The Secretary of State for Defence (SOFSP) requires that all Defence activities are properly governed and organised and are conducted in a safe, effective and efficient manner as reasonably possible.

As the Defence Authority for Logistics (DAfL), I am responsible for providing the MOD's rules and regulations for the safe conduct of all logistic operations; the policy set out in this JSP covers those that apply to the good governance, organisation, safe storage, handling, distribution and disposal of fuels, oils, lubricants and associated products. The application of these rules is mandatory and full compliance is required. It is the responsibility of commanders and line managers at all levels to ensure that personnel, including contractors, involved in the management, supervision and conduct of Defence activities using the products referred to in this publication are fully aware of their responsibilities.

Units should destroy previous editions of this publication.
Acknowledgements

Diagrams reproduced from Guidance for the design, construction, modification and maintenance of petrol filling stations, with kind permission of the Energy Institute (EI) and the Association for Petroleum and Explosives Administration (APEA). ISBN 085293 2170. For more information visit www.energyinst.org.uk; https://apea.org.uk and info@energyinst.org

This JSP has been Equality and Diversity Impact Assessed in accordance with the department's Equality and Diversity Impact Assessment Tool against: Part 1 - Assessment only, no diversity impact found.

The policy is due for review Apr 2021.
<table>
<thead>
<tr>
<th>No</th>
<th>Date</th>
<th>Name</th>
<th>Publish Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dec 07</td>
<td>W O1 (SSM) Gaunt</td>
<td>Dec 07</td>
</tr>
<tr>
<td>2</td>
<td>Jan 09</td>
<td>W O1 (SSM) Gaunt</td>
<td>Jan 09</td>
</tr>
<tr>
<td>3</td>
<td>Jan 10</td>
<td>W O1 (SSM) Garner</td>
<td>Jan 10</td>
</tr>
<tr>
<td>4</td>
<td>Jan 11</td>
<td>W O1 (SSM) Garner</td>
<td>Jan 11</td>
</tr>
<tr>
<td>5</td>
<td>Mar 12</td>
<td>W O1 (SSM) Everfield</td>
<td>Mar 12</td>
</tr>
<tr>
<td>6</td>
<td>Mar 13</td>
<td>W O1 (SSM) Everfield</td>
<td>Mar 13</td>
</tr>
<tr>
<td>7</td>
<td>Apr 15</td>
<td>W O1 (SSM) Costello</td>
<td>Apr 15</td>
</tr>
<tr>
<td>8</td>
<td>Apr 16</td>
<td>W O1 (SSM) Bloomfield</td>
<td>Apr 16</td>
</tr>
<tr>
<td>9</td>
<td>Apr 17</td>
<td>W O1 (SSM) Franks</td>
<td>Apr 17</td>
</tr>
<tr>
<td>10</td>
<td>Apr 18</td>
<td>W O1 (Cdr) Franks</td>
<td>May 18</td>
</tr>
<tr>
<td>11</td>
<td>Apr 19</td>
<td>W O1 (SSM) Bayham</td>
<td>Apr 19</td>
</tr>
<tr>
<td>12</td>
<td>Apr 20</td>
<td>W O1 (SSM) Bayham</td>
<td>Apr 20</td>
</tr>
</tbody>
</table>
Chapter 7

Arrangements for the Technical Examination and Inspection of JOFS & Legacy TFHE Equipment and the Inspection of Fuel Installations

Volume 3

Quality Assurance

Chapter 1

Sections 1 - Quality Control and Maintenance of Fuels, Lubricants and Associated Products - General

Annex A - General

Annex B - Unit Level Quality Assurance Testing of Fuels - General

Annex C - Visual Test for Fuels

Annex D - Assessment of particulate Contamination in Aviation Turbine Fuel

Annex E - Guide to Identifying Microbial Growth in Fuels

Annex F - Water Detection Tests for Aviation Turbine Fuels

Annex G - Determination of the Density of Fuels Procedure

Annex H - Determination of the Concentration of Fuel System icing Inhibitor (FSII) in Aviation Fuels Using a Refractometer

Annex I - Determination of Conductivity of Aviation Fuels

Annex J - Sampling Procedures General Requirements

Annex K - Use of the ALB TMS Sampler and Winder

Annex L - The Frequency of Laboratory Testing for Fuels Held in Bulk (Permanent, Non-Permanent and Mobile Storage)

Annex M - Reporting Petroleum Contamination Incidents

Annex N - Care of Fuel Delivery Hoses, Nozzles and Pressure Couplings for Aviation Use

Annex O - Change of Grade Procedures

Annex P - Marking Requirements
1. JSP 317 lays down the standards of practice to be observed within the MOD for the storage and handling of all Fuels, Lubricants and associated products. It is designed to be used by staff responsible for the storage and handling of fuels stored in Bulk storage vessels and packed stock areas.

2. The JSP is structured in two parts:
   a. Part 1 - Directive, which provides the direction that must be followed in accordance with Statute, or Policy mandated by Defence or Defence by Central Government.
   b. Part 2 - Guidance, which provides the guidance and best practice that will assist the user to comply with the Directive(s) detailed in Part 1.

3. Where applicable, this document contains links to other relevant JSPs, some of which may be published by different Defence Authorities. Where particular dependencies exist, these other Defence Authorities have been consulted in the formulation of the policy and guidance detailed in this publication.

