

# SAUDI ARABIAN OIL COMPANY (Saudi Aramco)

## GENERAL INSTRUCTION MANUAL

GI NUMBER 150.100 Approved

ISSUING ORG. ENVIRONMENTAL PROTECTION DEPARTMENT (EPD)

ISSUE DATE 06/30/2009 REPLACES 06/12/2005

SUBJECT HAZARDOUS MATERIALS COMMUNICATION (HAZCOM) PROGRAM

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### CONTENT

This instruction provides the minimum requirements for implementation of the HAZCOM Program aspects of the Saudi Aramco Environmental Protection Policy Statement (INT-5). It assigns responsibilities and establishes measures for safe handling practices and procedures for hazardous materials at all company facilities.

1. PURPOSE
2. POLICY
3. DEFINITIONS
4. RESPONSIBILITIES
5. PRACTICES
6. SIGNATURE SHEET

#### 1.0 PURPOSE

- 1.1 The purpose of this General Instruction is to provide implementation and compliance requirements for the Hazardous Materials Communication (HAZCOM) Program. The program provides hazardous materials information and guidance on how to handle chemicals safely to minimize incidents and reduce risks to people, production, equipment and the environment.
- 1.2 This General Instruction shall serve as a formal agreement between all Saudi Aramco organizations to incorporate its requirements into each organization's operating procedures, instructions and other documents as required.

#### 2.0 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 conservation. The Company will cooperate and participate with government and industry, as appropriate, in the development of 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 established corporate Environmental Protection Policy and that they do not present unnecessary risks to the environment or public health."

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### 3.0 DEFINITIONS

- 3.1 **Hazardous Material** - Any purchased or Saudi Aramco produced material or chemical which is a physical or health hazard. Biohazards are excluded. (This definition differs from the term as used in Fire Protection Department documents.)
- 3.2 **Health Hazard** - Any material or chemical for which there is statistically significant evidence based on at least one scientific study that acute or chronic health effects may occur in exposed employees.
- 3.3 **Physical Hazard** - Any material or chemical for which there is valid scientific evidence that it is a combustible liquid, compressed gas, explosive, flammable, an organic peroxide, an oxidizer, unstable (reactive) or water reactive.
- 3.4 **Biohazard** - A biological agent or condition that constitutes a hazard to humans or the environment. The scope of HAZCOM program excludes biohazards and radiation.
- 3.5 **Chemical Hazard Bulletin (CHB)**- An internal company document (available in both English & Arabic) developed by EPD to provide a standardized one-page summary of a material's hazard ratings that will specify health hazards, fire & reactivity, handling, storage & disposal and first aid information for use in the handling of hazardous materials.
- 3.6 **Chemical Risk Assessment (CRA)** - A comprehensive assessment of the handling and use of hazardous materials at Saudi Aramco facilities. The CRA covers identification of hazardous materials, risk characterization, storage conditions, compatibility, methods of transfer & handling, control measures and use of personal protective equipment.
- 3.7 **HAZCOM Label** - Unlike manufacturer and transportation labels, HAZCOM labels are developed only for materials used and produced in Saudi Aramco, and provide basic hazard information taken from the CHB. The labels are placed on containers where this additional warning information is required.
- 3.8 **Container** - A container is anything that holds hazardous chemical except pipes and piping systems.
- 3.9 **Material Safety Data Sheet (MSDS)** - A document furnished by the chemical manufacturer or the distributor containing chemical and physical properties of the material, potential hazards, protective measures, personal protective equipment and storage requirements, and first aid procedures. The MSDS gives the basic hazard information for the chemical used in the development of a CHB.
- 3.10 **Elements of HAZCOM** - The six elements of HAZCOM are the CRA, CHB, Labeling, Written Program, Training of Employees, and Program Audit.
- 3.11 **Program Audit** - Following the full implementation of the HAZCOM Program at a facility, EPD will perform a "Program Audit" to verify that all HAZCOM elements are in place and meet requirements.

