



# AzSPU Chemical and Hazardous Materials Management Procedure

## AZSPU-HSSE-DOC-00078-2

<b>Authority:</b>	AzSPU Offshore Health & Safety Manager (Yuliy Zaytsev)	<b>Custodian:</b>	AzSPU Hazardous Materials Technical Authority (John Elliott)
<b>Scope:</b>	AzSPU	<b>Document Administrator:</b>	HSE Document Coordinator
<b>Issue Date:</b>	17.08.2006	<b>Issuing Dept:</b>	Offshore HSE
<b>Revision Date:</b>	19.11.2010	<b>Control Tier:</b>	2
<b>Next Review Date:</b>	19.11.2011		

## 1.0 Purpose / Scope

This procedure defines the Azerbaijan Strategic Performance Unit (AzSPU) requirements for chemical and hazardous materials management and provides guidance to Operating Areas/Facilities on the management of chemicals and hazardous materials to ensure that:

- Risks to personnel, public, environment and installations associated with selection, procurement, transportation, storage and disposal of chemicals and hazardous materials are comprehensively assessed in accordance with BP Corporate policies, AzSPU guidelines and International Standards;
- A formal and consistent management system which documents all aspects of chemical and hazardous material management is established and implemented across the AzSPU.

This procedure takes account of the AzSPU commitments related to the management of chemicals and hazardous materials as defined in the AzSPU Compliance Task Manager (CTM) database.

This procedure applies to Operating Areas/Facilities within the AzSPU. The scope of the procedure includes both onshore and offshore operational activities undertaken by BP and contractors, including drilling.

Detailed guidance is provided with respect to the following processes:

- HSE assessment of products during selection;
- Product receipt, storage and handling requirements;
- Training requirements;
- Inspection and audit requirements;
- Record keeping.

Other aspects of chemical and hazardous material management, such as logistics, waste and residual material disposal are not considered in detail in this document. General guidance and specific procedures are referenced, as applicable.

For the purposes of this document, the terms "chemicals" and "hazardous materials" are not mutually exclusive.

## 2.0 Definitions / Abbreviations

ALARP	As low as reasonably practicable
AzSPU	Azerbaijan Strategic Performance Unit
CAM	Contract Accountable Manager
Carcinogenic	Substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence
Chemicals	Any solids, liquids or gases which are used in the production process or in any ancillary supporting activity, e.g. cleaning, transportation, etc

Corrosive	Substances and preparations which may destroy living tissue on contact
COSHH	Control of Substances Hazardous to Health
ERA	Environmental Risk Assessment
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
Explosive	Substances and preparations which may explode under the effect of flame, or which are more sensitive to shocks or friction than dinitrobenzene
Flammable	Liquid substances and preparations having a flash point equal to or greater than 21°C and less than or equal to 55°C
Harmful	Substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may involve limited health risks
Hazardous materials	The definition of hazardous materials under EEC Directive 91/156/EEC is: "any substance which has the following potential properties: explosive, oxidising, highly flammable or flammable, irritant, toxic, carcinogenic, corrosive, infectious, teratogenic, mutagenic; substances which release toxic or very toxic gases in contact with air, water or acid; substances which are capable after disposal of producing another substance, and ecotoxic substances"
HSE	Health, Safety and Environment
IMDG	International Maritime Dangerous Goods
MOC	Management of Change
Mutagenic	Agent capable of producing a mutation, i.e. permanent change in the genetic material of cells
MSDS	Material Safety Data Sheet
OCNS	Offshore Chemical Notification Scheme
OGUK	Oil & Gas UK (previously UKOOA - United Kingdom Offshore Operations Association)
OSHA	Occupational Safety and Health Act
OSPAR	Convention for Protection of Marine Environment of North-East Atlantic
PLONOR	OSPAR List of Substances / Preparations which are considered to pose little or no risk to the environment
PPE	Personal protective equipment
CTM	Compliance Task Manager (database)

PSA	Production Sharing Agreement
PU	Performance Unit
SCM	Supply Chain Management
Teratogenic	Substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce non-hereditary congenital malformations or increase their incidence
Toxic	Substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may involve serious, acute or chronic health risks or even death
Waste	Materials produced during operational activities, which are of no use, or value to the process that generated it

### 3.0 Specific Requirements

Chemical and hazardous materials management shall be compliant with commitments made in the Production Sharing Agreements (PSA), Host Government Agreements, Environmental and Social Impact Assessments (ESIA), relevant Environmental and Social Action Plans (ESAP), together with any subsequent commitments to, or agreements with, the lenders and/or local governments. These are summarised in the AzSPU CTM database and shall be taken into consideration when developing Operating Area/Facility specific procedures / instructions.

The following internationally recognized / adopted standards and legislation specific to hazardous materials management shall apply as a minimum:

#### **Health and safety assessment**

- Control of Substances Hazardous to Health Regulations 2002 (COSHH);
- Occupational Safety and Health Act (OSHA), 29 U.S.C. 651 et seq. (1970);
- International Finance Corporation, Environmental, Health and Safety Guidelines, "Hazardous Materials Management Guidelines", Dec 2001.

#### **Classification and labelling**

- Globally Harmonized System for Hazard Classification and Labelling (GHS) Feb 2006;
- Proposal for the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3;
- International Maritime Dangerous Goods (IMDG) Code, May 2004;
- Guidelines to the Safe Packing and Handling of Cargo to and from Offshore Locations (UKOOA/OGUK), Issue 2- Nov 2002;
- ISO 11014 - 1:1994. Safety Data Sheet for Chemical Products - Part 1: Content and Order of Sections.