4. The owner of this JSP is ACDS Sp Ops, Defence Strategic Fuels Authority. For further information on any aspect of this guide, or questions not answered within the subsequent sections, or to provide feedback on the content, contact in the Subject Matter Expert / Chapter Sponsors promulgated at the front of each Chapter, or:

<table>
<thead>
<tr>
<th>Contact Email</th>
<th>Role</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:deflog-ops-cap-dsfa-polmultuser@mod.gov.uk">deflog-ops-cap-dsfa-polmultuser@mod.gov.uk</a></td>
<td>DSFA Policy WO</td>
<td>030 679 83799 / 9679 83799</td>
</tr>
</tbody>
</table>
5. **Scope.** This section provides the standard definitions and abbreviations for the terminology used in connection with the storage, handling and use of the range of fuels and lubricants used within the MOD.

6. **Source.** Definitions used in this publication are mainly derived directly from legislation, Codes of Practice and Guidance Notes. In addition, NATO terminology has been introduced where appropriate. The relevant source is quoted wherever possible.

7. **Precedence.** In deriving the definitions used in this publication, several meanings have been found to exist for the same expression. Accordingly, the following table of accession has been adopted:

   a. UK legislation.
   c. Economic Commission for Europe (ADR).
   d. European Standards (CEN).
   e. British Standards Institute (BSI).
   f. Trade Associations, including BC GA, UKLPG and EIGA.
   g. NATO Terminology (APP-1).
   h. MOD (e.g. APS, JAPs, JSPs, SRPs, etc).

8. **Availability.** JSP 317 is available electronically from the defence. A controlled version is also available on the Internet GOV UK Page - JSP 317.

9. **Units that require JSP 317 in CD-ROM format are expected to 'burn' off copies as required at a local level. Units that either have no access to the Internet or the facility to 'burn' CD-ROMs should staff their requirement through the chain of command.

   Exceptionally CD-ROM copies of JSP 317 can be obtained from the JSP 317 Technical Author.

9. **Abbreviations and terms defined in this publication are contained in Annexes A and B. In this publication the following terms have the definitions assigned to them irrespective of any other meanings that may be given elsewhere. The source publication has been identified where applicable. To minimise confusion, wherever practical the terminology used by civilian industry or incorporated into legislation and standards is used.
11. Sources. The policy contained in Joint Service Publication (JSP) 317 are derived from international and national legislation; international, NATO and national standards; industry Codes of Practice and Guidance Notes.

12. Authority. JSP 317 is produced and maintained by the Defence Strategic Fuels Authority under the authority of the Fuels and Gases Stakeholder Committee as defined in JSP 815 and JSP 309.

13. Maintenance. JSP 317 will be maintained on the Defence intranet and will be reviewed on an annual basis. All hard copies of JSP 317 are uncontrolled. To check the latest amendment status reference should be made to the Defence Intranet or DefLog - JSP 317 Pt 1 (v 6.4 Apr 20) OpsCap-DSFA-PolMultiuser@mod.gov.uk

14. Equality and Diversity Impact Assessment. This policy has been Equality and Diversity impact assessed in accordance with the department's equality and diversity impact assessment tool against: "Part 1 Assessment only - no diversity impact found."

15. Application. The Secretary of State for Defence issues a policy statement on safety, health, environmental protection and sustainable development in the MOD which sets out the strategic principles, duties and governance to be applied throughout the MOD. This policy statement is published in DSA 01.1. The MOD policy for fuels and gases is promulgated by the Defence Fuels and Gases Stakeholder Committee (DF&G SC) in the form of a domain specific publication - DSA 02 & 03. The specific MOD policy and policy relating to the end to end storage and handling of fuels and lubricants are detailed in JSP 317. JSP 317 policy shall be applied to the storage & handling of fuels and Lubricants by the three Services, Defence Equipment and Support (DE &S), Central TLB, and Defence Agencies. The policy shall also apply to contractors, and their personnel, operating on MOD estate and to non-public activities/encroachments (such as flying clubs).

16. Transportation. Flammable liquids are classified as dangerous goods. DSA 03-DLSR-MSTR-Dangerous Goods Manual always to be consulted when transporting dangerous goods detailed within this publication.

17. Exceptions. These policies do not cover the internal use of fuels and lubricants aboard ships or vessels, or aircraft operated by the Services or specialist contractors or agencies, or the repair of MOD vehicles or aircraft for which special regulations apply. Such special regulations shall be based on this publication. Similarly, where the Services need to operate at locations which require specific standards higher than those contained in this manual, then the higher standard shall be applied. Where applicable these specialist regulations/publications are referenced within JSP 317.

1

End to End Includes:

- Petroleum Supply Depots
- Packaged stock containers including Jericans and 205 Ltr Drums when in MOD station / MOD central establishments stored.
- Bulk Fuel Installations and associated pipelines
- Mechanical Transport Fuel Installations (MTFIs)
- Deployable Bulk Fuel Installations
- Bulk Fuel Carrying Vehicles parked on and MOD establishment

End to End does not include:

- Transportation of Bulk fuel in BFCV. (Transport carriage of Dangerous Goods via DGM).
- Jericans that are in carriage (Transport carriage of Dangerous Goods via DGM).
18. Outside UK. In countries, outside of the UK, the standards specified in this manual shall be applied unless the host nation requires a higher standard in which case that standard must be applied. In Germany, where the Status of Forces Agreement (SOFA) has precedence, all facilities must be constructed to German standards with regard to the regulations specified in this manual.

19. Specific Procedures. The main sections of the JSP 317 will detail the generic procedures to be used within the services and associated users. However, where storage handling procedures are not common across the services at this stage, they will be detailed in annexes or references covering the Land, Marine and Aviation environments. Where single-service issues require the production of clarifying or complementary statements, policies or orders, these shall be based on the detail of this publication but should not repeat its contents. The JSP 317 shall have primacy over any such clarifying or complementary statements, policies or orders.