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- 3.12 **Chemical Hazards Awareness Training (CHAT)** - A one-day training session for employees who work with hazardous materials. The training covers the basic elements of HAZCOM, along with detailed information on CHBs, MSDSs and Personal Protective Equipment (PPE).
- 3.13 **Written HAZCOM Program** - Covers the elements of HAZCOM specific to each particular Saudi Aramco facility detailing the areas of responsibilities within the facility and the HAZCOM Program implementation requirements.
- 3.14 **Placarding** - Refers to hazard identification signage required for bulk transportation containers and trucks transporting hazardous materials consistent with international standards; it includes the DOT hazard diamond.
- 3.15 **DOT hazard diamond** - Refers to the US Department of Transportation (DOT) hazard labeling system which uses a color coded diamond in which there is a symbol and a term describing the major hazard of the material. DOT hazard classes include explosive, gases (flammable, nonflammable, corrosive, and poison), flammable liquids, flammable solids, oxidizers, poisons, radioactive materials, and corrosives. The DOT system is used for the transportation of hazardous materials.
- 3.16 **Non-transient Stock Containers** - Those containers which are unloaded and stored in any of the Materials Supply warehouses prior to dispatch to proponents.

#### 4.0 **RESPONSIBILITIES**

To meet the requirements of Article 130 of the Saudi Labor and Workmen Law the responsibilities under each element of HAZCOM are detailed in the following sections.

##### 4.1 **Chemical Hazard Bulletin (CHB)**

###### 4.1.1 **Proponent Facility / Organization:**

- 4.1.1.1 Shall post the relevant CHBs, or MSDSs if CHBs are not available, on a Bulletin Board in the areas where the particular materials are stored and/or where the materials are used. CHBs printed directly from EPD CHB/Label site should be color-printed to properly show the color-coded ratings.
- 4.1.1.2 Shall ensure that employees who handle hazardous materials are fully aware of safe handling procedures as per the CHB or MSDS.
- 4.1.1.3 Shall send to EPD a copy of MSDSs for any supplied chemical including direct charge that does not have CHB for EPD inventory and to develop CHB and HAZCOM labels. Laboratory reagents, medicinal packages and small containers such as aerosols that are adequately labelled by the manufacturer will not require CHBs.

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### 4.1.2 Environmental Protection Department:

- 4.1.2.1 Shall develop CHBs for all hazardous materials used and produced by the company and shall make an electronic copy of the CHBs available to all proponents through SAP EH &S. (Attachment I, example of CHBs).
- 4.1.2.2 The developed CHBs must identify the name and class number of the DOT hazard diamond and the Emergency Action Code (EAC) required on the Saudi Arabia placard.
- 4.1.2.3 The CHBs shall be rated as per EPD guidelines (Attachment II & III, example of CHB & HAZCOM Label rating codes)
- 4.1.2.4 Shall update the CHBs every three years or sooner whenever there is a change in chemical information, handling or practices. The revision dates shall be recorded on the CHBs.

### 4.1.3 Materials Supply:

- 4.1.3.1 Shall ensure that suppliers of all hazardous materials provide Saudi Aramco with Material Safety Data Sheets (MSDSs) for their products both for storehouse and direct purchase materials three weeks prior to introduction of the chemical into company operations.
- 4.1.3.2 Shall transmit electronic copies of all MSDSs and any other relevant hazard information to EPD through SAP EH&S for review and approval prior to purchase of any hazardous materials.
- 4.1.3.3 Shall assign SAP stock number for each CHB and shall annually send an updated list of SAP stock numbers with corresponding CHB numbers and required sizes to the proponent organizations for their reference and use.