#### **Chemical acceptability**

- Stockholm Convention on Persistent Organic Pollutants (2003);

- Vienna Convention on the Protection of the Ozone Layer (1985);
- For drilling, production and utility chemicals:
  - OSPAR PLONOR list (acceptable candidate chemicals);
  - OSPAR list I and II and chemicals subject to OSPAR decisions on phasing out or prohibition (unacceptable candidate chemicals);
  - Chemicals which have passed the OSPAR pre-screening process (e.g. chemicals on the UK OCNS ranked list) (acceptable candidate chemicals).

Conventions, codes and regulations referenced above may change over time. AzSPU Safety & Compliance Systems Manager shall ensure that a formal centralized process to track any relevant changes is established, and that relevant Operating Area/Facility managers are informed of the latest valid published versions. When a valid change is notified, all dependent documentation must be reviewed and (where necessary) revised to ensure that it continues to comply with the intent of the originating organisation.

National requirements may be no more stringent than the international standards adopted in this Procedure. However, Operating Area/Facility HSE Managers shall be aware of the possible need to conform to national legislation as well as to AzSPU procedures. If compliance requirements are not clear, the AzSPU Safety & Compliance Systems Manager shall be consulted for formal guidance.

## 4.0 Key Responsibilities

### Offshore and Midstream HSE Managers

- Accountable for the effective implementation of this procedure within their respective areas of responsibility.
- In collaboration with Operations Management to ensure that the necessary and competent resources are deployed to effectively implement this procedure.

### AzSPU Hazardous Materials TA

The AzSPU Hazardous Materials TA is the custodian of this document and shall ensure that:

- The requirements of this procedure are communicated and implemented within AzSPU.
- This procedure is audited holistically on an annual basis.
- Regulatory requirements, both national and international, pertaining to chemical and hazardous material management, as well as any changes to relevant legislation and standards, are identified and communicated to Facilities/Operating Areas.

### AzSPU Environment Manager

The AzSPU Environment Manager has overall responsibility for the AzSPU Environmental Risk Assessment (ERA) Procedure ([AzSPU-HSSE-DOC-00120-2](#)) and shall ensure that:

- The requirements of the procedure are communicated and implemented within AzSPU;
- The entire chain of the procedure is audited holistically on an annual basis.
- Ensuring that the AzSPU Environmental Risk Assessment (ERA) Procedure ([AzSPU-HSSE-DOC-00120-2](#)) is in current revision and communicated to the AzSPU.

### AzSPU Supply Chain Manager

The AzSPU Supply Chain Manager shall ensure that:

- Material Safety Datasheet (MSDS) and other relevant requirements, as defined in this procedure, are included in the Suppliers Contracts / Purchase Orders.
- Suppliers are contractually obliged to comply with the internationally recognized standards and regulations for transportation, packaging and labeling.
- Technical support is obtained from Facility/Operating Area or AzSPU representatives at the contract agreement stage.

### **Facility/Operating Area HSE Manager**

Facility/Operating Area HSE Managers or delegates shall ensure that:

- The AzSPU Environmental Risk Assessment (ERA) Procedure ([AzSPU-HSSE-DOC-00120-2](#)) is implemented on site.
- COSHH risk assessment and COSHHnet tool is implemented and operational within the Operating Area/Facility (see Appendix 1).
- Site specific hazardous materials management procedures / instructions are developed and are regularly reviewed and updated to ensure that they are consistent with each other and the information contained in this procedure.
- Relevant training requirements are identified, and regular and timely training is provided to Operating Area/Facility staff and contractors involved in the management of chemicals and hazardous materials.
- Documented task-based risk assessments are undertaken.
- The introduction of new chemicals, or substitution of existing chemicals, on site are approved.
- Inspections and audits of site based activities are scheduled and are carried out.
- Site specific inventory and relevant records are maintained.

### **AzSPU Health Team Industrial Hygienist**

- Provides technical support, guidance and advice, as requested, on all aspects of chemicals exposure assessment and control.
- Assists relevant site HSE personnel in completing IH technical tasks such as chemical assessments and exposure monitoring.
- Monitors published occupation exposure limits, specifically those of the UK HSE and US ACGIH.
- Communicates exposure limits to site HSE personnel.
- Administers the AzSPU MSDS Database (DOLPHIN).
- As part of the chemical MoC process, completes new chemical evaluations and approves acceptable products.
- Advises on appropriate PPE for protection against chemical hazards.
- Provides advice to the Training Team regarding chemicals awareness/COSHH training.
- Advises site H&S staff in identifying personnel for medical surveillance programs.

### **AzSPU HSE Compliance Advisor**

- Manages identification and accurate interpretation of legal and other requirements (in consultation with the legal department).
- Monitors changes to legal and other requirements.

- Ensures communication of new, or changed, legal and other requirements to affected parties involved in chemicals management or chemicals selection.

### **Persons Responsible for Selection**

AzSPU HSE&TD (representatives from AzSPU central Health, Safety and Engineering Teams and representatives from Supply Chain Management) shall be responsible for:

- The consideration of HSE implications during the selection of new drilling fluids and process chemicals prior to use on BP-operated sites.
- Ensuring the distribution and availability of master copies of all MSDS Manuals for mud, cementing and well service chemicals.
- Ensuring incorporation of all current MSDS into Dolphin electronic database.

All persons, including contractors, responsible for the selection of chemicals and hazardous materials shall ensure that:

- HSE evaluation is undertaken during selection stage (prior to purchasing) in accordance with the requirements of this procedure;
- Operating Area/Facility HSE / or H&S Advisors are consulted on HSE risk assessment issues and sign off final document for selection process.