20. User Responsibilities. The responsibility for the safe use of gases lies with the "user" and their respective Trade Group Sponsor or equipment/platform Project Team (PT) as appropriate. "User" process should include safe operating procedures, (how fuels and lubricants interface with user equipment/processes), training, and auditing programmes (including Ready Use).

21. Operational Conditions. Some relaxation of the procedures detailed in the JSP 317 may be necessary under operational circumstances. However, as many of the regulations and procedures contained within the JSP are derived directly from legislation, exemption from the regulations would require the approval of the Secretary of State for Defence.


23. Format. The format of this JSP is in accordance with JSP 101 and structured to the DRU format.

24. Editorial. JSP 317 is published under the management control of Defence Strategic Fuels Authority (DSFA) as MOD Policy for storage, handling and use of Fuels and Lubricants. The chairman of the JSP 317 Working Group is responsible for the editorial content of this publication.

25. Editorial Working Group. An editorial Working Group is responsible for reviewing the content of JSP 317: Refer to Table 1.

<table>
<thead>
<tr>
<th>Department</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Strategic Command (JSC)</td>
<td>De f Lo g  DSFA C O S  Ch airm a n</td>
</tr>
<tr>
<td></td>
<td>De f Lo g  DSFA Po lic y  W O1 - Se cr e ta ry</td>
</tr>
<tr>
<td></td>
<td>Def Log DSFA SO2 Ops C E SO EPS D A</td>
</tr>
<tr>
<td>DSA</td>
<td>DLSR-SO1 FGSR</td>
</tr>
<tr>
<td>FGSR</td>
<td>SO2</td>
</tr>
</tbody>
</table>

11 JSP 317 Pt 1 (v 6.4 Apr 20)
26. Amendments
.

Amendments will be issued when required to reflect changes in legislation or other source documents. Proposed amendments to JSP 317 should be submitted through existing staff channels to the Editor of JSP 317.

Reporting Amendments in JSP 317

27. Purpose
.

The purpose of this information is to provide users at all levels with a means of reporting unsatisfactory features in the JSP 317 and proposing an amendment. Reports are to be submitted using the MOD Form 765.

Originator of report
.

Originators of reports are to raise one copy of the report. Once satisfied that the report contains all relevant detail, it is to be forwarded to the JSP 317 Editor - DefLog - Ops Cap - DSFA-Pol Mult. There is no requirement to provide a covering letter or additional correspondence with the report; unless the originator believes amplification of the report is necessary to assist the JSP 317 WG.

Action by JSP 317 WG
.

On receipt of the report, the JSP 317 WG is to investigate the content of the report and, if necessary, initiate amendment action through the Chapter Sponsors and the Editor of JSP 317. On completion the Editor is to return the original to the originator.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Apron</td>
<td>An area between the tank and a tanker where the process operating controls on both tank and tanker are accessible to the operator during filling/discharging. This area will normally have provision for containing or diverting a liquid spillage.</td>
</tr>
<tr>
<td>Adapter</td>
<td>A self-sealing male component on tank or line end to which hose couplings are attached. Located on the road tanker and at petrol station vapour connection. Features a valve which when not activated by a spigot on the mating connector seals off the vapour path.</td>
</tr>
<tr>
<td>Accident</td>
<td>Any event which causes, or has the potential to cause injury, loss or damage to people, plant or premises.</td>
</tr>
<tr>
<td>ADR</td>
<td>Agreement Concerning the International Carriage of Dangerous Goods by Road.</td>
</tr>
<tr>
<td>ADR Agreed Procedures and Safety Statement (SMS)</td>
<td>A work procedure acknowledged as sufficiently proven to be a safe way of carrying out a specific task, so much so that if agreed precautions and SMS are relevant to impending work, and the issuing authority undertakes to ensure that they will be followed, then it is not necessary for the issuing authority to draft further procedures and SMS for the work.</td>
</tr>
<tr>
<td>Airfield Road</td>
<td>A road within the airfield boundaries used for foot and vehicular traffic, but which is not classified as a Public Highway.</td>
</tr>
<tr>
<td>Attendant</td>
<td>Operated A filling station when an attendant directly operates and controls the dispensing equipment and the discharge nozzle on behalf of the customer.</td>
</tr>
<tr>
<td>Attended self-service</td>
<td>A filling station where customers operate the self-dispensing equipment, which is activated, supervised and may be shut off in an emergency by an attendant in a control point.</td>
</tr>
<tr>
<td>Authorised Person - Petroleum</td>
<td>The Authorised Person (AP) is the individual responsible for the practical implementation and application of JSP 375 Volume 3 for the systems, installations and locations for which they have been appointed.</td>
</tr>
<tr>
<td>Authority</td>
<td>An individual or a corporate body, according to the circumstances, e.g. a corporate body is an artificial legal person in law just as an individual, with legal rights and obligations.</td>
</tr>
<tr>
<td>Authorised Person</td>
<td>The Authorised Person (AP) is the individual responsible for the practical implementation and application of JSP 375 Volume 3 for the systems, installations and locations for which they have been appointed.</td>
</tr>
</tbody>
</table>
Term Definitions Source

Authorising Engineer - Petroleum
A professionally qualified engineer experienced in petroleum handling systems, employed or commissioned by the Maintenance Management Organisation or licensed by the DO to ensure safety of petroleum work for the base.

Automotive Repair
Any repair tasks involving any part of the bulk fuel tanker/refueller (less the bulk fuel container, associated pipe work or dispensing equipment), which does not require either hot work or the equipment to be immobilised.