## 4.2 Chemical Risk Assessment (CRA)

### 4.2.1 Proponent Facility / Organization:

- 4.2.1.1 Shall provide an inventory of all hazardous chemicals to EPD/ECD/Industrial Hygiene every year. The inventory will include the stock number, quantity stored, quantity used, and location for all hazardous materials used.
- 4.2.1.2 Shall update facility inventory on an annual basis and/or when new chemicals are introduced in the workplace.
- 4.2.1.3 Shall inform EPD when a new chemical is received and shall request EPD to conduct Risk Classification if no CHB is available. Laboratory reagents and pharmaceuticals will not be included with this inventory.
- 4.2.1.4 Shall nominate individual(s) with appropriate qualification and experience as

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recommended by Environmental Protection Department to participate in the CRA survey and assist the CRA team in conducting field activities.

### 4.2.2 Environmental Protection Department:

4.2.2.1 Shall conduct the CRA for the proponent and provide a written report with findings through SAP EH&S to the proponent. This process will be repeated on a periodic basis as determined by EPD. Medical (SAMSO) facilities shall be covered by SAMSO/Preventive Medicine Services Division / Occupational Medicine Section; and written CRA reports with findings shall be released & tracked through SAP EH&S.

## 4.3 HAZCOM Labeling

### 4.3.1 Proponent Facility / Organization:

4.3.1.1 Shall affix the HAZCOM Labels on hazardous materials' containers received directly from Supplier or through Materials Supply (non-transient).

4.3.1.2 Shall ensure Labels printed directly from EPD CHB/Label site are color-printed to properly show the color-coded ratings. This labeling requirement shall be applicable to both stock materials and direct purchase chemicals.

4.3.1.3 Shall use the MSDS when the HAZCOM label is not available for the chemical until EPD develops CHB and HAZCOM Labels. Laboratory reagents, medicinal packages and small containers such as aerosols that are adequately labelled by the manufacturer will not require HAZCOM labels.

### 4.3.2 Environmental Protection Department:

4.3.2.1 Shall develop the HAZCOM labels as per EPD guidelines for the proponent and supply an electronic copy through SAP EH &S to Materials Supply for printing of the labels. (Attachment IV, example of Label).

4.3.2.2 The HAZCOM labels shall be rated as per EPD guidelines (Attachment II & III, example of HAZCOM label & CHB rating codes)

4.3.2.3 Shall update the HAZCOM labels every three years or sooner whenever chemical information, handling or practices change. The revision dates shall be recorded on the labels.

### 4.3.3 Materials Supply:

4.3.3.1 Shall arrange printing and shall maintain stock of the printed adhesive HAZCOM Labels as developed by EPD.

4.3.3.2 Shall ensure HAZCOM Labels are readily available to all company organizations.

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4.3.3.3 Shall assign SAP stock number for each HAZCOM label and shall annually send an updated list of HAZCOM labels with their SAP stock numbers and required sizes to the proponent organizations for their reference and use.

4.3.3.4 Shall affix the HAZCOM labels to the appropriate non-transient stock containers before dispatching.

### 4.4 HAZCOM Program Audit

#### 4.4.1 Proponent Facility / Organization:

4.4.1.1 Shall conduct an internal audit of the HAZCOM Program on a periodic basis, not less than annually, and correct any deficiencies that are noted.

#### 4.4.2 Environmental Protection Department:

4.4.2.1 Shall audit all proponents including SAMSO following full implementation of HAZCOM Program to assure that all elements of HAZCOM Program have been effectively implemented. Any shortcomings will be addressed to the proponent, and followed-up through SAP EH&S notification process until closed.

4.4.2.2 Will re-audit all proponents every three years as part of the Occupational Health Hazard Assessment (OHHA) Program.

### 4.5 Training (CHAT)

#### 4.5.1 Proponent Facility / Organization:

4.5.1.1 Shall ensure that all Saudi Aramco employees who are working with hazardous materials are fully trained by attending in-classroom CHAT training course every three (3) years.