### **Facility/Operating Area Operations Manager**

Facility/Operating Area Operations Manager shall be responsible for ensuring that:

- Only approved chemicals are used on site.
- Chemicals and hazardous materials are stored and handled in accordance with the requirements of this procedure.
- Discharge to the environment of effluent containing chemicals will not take place without a) a comprehensive risk assessment and b) formal approval and consent from the relevant regulatory authorities.
- Training requirements are correctly and formally defined, and that training is provided by qualified and certified personnel.

### **AzSPU Contractor HSE Specialist**

The AzSPU Contractor HSE Specialist shall

- Liaise with the HazMat TA and Health Team Industrial Hygienist and SCM Category Managers to identify appropriate requirements for the safe management of HazMat, as this relates to contractors and suppliers.
- Ensure that the requirements of this procedure are communicated to SCM Category Managers for incorporation, as applicable, in Suppliers' Contracts/Purchase Orders.
- Schedule and oversee contractor audits that include verification of contractors' compliance with the applicable requirements of this procedure.

## **5.0 Procedure / Process**

The procedures outlined below are the minimum requirements to be put in place to eliminate, or minimize to as low as reasonably practicable (ALARP), any potential negative impacts resulting from the use of chemicals and hazardous materials and to meet legal and other requirements.



The introduction of a new chemical, the replacement of an existing chemical, a change in composition of an existing chemical, and a change in use of an existing chemical are all required to go through the Chemical MoC process. This is described in detail in the AzSPU Management of Change Procedure (AzSPU-GEN-PRC-001-007), which can be accessed through the [e-MoC system](#).

### 5.1 HSE Assessment during Materials Selection

During the selection process, the responsible persons shall ensure that all candidate materials undergo HSE assessment. Such assessment will form the basis of:

- Final product selection.
- Definition and implementation of appropriate mitigation measures.

The materials can only be procured upon satisfactory completion of the HSE assessment, as detailed below.

A common selection process shall operate across the AzSPU, applying to all Operating Areas/Facilities and contractors, and covering:

- Production, drilling and utility chemicals.
- Laboratory, catering and cleaning chemicals.
- Emergency response chemicals (e.g. fire fighting, spill clean-up).

HSE assessment, as described in the sections below, shall be applied to all chemicals, irrespective of their purpose or origin. If the full required data set required for the assessment is not available for locally-available chemicals, Operating Areas/Facilities and Contractors are required to consult the relevant HSE /or H&S Advisor before proceeding with procurement.

The selection and assessment procedures implemented by contractors shall be audited against AzSPU requirements.

#### 5.1.1 Generic Health and Safety Assessment

Generic health and safety assessment during the selection stage shall be based on the product MSDS, available data on generic assessments undertaken in accordance with the internationally recognized systems, e.g. COSHH, OSHA, as well as any information on ecotoxicity and known environmental impacts of the product.

The assessment shall determine the following, as a minimum:

- That a carrier is identified with all necessary licences, permits and approvals for the transportation of the relevant class of product from the country of origin to the country of destination.
- That existing storage and containment facilities are adequate for the planned quantities of product (or that storage and containment needs are identified and the resources to create these are allocated) and that incompatible chemicals are segregated.
- That personnel exposure risk, associated training needs and personnel protective equipment (PPE) requirements are clearly identified and available.
- That spill contingency requirements and equipment are identified and available.
- That disposal routes are available for any unused product, waste or reacted product, waste streams containing chemical or chemical residues.



### 5.1.2 Environmental Risk Assessment

Chemicals that will be discharged into the environment as part of planned operations require regulatory approval. Where the discharge of chemicals into the environment is planned and unavoidable, persons responsible for the selection shall ensure that:

- Products least harmful to the environment are selected; and
- The choice is validated by means of comprehensive Environmental Risk Assessment (ERA).

Detailed environmental risk assessment shall not normally be required for chemicals used in processes that will not result in a discharge to the environment. However, such assessment might be required when the risk of environmental damage is high due to potential spill resulting from loss of containment, e.g. during transportation of large volumes of highly toxic materials to offshore locations. Persons responsible for the selection of chemicals shall liaise with the Operating Area/Facility Environmental Advisor for the advice on the need for an ERA.

Detailed guidance on the Environmental Risk Assessment and the approval process is provided in the AzSPU Environmental Risk Assessment (ERA) Procedure ([AzSPU-HSSE-DOC-00120-2](#)).

### 5.2 Procurement

Specific to procurement of chemicals and hazardous materials, the supplier shall provide the following information with the delivery of the materials:

- Full details of the Supplier/Manufacturer.
- Complete MSDS. Chemical products supplied from within the EU member states should be provided with MSDS compliant with ISO 11014 requirements, as a minimum.
- Information on chemical composition, ecotoxicity and known environmental impacts of the product in addition to that included in MSDS. This information is mandatory for any chemical for which environmental risk assessment is required. Where necessary, BP and/or its contractors should offer the supplier a formal confidentiality agreement in order to secure this information. Failure of disclosure may prevent completion of the assessment and approval process.

The Suppliers shall ensure that the containers and packaging are labelled in accordance with the recognized international standards and regulations, and are in good condition.

The AzSPU SCM Manager shall ensure that the requirements above shall be included in suppliers contracts or purchase orders, as appropriate.

### 5.3 Task-Based Risk Assessment

Once the product is procured, a specific task-based risk assessment shall be conducted by personnel/working group involved into the chemicals utilisation process (e.g. site controller, maintenance, operations technicians, HSE advisors, etc.) prior to the delivery of the product to the operational site.