Auxiliary Power Units (APU) (Aircraft-borne) Power units of aircraft services built into the aircraft which can be operated independently of the main engines.

Fuel Installation (Av BFI)
An Installation where large quantity of Aviation Fuel are stored and dispensed to a consumer.

Back-up power supplies
Alternative arrangements providing a maintained supply to all or part of the electrical apparatus, in the event of failure of the mains supply, e.g. standby generation, uninterruptable power supply (UPS), battery back-up.

Biofuel
Fuel derived from organic matter (obtained directly from plants, or indirectly from agricultural, commercial, domestic, and/or industrial wastes) instead of from fossil products.

British Approval Service for Electrical Equipment in Flammable Atmospheres, now known as EESC, Electrical Equipment Certification Service.

Bottom Loading
The filling of a mobile container at or near its lowest point by means.

Bonding (Correct title – Equipotential Bonding)
Electrical connection maintaining various exposed conductive-parts and extraneous – conductive parts at substantially the same potential.

2 categories of Equipotential Bonding are: -

Main Equipotential Bonding: In each installation, main Equipotential Bonding conductors shall connect to the main earthing terminal extraneous conductive parts of that installation

Supplementary Equipotential Bonding: Where Supplementary Equipotential Bonding is necessary, it shall connect the exposed conductive parts of equipment in the circuits concerned and extraneous conductive parts.

Supplementary Equipotential Bonding is required in areas if increased risk recognised as “Special Locations”. A Hazardous Area would be considered as a “Special Location”.

BS7671 Edition 17
BS EN 60079-0
BS EN 60079-14
Breakaway Coupling
A coupling designed to shear at a pre-determined load, in which the two halves, when parted are sealed by internal valves.

Breathing
Emissions from, or intake of air into, a tank due to ambient temperature/pressure effects, or due to vaporisation/condensation of product and to compensate for product dispensed by forecourt pumps.

Bulk Fuel Carrying Vehicle (BFCV, Inc. UST & CST)
A goods vehicle which has a tank (on these Regulations referred to as a carrying tank) which is attached to the frame of the vehicle (whether structurally or otherwise) and (except when empty) is not intended to be removed from the vehicle; or an internal part of the vehicle.

Bulk Fuel Installation (BFI)
An installation where large quantity of fuel is stored and dispensed to a consumer.

Bund
A wall of appropriate height constructed of concrete, earth, or other suitable material, and designed to confine spillage of oil from any cause.

Bund Wall
See ‘Bund’

Bunded Area
An area bounded by natural ground contours or by bund walls so designed to control spillage.

Buried Tank
A tank underground which is so sited that no portion of the tank shell is above the surrounding ground level.

Batch
A quantity of cylinders that are filled from the same charge from the same source.

Breathing Apparatus
Apparatus designed to enable the wearer to work and breathe without harmful effects in a non-life supporting atmosphere by supplying breathable quality air via an airline or pressured cylinder.

Breathing Gas
Gas used in breathing apparatus to aid breathing.

Checklist
A secondary document which the performing authority is required to complete prior to, or in the course of, carrying out the work, by way of evidence that specific safety precautions have been taken.

Class I and Class II Electrical Equipment
Equipment constructed in particular ways to protect against electric shock. (See BS 2754)

Clearance Certificate
The primary document used to request and approve the commencement if installation and maintenance work on petrol filling station.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed system</td>
<td>A product handling and transfer system designed to minimise vapour emissions to atmosphere.</td>
</tr>
<tr>
<td>Coastal Waters</td>
<td>Those waters up to 3 miles from the Low Water Mark.</td>
</tr>
<tr>
<td>Co-axial hose</td>
<td>A flexible petrol dispensing hose of annular construction in which vapour and flow are independent of one another.</td>
</tr>
<tr>
<td>Combined Sewer</td>
<td>A sewer discharging to a sewage treatment works conveying both.</td>
</tr>
<tr>
<td>Combustible</td>
<td>Combustible refers to any substance, solid, liquid or gas which will burn with the application of heat.</td>
</tr>
<tr>
<td>Competent Person</td>
<td>A person with sufficient technical knowledge or experience to prevent danger or, where appropriate, injury, during his or her work. A competent individual person (other than an employee) or a competent body of persons corporate or unincorporated. Responsible for preparing or certifying the suitability of a written scheme of examination and for carrying out an examination in accordance with the written scheme of examination.</td>
</tr>
<tr>
<td>Competent Petroleum Trained Person (CPTP)</td>
<td>A qualified tradesman who has the practical, theoretical knowledge and experience to construct and operate a Deployed Bulk Fuel Installation safely and effectively.</td>
</tr>
<tr>
<td>Condensate</td>
<td>Liquid formed due to the change of state from vapour to liquid.</td>
</tr>
<tr>
<td>Confined Space</td>
<td>Any tank, chamber, pit, or enclosure in which the atmosphere is likely to be hazardous by flammability, toxicity, deficiency of oxygen, risk of asphyxiation etc, due to restricted natural ventilation and restricted access and egress.</td>
</tr>
<tr>
<td>Containment System</td>
<td>The combination of storage tank, delivery, fill and vent pipework including associated valves and fittings which together provide containment.</td>
</tr>
</tbody>
</table>
**Definitions**

**Contractor**
Any company or individual with whom a site owner has a commercial agreement to carry out installation or maintenance work on service stations. The contractor will normally be the employer of both the issuing and performing authorities. References to either is synonymous with a reference to the contractor also, the term ‘contractor’ is used in the text as a collective term for both. In some cases, the contractor can be the employer of the verifying authority.