4.5.1.2 Shall ensure all company employees who have received in-classroom CHAT training complete the online computer based CHAT refresher training every three years to ensure that they stay abreast of current information on hazardous chemicals used at their respective facilities.

4.5.1.3 Shall provide the training facility, schedule the employees and supply the required Personal Protective Equipment and demonstration items for the in-classroom CHAT training.

4.5.1.4 Shall provide qualified participants (company employees) to attend EPD "Train-the-Trainer" HAZCOM course, and make those trainers available to conduct in-classroom training sessions after being certified by EPD. The in-classroom CHAT training shall be conducted by certified proponent trainers who have received EPD "Train The-Trainer" course.

#### 4.5.3 Environmental Protection Department:

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4.5.3.1 Shall provide training materials including the posters, overheads, videos, and student handbooks for the in-classroom CHAT training classes.

4.5.3.2 Shall provide a "Train-the-Trainer" class for proponent "Train-the-Trainer" candidates to become certified trainers for their facilities.

4.5.3.3 Shall provide assistance to proponent facility / organization in conducting in-classroom CHAT training as required.

4.5.3.4 Shall monitor the CHAT training and ensure that the training classes are conducted as per HAZCOM Program requirements and consistent throughout the company.

### 4.6 Written Program

#### 4.6.1 Proponent Facility / Organization:

4.6.1.1 Shall develop a Written HAZCOM Program to detail the specifics of all HAZCOM elements at the site, and designate responsibilities for each program element.

4.6.1.2 The written program shall be incorporated into each proponent organization's operating procedures, instructions and other documents as required.

#### 4.6.2 Environmental Protection Department:

4.6.2.1 Shall provide the proponent with a generic outline or template for the development of the Written HAZCOM Program.

4.6.2.2 Shall provide technical assistance to the proponent, and review the final version for concurrence by EPD.

## 5.0 PRACTICES

The HAZCOM Program provides a comprehensive system for the communication of chemical hazards to facility management and employees throughout Saudi Aramco. This objective is achieved through the interconnected use of employee training or CHAT and TTT, along with CHBs, MSDSs and HAZCOM labelling to provide employees with the information needed on how to work with hazardous materials in a safe manner. The hazardous materials are identified through the CRA process and detailed in the site Written HAZCOM Program. Details for the practices are provided in the following sections.

5.1 CHBs shall be provided for all Saudi Aramco Hazardous Materials, and include Hazard Ratings for the areas of Health, Flammability, and Reactivity. MSDSs not older than 5 years shall be available for any materials that do not have a CHB.

5.2 The CRA shall include a complete chemical inventory, identification of chemical products, inspection of storage and usage conditions, methods of transfer & handling, risk characterization, and control measures necessary to minimize risks and potential adverse effects on employees and property.



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- 5.3 HAZCOM Labels shall be provided for Saudi Aramco Hazardous Materials including process chemicals, products, test substances and other hazardous materials leaving the proponent facility. Exempt from the labelling requirement are laboratory reagents, medicinal packages and small containers such as aerosols that are adequately labelled by the manufacturer. The HAZCOM labels shall include the hazard ratings from the related CHB, along with precautionary statements on health, fire and reactivity, the related CHB number, required PPE and first aid procedures.
- 5.4 For each hazardous chemical in storage, distribution or processing systems, the proponent shall ensure that they are prominently stenciled or labeled with the commonly understood identifying name, color and number consistent with Saudi Aramco Engineering Standard SAES-B-067 "Safety Identification and Safety Colors". Fixed bulk chemical storage tanks shall have an enlarged HAZCOM label posted near by the storage tank.
- 5.5 The Program Audit shall cover each element of the HAZCOM Program and will require field verification of the functionality of each element.
- 5.6 The CHAT training shall be provided to employees who work with hazardous materials, and cover the basic concepts of chemical hazards and of the HAZCOM Program with specific emphasis on the contents of the CHB, MSDS, proper labeling, and use of Personal Protective Equipment (PPE).
- 5.7 The Written Program will describe all six elements of the HAZCOM Program, and will designate by name or title the personnel in the facility who will be responsible for each aspect
- 5.8 Bulk transportation shipping of hazardous materials to and from Saudi Aramco facilities must comply with transportation hazard placard requirements of Saudi Arabia and be consistent with international standards.