A task-based risk assessment shall be undertaken for each separate use, or application of the product. Internationally recognised systems, e.g. COSHH, or tools such as COSHHnet shall

be used, as directed by AzSPU HSE&TD. All task-based risk assessments shall be documented and authorized.

The HSE Advisor undertaking the task-based risk assessment shall be trained and qualified in COSHH. Instructions to personnel on the implementation of the COSHH Regulations and the COSHH Approved Code of Practice are provided in Appendix 1.

## 5.4 Transportation, Delivery and Receipt

Transportation of chemicals and hazardous materials to the operating sites shall be in compliance with:

- National regulatory requirements including all relevant permits and approvals.
- Recognised international standards and regulations.
- Relevant BP requirements.

Upon the delivery of hazardous materials to the operating sites, and prior to offloading, cargo documentation, i.e. delivery note and MSDS, shall be checked and visual inspection of the cargo undertaken to ensure that:

- Containers / sacks / pallets are free from rust, dents and puncture marks that would endanger integrity of the container;
- Containers are delivered in pallets and/or cages; and
- Containers / sacks / pallets are clearly labelled.

In the event of a non-compliance the site HSE Advisor shall make judgement on whether to return the product to the supplier (e.g. unidentified container, lack of MSDS, etc), or to quarantine the product for safe temporary storage (e.g. damaged container).

The placement of products in a quarantine area is an emergency provision, intended only to minimise 'unknown' risks while uncertainties are resolved. The resolution of uncertainties should therefore be pursued with urgency, to minimise the risk that two or more 'unknown' (and therefore potentially incompatible) materials might be placed concurrently in the same quarantine area.

Quarantine areas should not be used for planned or deliberate part of any procurement process. The use of quarantine areas should be monitored regularly, to ensure that procurement processes are improved where necessary.

All deliveries and offloading of chemicals and hazardous materials shall be recorded and supervised at all times. Delivery note records shall be kept on site.

## 5.5 Storage

Chemicals and hazardous materials shall be stored in purpose-built and specifically designated locations. Such locations shall be shown on the site map. The key design principles for storage locations are as follows:

- Segregation: care shall be taken to establish the compatibility of each chemical. Incompatible chemicals must not be stored together and shall be separated by sufficient distance and physical barriers as required by their characteristics (see compatibility chart in Appendix 2).
- Containment: each segregated storage area shall have an impermeable bund to ensure secondary containment of 110% of the largest vessel volume. There must be no

connection between banded areas for incompatible categories of material. If due to operational constraints the establishment of an impermeable bund is not possible, then the storage area must be segregated and served by a drain system with no discharge to the environment. Secondary containment of individual chemicals / hazardous materials can also be provided by double skinned tanks, providing that the outer skin can contain 110% of the tank contents.

- All chemicals and materials shall be stored in containers of a compatible material and construction.
- All containers / sacks / pallets shall be labelled in accordance with recognised international standards and regulations in English. An example of a label is shown in Appendix 3. Container / sack / pallet condition, clarity and legibility of labels shall be regularly checked and assured.
- Appropriate spill response and clean-up equipment for all inventory materials shall be maintained and available.
- Containers / sacks / pallets shall be protected from excess temperature and precipitation in accordance with the requirements of the chemical and container suppliers defined in the MSDS or any other relevant documentation.
- Storage areas shall be accessible only by vehicles directly engaged in handling the materials present in the areas. Care shall be taken to minimise the risk of accidental damage to containers / sacks / pallets by general traffic.
- Access to storage areas shall be restricted to authorised personnel only.
- Storage areas shall be signposted in English and local language. The signs shall be clearly visible and have internationally recognised symbols describing the PPE requirements for personnel entering the storage area and the nature of the hazardous materials stored (e.g., flammable, corrosive).
- If on-site space allows, facilities shall have a dedicated, segregated quarantine area where non-compliant materials can be placed for safe temporary isolation. For sites with more limited space (e.g. offshore) quarantine areas should be set up as required, ensuring segregation from other on-site chemicals.

Materials, for which there is no current or anticipated use, shall not be kept in storage indefinitely. Operating Area/Facility specific procedures / instructions shall establish the maximum storage period for such products, depending on the site storage requirements. If no use is made of a material within such period, the Operating Area/Facility HSE /or H&S Advisor shall contact the designated users to establish whether the material is still required for any current or imminent operation. If there is no confirmation of requirement, approval shall be obtained from the designated users to seek an appropriate disposal route for the material.

Materials held in storage should be reviewed at 3-month intervals to determine:

- Whether there is a continuing use for the material.
- Whether the rate and pattern of use justifies storage for long periods of time (for instance, where it is known that there is a permanent need for supplies of the material, and where it is logistically and economically efficient to procure large quantities at widely-spaced intervals of time).

Unused material shall not be returned to storage unless it is in the original container / sack, with the original label on it. Materials that do not meet these requirements must be placed in quarantine, and must be appropriately re-packaged and labelled as rapidly as practicable.

Materials that are stored at work locations, due to operational requirements, shall be in appropriate containers / sacks / pallets, placed on drip trays and located over an impermeable surface (where practicable).

All storage locations shall have current up-to-date MSDS information available for each chemical / hazardous material stored. Such information can be presented either in the form of the original MSDS, or in a form of a ChemTag (Appendix 4).

Waste material shall be disposed of in accordance with the AzSPU Waste Management Strategy ([AzSPU-HSSE-DOC-00068-2](#)) requirements and relevant Operating Area/Facility specific waste management procedures and site instructions.