**Control Point**
A position in a kiosk or other building at an attended self-service filling station from which an attendant can adequately view and supervise activities at the dispensing equipment, activate the equipment and shut it off in an emergency.

**Controlled Waters**
River, streams, ditches, other surface water bodies such as canals, estuaries, coastal waters and ground waters.

**Coupling**
A device to permit the connection of a pipe or hose to an adapter.

**Decant**
The filling or transfilling from one receptacle to another.

**Dangerous Area**
An area in which there exists, or may exist, a dangerous atmosphere which in turn is defined as an atmosphere containing:

a. Any flammable gases or vapour in a concentration capable of ignition.
b. A concentration of toxic gas above prescribed limits.
c. An atmosphere containing insufficient oxygen for normal respiration.

**Dangerous Occurrence**
A specific, unplanned, uncontrolled event which has the potential to cause injury or damage and is listed in Schedule 2 of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995.

**DCD**
Driver Controlled Delivery is one where the complete operation of delivering product to the petrol filling station is under the control of the delivery driver without any assistance from the petrol filling station personnel.

**Deployed Bulk Fuel Installation (DBFI)**
For this document this is a BFI that has been built and operated by CPTP for receipting, issuing and handling fuel in the field.

**Dip Hatch (Point)**
A covered opening in a tank to permit dipping.

**Dipping**
Measurement of the height of fuel in a tank by means of a graduated tape or rod.

**Direct Fill Point**
A product entry point, e.g. on an underground tank at a petrol filling station, positioned directly on top of the tank.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispenser</td>
<td>A measuring system like a metering pump except that it does not incorporate its own pumping system.</td>
</tr>
<tr>
<td>Dispensing Equipment</td>
<td>Metering pumps and dispensing equipment installed at filling stations and used to dispense liquid fuel.</td>
</tr>
<tr>
<td>Droppe d suction line</td>
<td>Where it is not possible to arrange a continuous fall from dispenser to tank it is possible to insert a vertical leg with a draw-off pit. The arrangement is referred to as a dropped suction line.</td>
</tr>
<tr>
<td>Drop pipe</td>
<td>A fill pipe fitted vertically inside a tank and reaching to the bottom of the tank, designed to reduce splashing during tank filling and to maintain a liquid seal, so isolating the vapour space.</td>
</tr>
<tr>
<td>Dry break coupling</td>
<td>A coupling designed to minimize the leakage of product when disconnected.</td>
</tr>
<tr>
<td>Duty Holder</td>
<td>For this document this is a person with specific delegated responsibilities for satisfying the objectives of the policy through the application of a safety regime of an Installation.</td>
</tr>
<tr>
<td>Element of Construction</td>
<td>Any wall, floor, ceiling, door, roof or window (including the frame) etc that forms part of a building, room or other enclosure.</td>
</tr>
<tr>
<td>Electrical Installation</td>
<td>All electrical/electronic and telecommunications equipment located within the boundaries of the fuel installation. (This includes cables feeding apparatus located outside the curtilage of the filling station).</td>
</tr>
<tr>
<td>Emission</td>
<td>A release of vapour to the atmosphere.</td>
</tr>
<tr>
<td>Enforcing Authority</td>
<td>The organisation charged with day to day responsibility for ensuring compliance with statutory regulations.</td>
</tr>
<tr>
<td>EPA</td>
<td>United States Environmental Protection Agency</td>
</tr>
<tr>
<td>Evaporation</td>
<td>Conversion of a liquid to a vapour, without necessarily reaching the boiling point.</td>
</tr>
<tr>
<td>Explosimeter</td>
<td>See combustible gas indicator.</td>
</tr>
<tr>
<td>Explosive</td>
<td>Atmosphere A mixture, under atmospheric conditions, of air and one or more dangerous substances in the form of gases, vapours, mists or dusts in which, after ignition has occurred, combustion spreads to the entire unburned mixture.</td>
</tr>
<tr>
<td>Faucet</td>
<td>A valve. In the context of mobile containers, the valve at the end of the discharge/load ing pipe.</td>
</tr>
</tbody>
</table>
Term

Fire Resistant
A term used to denote a defined standard of resistance to fire exposure. (see BS 476)

Fire Resisting
A fire-resisting element of construction is one which would have at least the stated period of fire resistance (relating to integrity, insulation and stability/load bearing capacity where appropriate) tested from either side in accordance with BS 476 Pt 8 or Pts 20 to 23:1987. In addition:

APEA/IP HS(G)51

a. Where two or more elements of construction together provide separation, the junction between them should be bonded or fire-stopped to prevent or retard the passage of hot gases, thus giving effective separation between the rooms or spaces on either side.

b. Elements of construction should be such that their fire-resisting properties are not impaired by everyday wear and tear. Additional protection, e.g. crash barriers, reinforcing plates or wearing strips, may be required where mechanical damage is foreseeable.

Fire Wall
A wall, screen or partition erected in the open air to help protect containers of flammable liquid from heat radiating from a nearby fire, and/or ensure an adequate dispersion distance from buildings, boundaries, sources of ignition etc for flammable liquid or vapour leaking from any container.

HS(G)51

Flammable
(Synonymous with Inflammable)
Refers to any substance, solid, liquid, gas, or vapour which is easily ignited. The addition of the prefix ‘Non’ shall indicate that the substances, etc, are not readily ignited, but shall not necessarily indicate that they are non-combustible.

Highly flammable products can be defined as those products with a flash point < 31°C.

Flame Arrestor
Device built into equipment in order to prevent the unrestricted propagation of flame from within an enclosure to the external surrounding atmosphere.