\* CHANGE

\*\* ADDITION

NEW INSTRUCTION ☐

COMPLETE REVISION ☐



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**6. SIGNATURE SHEET**

RECOMMENDED: \_\_\_\_\_ Date: \_\_\_\_\_

Manager  
Environmental Protection Department

CONCURRED: \_\_\_\_\_ Date: \_\_\_\_\_

Vice President  
Engineering Services

CONCURRED: \_\_\_\_\_ Date: \_\_\_\_\_

Senior Vice President  
Engineering and Project Management

CONCURRED: \_\_\_\_\_ Date: \_\_\_\_\_

Senior Vice President  
Operations Services

CONCURRED: \_\_\_\_\_ Date: \_\_\_\_\_

Senior Vice President  
Refining Marketing & International

CONCURRED: \_\_\_\_\_ Date: \_\_\_\_\_

Senior Vice President  
Industrial Relations

CONCURRED: \_\_\_\_\_ Date: \_\_\_\_\_

Senior Vice President  
Exploration and Producing

APPROVED: \_\_\_\_\_ Date: \_\_\_\_\_

President and Chief Executive Officer

\* CHANGE

\*\* ADDITION

NEW INSTRUCTION ☐

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## Attachment - I

### Example – HAZCOM CHBs

### CHEMICAL HAZARD BULLETIN NO. 45

**HYDROFLUORIC ACID**  
HYDROGEN FLUORIDE

1000183236 500 ML BT

Health	4	<p><b>COLORLESS FUMING LIQUID. BOTH VAPOR AND LIQUID ARE EXTREMELY CORROSIVE AND TOXIC. NON-FLAMMABLE. HIGHLY REACTIVE. DISSOLVES GLASS</b></p> <p>CAS: 7664-39-3 LIN: 1790 GUIDE: 157</p>
Fire	0	
Reactivity	3	

