environmental Performance Assessment (EPA) Program:**

\* Objective:

To conduct periodic facility inspections to determine compliance with the Corporate Environmental Protection Policy, and to provide Management with analyses, recommendations, and information concerning the facilities surveyed. Scope of the EPA program covers the areas of air and water quality, solid and liquid waste, hazardous chemicals, spill prevention and control.

#### **Waste Minimization Program:**

*Objective:* 

To minimize in-plant generation of waste through source reduction, process modification, process material substitution, waste segregation, good housekeeping, reuse and recycling.

### **Industrial Waste Management Program:**

*Objective:* 

To develop and maintain Company-wide inventories of wastes generated disposal sites, and current waste management methods. The Program also mandates the review and approval of the design of new and altered landfill and land treatment sites.

#### **Contractor Management Program:**

Objective:

To develop and maintain an inventory of approved contractors for waste management. Contractors' compliance with applicable Company and Government standards are monitored through periodic inspections of their facilities and operations.

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# **Environmental Awareness Program:**

Objective:

To enhance awareness among Company organizations and others regarding environmental and public health issues. The program activities include giving various presentations and courses, publishing documents such as newsletters and annual reports, and meetings with facility management and environmental coordinators.

### **Environmental Health Monitoring Program:**

Objective:

To evaluate compliance of Company and contractor facilities with applicable Government and Company standards and guidelines. Results are analyzed to recommend corrective measures.

#### Air Quality Monitoring and Meteorology Program:

Objective:

To provide information about ambient air conditions through the Air Quality Monitoring and Meteorology Network (AMMNET). Data obtained are used to determine the degree of compliance of Saudi Aramco facilities with applicable Government and Company standards, and in the design and operation of Company facilities. A major activity supplementing this Program is the air dispersion modeling which is utilized to predict the ambient air quality of an area near Company facilities; modeling results are used in developing mitigative measures, as required.

### \* Saudi Aramco Groundwater Protection Program:

Objective:

To conduct site groundwater monitoring; characterize site hydrology; assess contaminant extent; evaluate potential risk to human health and the environment; and propose site remediation options at the appropriate Company facilities. These investigations are conducted to ensure that each facility meets applicable environmental guidelines and standards.

#### **Wastewater Discharges Monitoring Program:**

*Objective:* 

To evaluate the compliance of Company facilities generating wastewater discharges with applicable Government and Saudi Aramco standards.

## \* Marine Protection Program:

*Objective:* 

To conduct marine studies and surveys for use in evaluating impacts of coastal and offshore Company projects and operations on the marine environment. Data obtained are also utilized for the cost-effective design and construction of offshore structures.

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### 5. COMMITTEES:

In addition to those listed below, Corporate Regular Committees and other committees shall be established as required to address various environmental and public health issues related to Company operations, and to demonstrate compliance with Saudi Aramco's Environmental Protection Policy.

#### **Board of Engineers (BOE):**

Function of BOE is to review and provide guidance with regard to Corporate technical issues and the application of engineering standards and specifications.

Responsibilities of BOE include reviewing environmental engineering standards to ensure their adequacy, recommending revisions to existing standards, and developing new standards.

#### **Area Planning Committee (APC):**

Function of APC is to review advice and recommend to Executive Advisory Committee and/or Management Committee regarding land use issues and area planning studies related to Company concessional areas.

Responsibilities of APC include identifying environmental impacts of area planning studies and engineering study programs concerning land usage and traffic circulation, and recommending appropriate courses of action.

#### Oil Spill Committee (OSC):

Function of OSC is to review and approve as appropriate, policies, strategies, plans and actions with regard to oil spill prevention, containment and clean-up in Saudi Aramco's worldwide area of operations. Responsibilities of OSC include ensuring that adequate and effective oil spill prevention and response plans are in place to avoid or reduce, to the extent possible, environmental loss or damage. In the event of an oil spill, OSC oversees operations of the Company's oil spill clean-up organization to ensure promptness of response, appropriate allocation and mobilization of all available resources, and efficient clean-up at the oil spill site.

#### **Radiation Protection Committee (RPC)**

Function of RPC is to address all issues related to the safe handling, storage and disposition of radioactive materials, and to monitor the compliance of users with applicable Government regulations and Company procedures.

Responsibilities of RPC include overseeing the Company's radiation safety program and ensuring that user organizations maintain adequate and effective resources and procedures to handle and dispose of radioactive materials and for the protection of public health from these materials.

#### **National Committees:**

Company shall participate, as required, in pertinent national committees and may participate in the Kingdom's Delegations including those related to Climate Change Convention, Vienna Convention for the Protection of the Ozone Layer, IMO (International Maritime Organization) conventions and protocols, UN Commission on Sustainable Development, ROPME (Regional Organization for the Protection of the Marine Environment), and PERSGA (Red Sea and Gulf of Aden Environment Program).

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#### **International Industry Organizations:**

International Petroleum Industry Environmental Conservation Association (IPIECA)

IPIECA is the petroleum industry's principal channel for communication to the United Nations. IPIECA's mission is to develop and promote scientifically sound, cost-effective and realistic solutions to global environmental issues pertaining to the petroleum industry. Climate change, oil spill management, urban air quality management, and the Biodiversity Convention are among the environmental issues addressed and monitored by various committee of the Association.

International Association of Oil & Gas Producers (OGP)

The mission of OGP is to represent its members' interests to international regulatory and legislative bodies, ensuring that they understand the oil industry views of the potential impact of their proposals on the industry and society. OGP also aims to foster development and dissemination of best operating practices internationally. Preparation of industry guidelines, and the development of oil industry position related to sustainable development, climate change, environmental performance, and IMO regulations are examples of the activities undertaken by various committees of OGP.

\* Regional Clean Sea Organization (RECSO)

The prime objective of RECSO is to protect the Arabian Gulf resources from oil pollution by creating a coordinated oil spill response capability, providing a pool of equipment and materials for use in oil spill response operations, keeping member-companies aware of the latest developments in oil spill response methods, and by encouraging the sharing of information on environmental matters.

Recommended:	
Manager	

**Environmental Protection Department** 

Concurred:

Vice President Engineering Services

Senior Vice President Engineering & Operations Services

Senior Vice President Manufacturing Operations Senior Vice President Industrial Relations & Affairs

Senior Vice President Exploration & Producing

Approved:

President & Chief Executive Officer