Flame Trap
See 'Flame Arrestor'.

Flameproof Enclosure
A type of protection where enclosures for electrical apparatus will withstand an internal explosion of the flammable gas or vapour which may enter it, without suffering damage and without communicating the internal flammation to the external flammable gas or vapour for which it is designed, through joints or structural openings in the enclosure.

BS EN 60079-14
Flash Point (Closed Cup)
The lowest temperature at which application of a small flame causes the vapour above a petroleum product to ignite when the product is heated under prescribed conditions in a 'closed' container (See IP Methods 33 and 170).

Foot Valve
A valve at the base of a mobile container leading to the discharge pipe work.

For Court Separator
Part of the forecourt drainage system, which separates light liquid from waste water and retains the light liquid.

Foul Sewer
A sewer discharging to a sewage treatment works.

Fuels, Lubricants and Associated Products (FLAP)
Petroleum fuels, lubricants, hydraulic and insulating oils, temporary protectives, liquid coolants, windscreen washing fluids, de-icing and anti-freeze compounds together with components and additives for such products.

Fueller (As for Mobile Fueller)

Fully documented procedures
Method statements and procedural statements to describe an activity (such as tank testing). The documentation should explain any equipment operation, the principles of operation and technician activity, making clear description of safe working practices.

Gas Free
A tank of similar confined space is considered to be gas free if the concentration of combustible vapours present is below one per cent of the Lower Explosive Limit as measured by an accurate combustible gas indicator.

Note: Gas free does not mean non-toxic.

Gauging Device
A device for the measurement of the level of liquid in a tank.

Ground Power Unit (GPU)
A portable unit for providing electrical power for starting aircraft engines and/or for operating auxiliaries.

GRP
Glass reinforced plastic.

Hazardous Area
An area in which explosive gas – air mixtures are, or may be expected to be, present in quantities as to require special precautions instituted to prevent their ignition. Such areas are to be designated and appropriately signed.

Hot Work
This includes welding or the use of any flame or electric arc or the use of any equipment likely to cause heat, flame or spark. It also includes caulking, chipping, drilling, riveting and any other heat producing operation, unless it is carried out in such a way as to keep the temperature of the tools and work below 100° C.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrant</td>
<td>A vehicle used for the delivery of fuel from any hydrant situated at an aircraft loading position to the aircraft and to which there may be structurally attached metering equipment, filters, pipework, hoses and a pump.</td>
</tr>
<tr>
<td>Hydrant Pit</td>
<td>A connecting point for drawing aviation products from a hydrant system.</td>
</tr>
<tr>
<td>Hydrant System</td>
<td>A system which allows for aviation products to be pumped direct from the airfield depot or satellite depot to the parking apron for delivery in bulk to the aircraft.</td>
</tr>
<tr>
<td>Hydrostatic</td>
<td>Testing of a vessel by means of a pneumatic test in which the explosive energy which would be released on failure is reduced by almost filling the vessel with water.</td>
</tr>
<tr>
<td>Immobilised</td>
<td>A condition of the bulk fuel tanker/refueller which prevents it being either immediately driven, towed or pushed clear of a hazardous situation.</td>
</tr>
<tr>
<td>IMDG Code</td>
<td>The International Maritime Dangerous Goods Code used to cover the carriage of dangerous goods by sea.</td>
</tr>
<tr>
<td>Impact Check</td>
<td>Valve: An impact and/or heat activated device which closes to prevent flow from a pressure source and remains closed after activation.</td>
</tr>
<tr>
<td>Incident</td>
<td>Any event which causes, or has the potential to cause injury, loss or damage to people, plant or premises.</td>
</tr>
<tr>
<td>In-use</td>
<td>E.g. A tank or container being used for issue and/or receipts but not necessarily all stocks held.</td>
</tr>
<tr>
<td>Interceptor</td>
<td>A device installed in a surface water drainage system to separate out any petroleum products and thus preventing it reaching public drains, sewers or water courses.</td>
</tr>
<tr>
<td>Interlock</td>
<td>A safety system that ensures that two or more actions can only take place in a predetermined system.</td>
</tr>
<tr>
<td>Issuing Authority</td>
<td>The Authority responsible for raising requests for access to fuel installations to commence work, and subsequently raising and authorising any additional documentation as a condition of approval to proceed. The issuing authority will invariably be a competent person nominated by the contractor.</td>
</tr>
</tbody>
</table>

**Notes:**
- **JSP 317 Pt 1 (v 6.4 Apr 20)**: JSP 317 is a military standard that provides guidance on the safe storage and handling of fuels in the armed forces. The partial title and version date are visible in the image.
- **SI 1992 No 743**: SI stands for Statutory Instrument, which are legislative instruments made by a competent authority under an Act of Parliament. The number indicates the specific instrument.
- **IP Pt7**: IP refers to Inland Port, and Pt7 might denote a specific section or part of a larger document.
- **HS(G) 41**: HS(G) stands for Health and Safety (General) Regulations, a set of regulations concerning the health and safety of employees in Great Britain.
- **IMDG Code**: IMDG stands for International Maritime Dangerous Goods Code, a code used to cover the carriage of dangerous goods by sea.
- **APE A/IP**: APE likely stands for another acronym or phrase, possibly related to port or airport regulations.