All sites with storage facilities should maintain records of the following:

- Product delivery date.
- Quantities stored.
- Product removed from storage, including date, quantity and destination.
- Product returned to storage, including date and quantity.
- Product disposed as waste.
- Running totals of amounts used per month (bulk products only).

Such records shall be maintained by the Materials Controller or any other person responsible for managing the site chemical storage areas.

## 5.6 Fire Extinguishers

Requirements for fire extinguishers (including placing, maintenance and testing) are included within the CTM database.

## 5.7 MSDS Database

AzSPU HSE&TD together with site administrators shall maintain a MSDS database (Dolphin or equivalent) and a register of generic risk assessments based on the internationally recognised system of COSHH for all the products used within the AzSPU. This database shall be reviewed and updated regularly.

## 5.8 Site Specific Chemical and Hazardous Materials Inventory

At the site level, each Operating Area/Facility shall maintain a Chemical and Hazardous Materials Inventory. The Operating Area/Facility HSE or H&S Advisor shall ensure that the Inventory is revised periodically to ensure that new information on chemicals and substances in use is evaluated and changes made, as required.

The inventory shall specify, as a minimum:

- Product name.
- Supplier / Manufacturer name.
- MSDS.
- Chemicals storage location.

An example of a site inventory is provided in Appendix 5 of this procedure.

## 5.9 Handling

Handling of chemicals or hazardous materials shall be in compliance with the requirements identified and documented during the task based risk assessment process.

## 5.10 Waste and Residual Material Disposal

The options for the disposal of unused product, waste and residual material should be assessed in the following order of priority:

- Return to vendor, taking into account:
  - Confirmation that vendor will accept.
  - Identification of a carrier qualified and prepared to arrange shipment.
  - Confirmation that waste, residual and reacted material has been fully characterised, suitably packaged and labelled and that it can be shipped and received under prevailing regulations in all countries through which it will pass.
- Reuse or recycling of the product.
- Disposal to a dedicated treatment or landfill facility in accordance with the AzSPU Waste Management Strategy ([AzSPU-HSSE-DOC-00068-2](#));
- Long term storage in a dedicated, secure, BP-approved facility if no other option consistent with BP's policy and relevant regulations is available.

Discharge directly to the environment shall not take place without authorisation and approval in accordance with the requirements of the AzSPU Environmental Risk Assessment (ERA) Procedure ([AzSPU-HSSE-DOC-00120-2](#)). These requirements include the need for formal approval and consent by the relevant regulatory authorities. Each site shall maintain an up-to-date register of the state and municipal organisations with regulatory authority in their areas of operation.

## 5.11 Training

All staff engaged in chemical or hazardous materials selection, procurement, storage, handling and transportation shall receive training in:

- Correct interpretation of MSDS documentation.
- Task-based risk assessment.
- The identification and use of appropriate PPE for each chemical type.
- Correct labelling and container / sack / pallet types for each class of chemical.
- Identification of incompatible chemical types, and appropriate container materials and storage facilities.
- Identification of appropriate handling and transportation equipment and procedures.
- Appropriate spill and clean-up response for each chemical.

Operating Area/Facility shall maintain an up-to-date training record and training schedule for each employee. The record will be reviewed at least annually, and will be updated whenever additional training has been successfully completed.

As far as practicable, training related to safety should be provided by professional trainers, should be undertaken to recognised international standards, and should result in the award of a formal qualification or completion certificate. Where formal certification is awarded, a specific training schedule should be implemented to ensure that all necessary refresher courses are provided at the intervals prescribed by the guidelines or regulations under which the training is defined and delivered. Formal training is mandatory for responsible managers.

## 5.12 Record Keeping

Site-specific records relating to hazardous materials management shall include the following, as a minimum:

- Chemicals and Hazardous Materials Inventory.
- Product disposed as waste and associated waste transfer notes.
- Product returned to vendor.
- Running totals of amounts used per month.
- Task-based risk assessments.
- Copies of MSDS.
- Training register.
- Incident reports.
- Audit reports and any other audit related records.

### 5.13 Inspections and Audits

Documented regular inspections shall be undertaken at each Operating Facility using the AzSPU Hazardous Materials Management Checklist ([AZSPU-HSSE-DOC-00124-2](#)).

An audit schedule shall be developed at AzSPU level to provide further assurance of compliance with the requirements of this procedure.

## 6.0 Key Documents/Tools/References

AzSPU Waste Management Strategy ([AzSPU-HSSE-DOC-00068-2](#))

AzSPU Environmental Risk Assessment (ERA) Procedure ([AzSPU-HSSE-DOC-00120-2](#))

AzSPU Health Surveillance Management Programme ([AzSPU-HSSE-DOC-00135-2](#))

AzSPU Respiratory Protection Management Programme ([AzSPU-HSSE-DOC-00136-2](#))

AzSPU Management of Change Procedure ([AzSPU-GEN-PRC-001-C7](#))

Sangachal Terminal Hazardous Materials Management Site Instruction Health & Safety Commission - List of Approved Workplace Exposure Limits EH40/2005 (amended 2007) ([AzSPU-HSSE-PMT-01266-2](#)).