إرامكو السعودية  
Saudi Aramco

<p><b>GAS/LIQUID:</b> The TLV for HF is a Ceiling Value of 3 ppm.</p> <p><b>INHALATION:</b> Intensely irritant and corrosive to tissue at concentrations of 100 mg/m<sup>3</sup>. Inhalation of vapors may cause ulceration of the upper respiratory tract. Chronic exposures to low levels can cause fluorosis and bone deformity.</p> <p><b>EYE/SKIN:</b> Contact with the eye will cause immediate and permanent blindness. Skin contact causes painful and long lasting damage. The effects of contact with dilute solutions may be delayed for several hours but are no less serious.</p> <p><b>INGESTION:</b> Intensely corrosive to the digestive tract.</p>	<p><b>health hazards</b></p>	<p><b>WEAR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT</b></p> <p>The anhydrous acid, its vapor and aqueous solutions are non-flammable. In contact with a fire highly toxic fumes may be released. Fire fighters should wear self-contained breathing apparatus (SCBA) and full protective acid resistant clothing.</p> <p><b>REACTIVITY:</b> The acid reacts violently with many organic materials, bases etc. It attacks and dissolves glass and most metals.</p>
<p><b>USE:</b> Laboratory reagent used to treat rock specimens. Oilfield chemical for acidizing wells.</p> <p><b>STORAGE:</b> In a cool dry well ventilated store. In polythene, polypropylene or rubber bottles, away from incompatible materials.</p> <p><b>TRANSPORT:</b> For transportation, always label containers with DOT/IMO Class 8, hazardous warning label (diamond); CORROSIVE LIQUID.</p> <p><b>SPILLS/LEAKS:</b> Always wear full protective clothing and air-supplied breathing apparatus. Apply magnesium sulfate to contaminated areas and isolate all material.</p> <p><b>DISPOSAL:</b> For proper disposal methods and locations for the chemical or chemical contaminated material, contact the Environmental Engineering Division at 874-6426 or 874-6428.</p> <p><b>SAFETY EQUIPMENT:</b> Provide ventilation to control exposures below the TLVs. Air supplied or SCBA (21-311-231) should be available. Chemical goggles (21-434-249), face shield, PVC gauntlet gloves (21-432-513) or rubber gloves, PVC boots (21-406-744) and apron (21-404-181) must always be worn when handling quantities of hydrofluoric acid. Maintain eyewash fountain and emergency shower and calcium gluconate gel (2.5%) in storage area and wherever used.</p>	<p><b>fire and reactivity</b></p>	<p><b>EXTINGUISH AREA FIRES WITH WATER SPRAY, CO<sub>2</sub> OR DRY CHEMICAL</b></p>
<p><b>EYE/SKIN CONTACT:</b> Immediately, flush eyes with copious amounts of water for at least 15 minutes holding eyelids apart. Remove contaminated clothing/shoes. Wash skin thoroughly with soap and water. Apply calcium gluconate gel (2.5%) liberally and massage into skin. All cases of HF exposure must immediately be sent to emergency room of district clinic for assessment and treatment. Do not re-use any contaminated clothing even after laundering.</p> <p><b>INHALATION:</b> Remove those exposed to fresh air. If breathing is difficult administer oxygen. If breathing has stopped, apply cardio-pulmonary resuscitation (CPR).</p> <p><b>INGESTION:</b> Give water to drink if conscious. DO NOT INDUCE VOMITTING. Keep warm and quiet.</p>	<p><b>handling storage &amp; disposal</b></p>	<p><b>USE CONFINED SPACE ENTRY PROCEDURES IF APPLICABLE</b></p>
<p><b>GET MEDICAL AID IMMEDIATELY (CALL 110)</b></p>		

For further information call Industrial Hygiene: 872-2623 (DH), 678-4902 (RT), 572-3553 (ABO) or 427-2217 (JD)  
Hazard Ratings: 0=insignificant, 1=slight, 2=Moderate, 3=High, 4=Extreme  
Revised 4/12/2003