**Additional Notes:**
- **JSP 375**: This standard or document is not clearly visible in the image, but it is associated with the Issuing Authority term, suggesting it might be related to fuel installation or management protocols.
### Intrinsic Safety

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intrinsically Safe Circuit</strong></td>
<td>An intrinsically safe circuit is one in which any electrical sparking that may occur in the normal working, under the conditions specified by the certifying authority and with the prescribed components, is incapable of causing an ignition of the prescribed flammable gas or vapour.</td>
</tr>
<tr>
<td><strong>Intrinsically Safe Apparatus</strong></td>
<td>Electrical apparatus which are intrinsically safe.</td>
</tr>
<tr>
<td><strong>Intrinsically Safe System</strong></td>
<td>An assembly of interconnected items of electrical apparatus, Electrical System described in a descriptive system document, in which the circuits or parts of circuits intended to be used in a potentially explosive atmosphere are intrinsically safe.</td>
</tr>
</tbody>
</table>

### Notes:

1. The use of the term intrinsically safe in normal working is intended to cover sparking that may in normal use be produced by breaking line current or a short circuit across the lines in the circuit that is required to be intrinsically safe. It is also intended to cover sparking that may be produced under any conditions of fault, which in the opinion of the certifying authority might arise in practice.

2. The certifying authority referred to in the above is the Department of Trade and Industry.

### References

- BS EN 50020
- BS EN 60079-14
- Intrinsic Safety

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>&quot;i&quot; (ia and ib)</strong></td>
<td>A type of protection based upon the restriction of electrical energy within apparatus and of interconnecting wiring exposed to a potentially explosive atmosphere to a level below that which can cause ignition either by sparking or heating effects. Because the method by which intrinsic safety is achieved, it is necessary that not only the electrical apparatus exposed to the potentially explosive atmosphere, but also other electrical apparatus with which it is interconnected is suitably constructed.</td>
</tr>
</tbody>
</table>
Petroleum products are classified according to their flash points:

- **IP Class 0**: Liquefied Petroleum Gas (LPG).
- **IP Class I**: Products that have a flash point below 21°C.
- **IP Class II**: Products which have a flash point from 21°C to 60°C inclusive.
- **IP Class III**: Products which have a flash point above 60°C up to and including 100°C.
- **Unclassified**: Products with a flash point above 100°C.

IP Class II and III petroleum products may be subdivided in accordance with the circumstances in which they are handled.

- **IP Class II (1)** or **IP Class III (1)** products refer to petroleum products handled at a temperature below their flash point.
- **IP Class II (2)** and **IP Class III (2)** classifications refer to petroleum products handled at or above their respective flash points.

For countries where ambient temperatures are high enough for the handling of petroleum products to rise above their respective flashpoints, or in circumstances where products are artificially heated to such temperatures, flammable liquids which fall into sub-divisions IP Class II (2) or IP Class III (2) should be treated as IP Class I products.

---

**Leak detection system**

An automated system for detecting product leaks from tanks and pipework.

**Liquefied Petroleum Gas**

Commercial butane (i.e., a hydrocarbon mixture consisting predominantly of butane, butylene or any mixture thereof) or commercial propane (i.e., a hydrocarbon mixture consisting predominantly of propane, propylene or any mixture thereof).
Lower Explosive Limit (LEL)

This is synonymous with 'lower flammable limit'. It is the minimum concentration of vapour in air or oxygen below that which propagation of flame does not occur with a source of ignition.

Maintenance Management (Organisation)
The organisation responsible for planning, organising and managing the operation, maintenance and repair of equipment and may include the design and construction of new works. The MMO may be a contractor, DIO or Military.

Manifold
One or more header pipes with branch connections used for collecting or distributing the products to be pumped directly from the airport depot / ship.

Maximum Capacity
The maximum volume of product authorized to be held in a container/tank. N.B. The authority is the authorising engineer and the quantity is recorded on the tank.

Maximum Working Capacity
The volume of useable product that can be held in the container/tank. NB This excludes tank bottoms.

Metering Pump
A measuring system designed to dispense liquid fuel into fuel tanks. It contains its own pumping system to draw fuel from a supply tank or tanks.

Mobile Fueller (Bowsers)
A vehicle designed for the transportation and transfer of aviation products in bulk to or from an aircraft.

Monitoring System
A system as used in double skinned containment systems (tanks and pipework) to identify failure of either of the containment walls. Alternatively, a system of hydrocarbon sensing devices located in wells, placed so as to detect leakage of petroleum products.

Mounted Tank
A tank above, or partly in, the ground completely covered by earth, sand, or other suitable material.

Mechanical Transport Fueling Installation (MT FI)
Premises at which petrol is dispensed into the fuel tanks of motor vehicles or into containers and which may be operated in one of the following modes:

- Attendant operated. A filling station where an attendant directly operates and controls the dispensing equipment and the discharge nozzle.
- Attended self-service. A filling station where customers operate the dispensing equipment which is activated and supervised by an attendant in a control point, who can shut off the pump supply in an emergency.
- Unattended self-service. A filling station where dispensing equipment is activated and operated by customers without supervision by an attendant.
Multi-Load
A load consisting of two or more dangerous substances.

Multi-point (off-loading system)
A facility at which more than one hose can be discharged simultaneously from a road tanker into underground storage tanks.

Nominal Capacity
The overall volume of a container/tank describing the tank/container, e.g. 200 litre drum or 1250 m³ tank.

Non-combustible Material
A material that fulfils the criteria for non-combustibility given in BS 476 Pt 4: 1970. A material which when tested in accordance with BS 476 Pt 11: 1982 does not flame and gives no rise in temperature on either the centre (specimen) or furnace thermocouples.

Non-Hazardous Area / Place
A place in which an explosive atmosphere is not expected to occur in such quantities as to require special precautions is deemed to be non-hazardous.

Non-precision Test
Any test process not having certification as for a precision test.

Nozzle
A device for controlling the flow of fuel during a dispensing operation.