**Revision/Review Log**

Revision Date	Authority	Custodian	Revision Details
17.08.2006	Gunther Newcombe	Alan McNulty	First issue
26.10.2007	Alan McNulty	Hijran Jafarova	Periodic review
29.02.2008	Alan McNulty	Hijran Jafarova	Periodic review
11.09.2008	Alan McNulty	Hijran Jafarova	Revised in line with May ISO 14001 external audit findings / recommendations.
05.12.2008	Yuliy Zaytsev	Hijran Jafarova	Authority position/name has changed to reflect org changes in HSE&TD as of December 1st 2008
28.04.2009	Yuliy Zaytsev (AzSPU Safety & Compliance Systems Manager)	Hijran Jafarova (AzSPU IH Technical Authority)	<p>Team / position titles updated throughout.</p> <p>Requirement for the storage capacity of material storage areas to be identified removed from procedure, in response to November 2008 ISO 14001 audit observation.</p> <p>Requirement for sacks and pallets also to be labelled in accordance with the template in Appendix 3 added to procedure, in response to November 2008 ISO 14001 audit observation.</p> <p>Requirement for dedicated permanent quarantine area removed from procedure as not practical for sites with limited space (e.g. offshore).</p> <p>Instructions to personnel on the implementation of COSHH regulations added as Appendix 1 to procedure.</p> <p>Reference to Chemical MoC (accessed through new e-MoC system) added to procedure.</p> <p>Reference to Dolphin MSDS database added to procedure.</p> <p>Key documents list reviewed and updated.</p>
6/04/2010	Yuliy Zaytsev (AzSPU Safety & Compliance Systems Manager)	Hijran Jafarova (AzSPU IH Technical Authority)	The next review date was extended due to AzSPU reorganization and e-MoC transition plan
02/11/2010	Yuliy Zaytsev (AzSPU Offshore HSE Manager)	John Elliott (AzSPU Hazardous Materials TA)	Document ownership amended and example checklist deleted. Minor updates to reflect organisational changes. The next review date was postponed to allow further organisational changes to be agreed.



## APPENDIX 1 - INSTRUCTIONS TO PERSONNEL ON IMPLEMENTATION OF COSHH

The purpose of this section of the document is to give instruction to personnel on the implementation of the Control of Substances Hazardous to Health (COSHH) Regulations and the COSHH General Approved Code of Practice (ACoP).

Term	Use of Term Implies	Dispensation for Area Covered by Term (All dispensations are to be recorded and retained)
<b>Must</b>	Legislative Requirement	No dispensation can be granted. Head of CHSE via Unit
	Group Standard/Practice or Golden Rule	Authorisation above the level of AzSPU Unit. Forward to Head of HSSE / SPU EA for referral to Group
<b>Shall</b>	Minimum requirement stipulated at SPU/Az level	Approval of Head of HSSE / SPU
<b>Should</b>	SPU/Az Best Practice or Recommended/Preferred option	Approval of Site Manager / OIM

The COSHH Regulations provide the legal framework to protect people against health risks from hazardous substances used at work. This document is not a comprehensive general guide to all aspects of the regulations, but should be read in conjunction with the COSHH (General ACoP), Control of Carcinogens and Control of Biological Agents published by the Health and Safety Commission.

**NOTE: “AUDIT” in terms of COSHHnet means Review and Authorise**

### Roles and Responsibilities

**Technical Authority/BU Administrator** (Industrial Hygienist, Technical Authority for COSHH and Business Unit COSHHNet custodian)

- Provide advice, support, training and audit of COSHH management on site
- Responsible for the development and any modifications to the system
- Ensure that COSHH is fully implemented and integrated into local safe systems of work
- Ensure that COSHH implications are considered as part of any new project or modification of existing plant
- Ensure that all COSHH Assessors and Coordinators have relevant access to COSHHnet
- Act as Main Administrator of COSHHnet system, in terms of managing sites and users' access to the system
- Carry out and/or coordinate air monitoring as identified in COSHH Assessments

### **Site Management**

Site Management shall be responsible for:

- Appointing competent persons with regard to the roles of COSHH Co-ordinator and COSHH Assessors.

- Ensuring that provisions for hazardous substances are in place with third parties and that performance and competence of such parties are suitably monitored.
- The maintenance of comprehensive, accurate and up-to-date records, where required by legislation.
- Ensuring that COSHH implications are considered as part of any new project or modification of existing plant.

Local management shall identify an appropriate person to whom the duties of COSHH Co-ordinator can be delegated. The Co-ordinator's role is outlined in this document. Management must also ensure that COSHH is fully implemented and integrated into local safe systems of work. Once such a COSHH Management System is in place, the Co-ordinator shall facilitate and support line management in maintaining the system.

Management shall ensure that suitable arrangements are made with regard to duties on maintenance, examination and test of control measures such as Local Exhaust Ventilation (LEV) and Respiratory Protection Equipment (RPE).

### **COSHH Co-ordinator**

The site health and safety function and Medics are primary COSHH co-ordinators (see the role of COSHH coordinators) and advise line management on the adequate control measures required for any task.

The COSHH Co-ordinator shall report to management on all aspects of the local COSHH programme. The Co-ordinator shall be the principal custodian for COSHH-related records onsite, further definition of this role is as follows:

- Co-ordinate inventory and ensure availability of health and safety information on all hazardous substances.
- Ensure that a mechanism is in place for updating substance information, including the screening of new substances.
- Assist primary assessors by participation in the assessment process and advising where specialist support may be required.
- Monitor and review contractor assessments to ensure suitability.
- Act as local custodian of the BP COSHH Database System
- Ensure that all assessment recommendations are entered onto an action tracking system and monitor progress.
- Propose nominations for assessor training.
- Audit COSHH assessments
- Ensure that provisions for programme review and audit are in place

### **COSHH Assessors**

Operations supervisors shall be the primary COSHH Assessors. Assessor training is provided by attendance at the BP COSHH Assessors Course, which enables them to recognise where and how their knowledge and experience fits into the assessment process.