### نشرة أخطار المواد الكيميائية رقم ٤٥

٧٦٦-٤٩٢-٩٦ ٢٠٠٠ سنة ٥٠٠ مل

حامض الهيدروفلوريك  
فلوريد الهيدروجين

إرامكو السعودية  
Saudi Aramco

<p><b>Health</b></p> <p><b>Fire</b></p> <p><b>Reactivity</b></p>	<p><b>health hazards</b></p>	<p><b>WEAR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT</b></p> <p>The anhydrous acid, its vapor and aqueous solutions are non-flammable. In contact with a fire highly toxic fumes may be released. Fire fighters should wear self-contained breathing apparatus (SCBA) and full protective acid resistant clothing.</p> <p><b>REACTIVITY:</b> The acid reacts violently with many organic materials, bases etc. It attacks and dissolves glass and most metals.</p>
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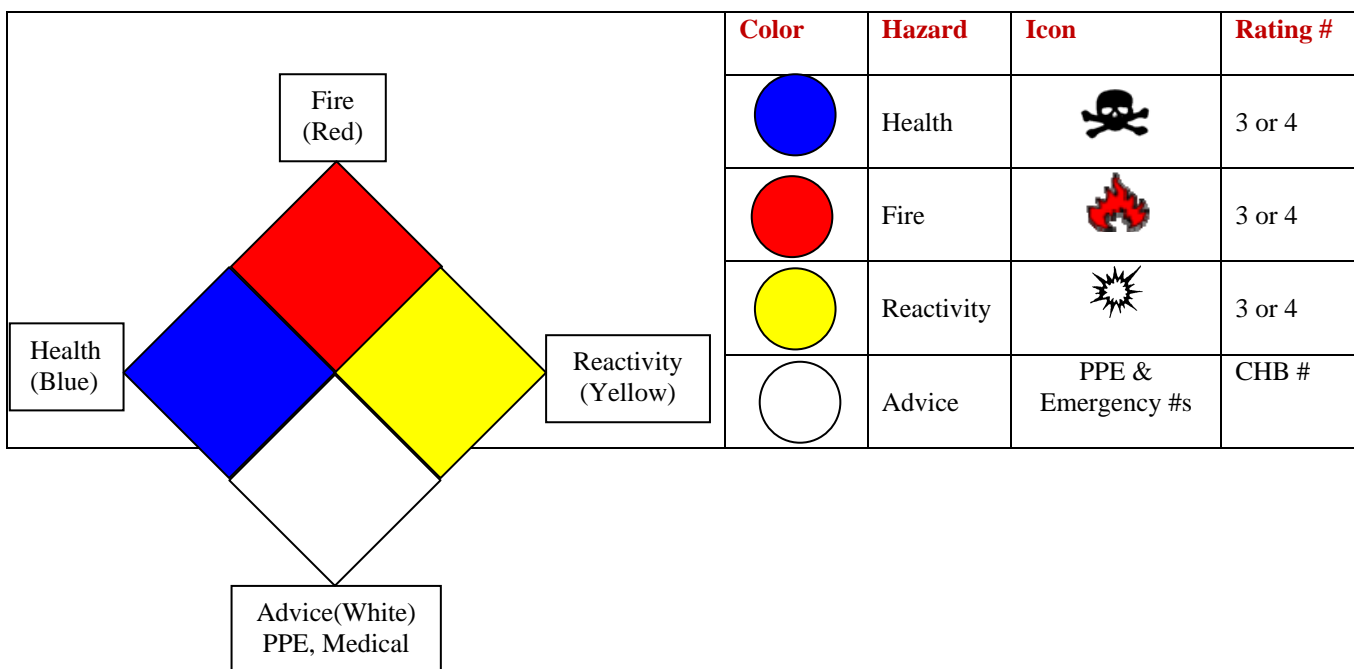
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**Attachment - II**

**HAZCOM CHB & Label Numerical Ratings:**

- 4.....Extremely Hazardous  
 3.....Highly Hazardous  
 2.....Moderately Hazardous  
 1.....Slightly Hazardous  
 0.....Insignificant Hazard









**SAUDI ARABIAN OIL COMPANY (Saudi Aramco)**  
**GENERAL INSTRUCTION MANUAL**

ISSUING ORG. **ENVIRONMENTAL PROTECTION DEPARTMENT (EPD)**  
 SUBJECT **HAZARDOUS MATERIALS COMMUNICATION (HAZCOM) PROGRAM**

GI NUMBER **150.100** Approved  
 ISSUE DATE **06/30/2009** REPLACES **06/12/2005**  
 APPROVAL **KAF** PAGE NO. **12 OF 13**

**Attachment - III**

**Saudi Aramco HAZCOM Program**  
**HAZCOM Label**

Chemical Name	<b>SULFURIC ACID</b>		1000186938/51 1000186954 1000186958 1000186971	0.5 -2.5 LT BT 95 LB Bulk Delivery 20 LB DM	 <b>UN: 1830</b> <b>EAC: 2P</b>	Chemical AMS Stock # or Material Master # (SAP) and container size	Emergency Response Information
Hazard Designation	<b>WARNING</b>						
Health Hazard Rating	<b>3 HEALTH HAZARD</b>						
Fire Hazard Rating	<b>0 FLAMMABILITY</b>						
Reactivity Hazard Rating	<b>3 REACTIVITY</b>						Icons Identify Extreme or High Hazard
First Aid	<b>FIRST AID:</b> Remove to fresh air. Get medical aid immediately (call 110). Use eyewash and shower. Flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally. Wash skin thoroughly with water, remove contaminated clothing and shoes.						Chemical Hazard Bulletin #
Personal Protective Equipment AMS Stock # or Material Master # (SAP)	<b>PPE</b>   		<b>CHB 400</b> 1000128583   1000129345   1000129418   1000128971				Specific Label AMS Stock # or Material Master # (SAP)
Contact Numbers	For further information call Environmental Protection: 872-2623 (DH), 678-4868 (RT), 572-1449 (ABQ), or 427-0155 (JID) Hazard Ratings: 0=Insignificant, 1=Slight, 2=Moderate, 3=High, 4=Extreme <b>HAZCOM Label # 1000644244</b>						

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## Attachment – IV

### Example – HAZCOM Labels

POLYISOCYANATE  
RESIN "CATALYST"  
47-955-915 1 QT  
أرامكو السعودية  
Saudi Aramco

**DANGER**

**4 HEALTH HAZARD**  
SKIN, EYE & RESPIRATORY TRACT IRRITATION.  
EXTREMELY TOXIC BY INGESTION.

**3 FLAMMABILITY**  
HIGHLY FLAMMABLE. FLASH POINT = 28°C(82°F).

**3 REACTIVITY**  
AVOID CONTACT WITH WATER, ALCOHOL, STRONG BASES.

FIRST AID: Remove to fresh air. Get medical aid immediately (Call 110). USE SHOWER AND EYEWASH. Flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally. Wash skin thoroughly with water, removing contaminated clothing and shoes.

PPE  
1000128583 1000129810 1000129628 1000128971  
CHB 503A

For further information call Industrial Hygiene: 872-2623 (DH), 678-4902 (RT), 572-3553 (ABQ), or 427-2217 (JID).  
Hazard Ratings: 0=Insignificant, 1=Slight, 2=Moderate, 3=High, 4=Extreme

رائج "وسيط كيميائي"  
متعدد الأيزوسيانات  
٩١٥-٩٥٥-٤٧ كوارت واحد  
أرامكو السعودية  
Saudi Aramco

**خطر**

**٤ المخاطر الصحية**  
هذه المادة تسبب تهيجاً للجلد والعينين والجهاز التنفسي. شديدة السمية جداً إذا ابتلعت.

**٣ قابلية الاشتعال**  
هذه المادة شديدة القابلية للاشتعال. نقطة الوميض هي ٢٨ درجة مئوية (٨٢ درجة فهرنهايت).

**٣ التفاعل**  
تجنب ملامستها للماء والكحول والقواعد القوية.

الإسعافات الأولية: ينقل المصاب إلى الهواء الطلق وتقدم له الرعاية الطبية فوراً (اتصل على الرقم ١١٠). استخدم مغسلة العينين ومروحة الاستحمام. اغمر العينين بكمية وافرة من الماء لمدة لا تقل عن ١٥ دقيقة مع رفع الجفنين من حين لآخر. يغسل الجلد جيداً بالماء وتخلع الملابس والأحذية الملوثة.

معدات السلامة الشخصية  
١٩٩-٤٠٤-٢١ ٢٤٩-٤٢٤-٢١ ٦٢٤-٤٢٢-٢١ ٧٤٤-٤٠٨-٢١

لزيادة من المعلومات اتصل بوحدة الصحة الصناعية على الهاتف: رقم ٢٦٢٣-٨٧٢ (الظهارة) أو رقم ٤٩٠٢-٦٧٨ (رأس تنورة) أو رقم ٣٥٥٣-٥٧٢ (بقيق) أو رقم ٢٢١٧-٦٣٨ (جدة).  
درجة الخطورة: صفر= غير خطير: ١= قليل، ٢= متوسط، ٣= شديد، ٤= شديد جداً