In most situations the person in charge of the work, eg team leader or supervisor, will be the prime instigator of the assessment process. They shall also be responsible for the regular review of tasks and substances under their control and for ensuring that risks and precaution information is passed onto their teams.

### **Contractors**

The simple guiding principle is that whoever is in control of an operation must ensure that adequate arrangements are in place. Legal responsibility remains with the employer. Good co-

operation and co-ordination are critical and it should be decided, at as early stage as possible, who has a duty under COSHH. In general, where a contractor/vendor provides a specialist service, including the use or supply of hazardous substances, they have a primary duty of assessment and they shall, with agreement of local management, utilise the BP COSHHnet tool.

Contractors shall be responsible for:

- Agreement with BP that suitable arrangements are in place prior to commencing any activities involving substances hazardous to health.
- Health surveillance arrangements, where appropriate, for their own employees.

### **Health Risk Assessment Process**

The health risk assessment process under COSHH involves five key steps, which are:

- (1) Hazard and task identification.
- (2) Risk assessment.
- (3) Measures to prevent or control exposure.
- (4) Record keeping.
- (5) Review.

The COSHH Assessment System provides a proforma for assessing risks to health in a format suitable for easy use, retrieval, sharing and storage. Forms **should** be completed by a competent COSHH Assessor and then audited by the Site Co-ordinator.

#### *Step 1: Hazard and Task Identification*

All activities where there is a risk of exposure to substances hazardous to health must be identified and a task-based assessment carried out. This should be integrated with other BP safe systems of work, such as the Integrated Safe System of Work (ISSOW) and Task Risk Assessment (TRA) processes.

All hazardous substances should be identified and information gathered on their hazards. MSDS are usually the main source of such information. Where insufficient information is provided to allow a health risk assessment, eg where substances may be evolved or created onsite (welding fume, biological agents, oil mists etc), specialist advice should be sought from the COSHH Co-ordinator, or the BP Industrial Hygienist.

#### *Step 2: Risk Assessment*

In all but the simplest cases, task-based risk assessments must be carried out by a competent person; this is most likely to be line management, or those directly in control of the work who have trained as COSHH Assessors. They will be assisted by the COSHH Co-ordinator and, where necessary, specialist support.

Provision shall be made to assess all core activities and to identify and record all new tasks which could arise from non-routine work, chemical trials etc. In addition, existing methods of assessing risk, such as ISSOW and TRA, can also highlight activities that are required to be assessed for the purposes of COSHH.

In all circumstances, both BP and its contractors must ensure that a safe system of work has been established before commencing any activities involving hazardous substances.

As a tool for ensuring a logical and consistent approach, the BP COSHHnet tool is suitable for use <http://coshh.bpweb.bp.com/>

### *Step 3: Measures to Prevent or Control Exposure*

The COSHH Regulations require that the exposure of employees to substances hazardous to health must be either prevented or, where this is not reasonably practicable, adequately controlled. Where the assessment indicates a risk to health, it is important to specify steps to achieve effective control.

A hierarchical approach should be taken when deciding upon control options, as follows:

- Elimination of substance or process.
- Substitution with a less hazardous substance and/or process.
- Engineering measures such as containment and ventilation.
- Procedural measures, eg segregation, limiting exposure time, good housekeeping, standing instructions/procedures/permits, supervision, housekeeping, personal hygiene, etc.

Personal Protective Equipment (PPE) should only be used as a last option.

This hierarchical approach is included as part of the COSHH Assessment tool.

### *Step 4: Record Keeping*

A written record of the assessment should be retained as a 'living' document. This document should be revisited if circumstances change in order to explain the decisions regarding risk. All risk assessments shall be stored in the current BP COSHHnet tool.

Records relating to examination, maintenance and testing of controls (Regulation 9), exposure monitoring (Regulation 10), health surveillance (Regulation 11), information, instruction and training (Regulation 12) are also required to be kept.

### *Step 5: Review*

Assessments should be reviewed every 2 years unless there have been some significant changes, for example:

- Changes to chemicals and/or their sources, process, work procedure or exposure controls.
- New information on health effects of chemical agents Workplace Exposure Limits, etc.
- Adverse results from exposure monitoring health surveillance, etc.

## **Maintenance, Examination and Testing**

Operational procedures are to be developed to ensure that control measures are being used correctly.

Control measures such as local exhaust ventilation systems (eg laboratory fume cabinets, fabrication shop extraction etc) and non-disposable PPE are to be inspected weekly and a system is to be put in place for maintenance, examination and testing on an annual basis, with records kept for 5 years.

## **Monitoring**

Where the assessment concludes that there could be serious risks to health if control measures fail, exposure limits might be exceeded or control measures might not be effective, air monitoring should be carried out. Monitoring should, whenever possible, use validated techniques and be carried out by a Competent Person. The BP Industrial Hygienist can advise.

As stated in the AzSPU Record Control Procedure ([AzSPU-HSSE-DOC-00041-2](#)) emissions monitoring records are to be retained for 6 years after the relevant PSA, HGA, IGA has expired (under COSHH monitoring records must be kept for 5 years).

### **Health Surveillance**

The COSHH Co-ordinator should identify from assessment where there could be a requirement and then contact the BP Occupational Health Medical Officer for instruction and guidance.

As stated in the AzSPU Record Control Procedure ([AzSPU-HSSE-DOC-00041-2](#)) health assessment records are to be retained for 75 years (under COSHH records shall be kept for 40 years).

Detailed health surveillance instruction is provided in the AzSPU Fitness for Task and Health Surveillance Management Programme ([AZSPU-HSSE-DOC-00007-2](#)).

The BP duty to provide health surveillance does not extend to non-employees, therefore contractors and third parties shall be responsible for arrangements for their own employees.

### **Information, Instruction and Training**

Information should be made readily available on risks to health, precautions, monitoring and health surveillance. This should be supplemented by instruction on the purpose, use and reporting defects of control measures and training on local safe systems of work, emergency procedures and competency.

Competency levels are dependent upon duties delegated by management, eg:



- General awareness – 1 hour CBT COSHH Awareness  
**ID:** \_scorm12\_bp\_ep\_at\_sa\_coshh\_enus, Tool Box Talks
- COSHH Assessor – 1 day COSHH Assessor Course
- COSHH Co-ordinator – 5 days International Hygiene Module on Control of Hazardous Substances W503; or 5 days Fundamental Principles of Industrial Hygiene (FPIH); or equivalent training

## APPENDIX 2 - STORAGE COMPATIBILITY CHART

**YES** may be stored together**NO** should NOT be stored together**?** may be stored together subject to special precautions

												
		EXPLOSIVE	OXIDISING	EXTREMELY FLAMMABLE	HIGHLY FLAMMABLE	FLAMMABLE	VERY TOXIC	TOXIC	HARMFUL	CORROSIVE	IRRITANT	RADIO-ACTIVE
STORAGE COMPATIBILITY	 EXPLOSIVE	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	 OXIDISING	NO	YES	NO	NO	NO	NO	NO	?	NO	?	NO
	 EXTREMELY FLAMMABLE	NO	NO	YES	YES	YES	NO	NO	YES	NO	YES	NO
	 HIGHLY FLAMMABLE	NO	NO	YES	YES	YES	NO	NO	YES	NO	YES	NO
	 FLAMMABLE	NO	NO	YES	YES	YES	NO	NO	YES	NO	YES	NO
	 VERY TOXIC	NO	NO	NO	NO	NO	YES	YES	YES	NO	YES	NO
	 TOXIC	NO	NO	NO	NO	NO	YES	YES	YES	NO	YES	NO
	 HARMFUL	NO	?	YES	YES	YES	YES	YES	YES	NO	YES	NO
	 CORROSIVE	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO
	 IRRITANT	NO	?	YES	YES	YES	YES	YES	YES	NO	YES	NO
	 RADIO-ACTIVE	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

## APPENDIX 3 – EXAMPLE CHEMICAL AND HAZARDOUS MATERIALS LABEL

<b>Glutaraldehyde</b>		
 <b>Toxic</b>	 <b>Dangerous for the environment</b>	<p>Toxic by inhalation and if swallowed Causes burns May cause sensitisation by inhalation and by skin contact Very toxic to aquatic organisms Keep locked up and out of the reach of children In case of contact with eyes, rinse immediately with plenty of water and seek medical advice Wear suitable protective clothing, gloves and eye/face protection In case of accident or if you feel unwell seek medical advice immediately (show the label where possible) Avoid release to the environment. Refer to special instructions/safety data sheet</p>
EC label 203-856-5		
Supplied by: Name, address and telephone number of supplier		



<span style="font-size: 2em; font-weight: bold; margin: 0 10px;">CHEMTAG</span>					
REF. No.	<div></div>	UN. No.	<div></div>	SITE EMERGENCY TEL. No.	<div></div>
<b>CHEMICAL DETAILS</b>					
<b>CHEMICAL NAME</b>			<b>TRADE NAME</b>		
<b>CHEMICAL APPEARANCE</b>			<b>PACKAGING</b>		
<b>SPILLAGE TREATMENT</b>					
<b>IMMEDIATE ACTION / FIRST AID</b>					
EYES :					
SKIN :					
RESPIRATORY :					
INGESTED :					
SUPPLIER _____ TEL. NO. _____					
USE _____					
STORAGE _____					
DISPOSAL OF PACKAGING _____ _____					
DATE OF COMPILATION _____					
<b>NOTES FOR MEDICAL PERSONNEL</b>					

**HAZARD WARNING SYMBOLS FOR CHIP & COSHH**

	<div></div>		<div></div>
EXPLOSIVE		TOXIC VERY TOXIC	
	<div></div>		<div></div>
OXIDIZING		FLAMMABLE HIGHLY FLAMMABLE EXTREMELY FLAMMABLE	
	<div></div>		<div></div>
CORROSIVE		HARMFUL IRRITANT	
	<div></div>		
DANGEROUS FOR THE ENVIRONMENT			

**MANDATORY SIGNS - EQUIPMENT INDICATED MUST BE WORN**

	<div></div>		<div></div>
EYE PROTECTION		SAFETY HELMET	
	<div></div>		<div></div>
EAR PROTECTION		RESPIRATORY EQUIPMENT	
	<div></div>		<div></div>
SAFETY BOOTS		SAFETY GLOVES	
	<div></div>		<div></div>
SAFETY OVERALLS		FACE PROTECTION	
	<div></div>		
NO SMOKING OR NAKED LIGHTS			

**BS EN 3 - FIRE EXTINGUISHING AGENT TO BE USED**

	<div></div>		<div></div>
WATER		POWDER	
	<div></div>		<div></div>
CO.GAS		FOAM	

**UNLAWFUL REMOVAL OR INTERFERENCE WITH THIS SIGN COULD MAKE YOU LIABLE TO PROSECUTION AND FINES**

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