Off-set Filling Pipe
A filling pipe for a tank or tank compartment which leads from a tank to a connection point for a road tanker’s delivery hose at some distance from the tank.

Off-set filling point
A filling point, e.g. on a filling station tank, in which connection for the hose of the delivery vehicle is at some distance from the tank.

Operating Authority
Operating Authority is a responsibility given to the HoE specifically for petroleum installations. Responsibility for the safe and proper operation of petroleum installations rests with the HoE; authority, but not responsibility, may be formally delegated to an appropriate person who may carry out tasks on behalf of the HoE.

Over fill prevention device
A device designed to shut off automatically and prevent a delivery of fuel overfilling a tank (or compartment of a tank) beyond its maximum working capacity.

Oil Interceptor (or Separator)
See Interceptor.

Parking Apron
The area on an airport where aircraft are normally parked for ground service operations.

Performing Authority
The individual who will physically supervise or carry out work on the petrol filling station. The performing authority is usually an employee of the contractor.
Permit to work
A document issued by an authorised person permitting specific work to be carried out in defined areas.

Petroleum-spirit
Petroleum-spirit intended to be used as fuel for motor vehicles, motor vessels or aircraft. When tested in accordance with Petroleum (Consolidation) Act 1928, has a flash point of less than 21° C.

Petroleum Fuel
Includes petrol, kerosene, diesel and LPG.

Personal Protective Equipment (PPE)
PPE is equipment that will protect the user against health or safety risks at work. It can include items such as safety helmets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses. It also includes respiratory protective equipment (RPE).

Pipeline Capacity
The volume of product required to fill pipelines.

Pipe Work
All pipes, lines and fittings (including joints) designed to carry petrol or vapour.

Petrol Pump
An electrically driven suction pump assembly mounted above or adjacent to a supply tank and remote from a dispensing facility. The inter-connection is made by a pressurised delivery pipe protected by a leak detector valve or by other means.

Public Highway
A street external to the MOD establishment used by the public for general traffic of all descriptions.

Remote Pump
An electrically driven suction pump assembly mounted above or adjacent to a supply tank and remote from a dispensing facility. The inter-connection is made by a pressurised delivery pipe protected by a leak detector valve or by other means.

Precision Test
Is defined as any tank tightness test which has the capability of detecting a leak rate of 380 ml/hr with a probability of at least 95% whilst operating at a false alarm rate of 5% or less. Precision tests consider such variables as the thermal expansion of the stored product, evaporative losses, the compressibility and thermal expansion of any other medium being used and the effects of other variables including groundwater levels and properties of the medium surrounding the tank.

Pressure/Vacuum Valve
A dual-purpose valve which automatically prevents excessive positive or negative pressure in the tank or pipe to which it is connected.

Public Highway
A street external to the MOD establishment used by the public for general traffic of all descriptions.

Requirements for Electrical Installations
This document otherwise known as BS 7671, 1992 the IEE Wiring Regulations, 17th Edition, while not statutory is widely recognised as a code of practice likely to achieve compliance with relevant aspects of The Electricity at Work Regulations 1989. BS 7671 does not deal with fire and explosion hazards for which reference should be made to various Parts of BS 5345 or BS EN 60079.

Respiratory Protection Equipment
RPE is a particular type of Personal Protective Equipment (PPE) designed to protect the wearer from breathing in harmful substances or from oxygen-deficient atmospheres where other controls are possible or insufficient on their own.

Responsible Person
For a dangerous occurrence in connection with a pipeline, the owner of the pipeline; for other facilities, the person for the time-being having control of the premises at which a dangerous occurrence happened.
Restricted Area
A temporarily defined area which may or may not be in an existing hazardous area, in which there is increased hazard due to spillage, defects in installation or the type of maintenance operations to be carried out.

Risk Assessment
Risk assessment is a process of recognising a hazard, estimating its likelihood of occurring and the possible consequences, then implementing appropriate control measures to remove the hazard or mitigate the consequences.

Road Tanker
A mobile road vehicle equipped with a tank containing two compartments or more for transporting and delivering fuel to a petrol station where it off-loads under gravity head.

Servicing
Any maintenance task carried out on a bulk fuel tanker/refueller (less the bulk fuel container, associated pipe work or dispensing equipment) which does not require either hot work or the equipment to be immobilised.

Silt Trap
A containment facility for settleable water borne particles.

Single (off-loading) Point
A facility at which only one mobile container can be off-loaded at once.

Site Records
Permanent records, retained at the petrol filling station, including such details as the equipment installed, repairs, modifications and replacements carried out and the results of all inspection.

Slide Valve
A valve positioned in a manifold pipe system which slides shut when the vapour hose to the delivery vehicle is connected, thus closing off the line to the P/V valve on the petrol filling station. Removing the vapour hose opens the slide valve.
<table>
<thead>
<tr>
<th>Source of Ignition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naked lights, flames, fires, exposed incandescent material, electrical welding arcs, electrical equipment of an unapproved pattern, or a spark or flame produced by any other means.</td>
</tr>
<tr>
<td>Note</td>
</tr>
<tr>
<td>Any surface, such as a hot exhaust pipe, heated above the ignition temperature of a flammable petroleum vapour and air mixture may also constitute a source of ignition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Split Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>A delivery of petrol to a petrol filling station in which the compartment is only partially emptied.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 1a</th>
</tr>
</thead>
<tbody>
<tr>
<td>The control of vapour emissions during petrol storage and when loading at a refinery or terminal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 1b</th>
</tr>
</thead>
<tbody>
<tr>
<td>The control of vapour emissions during the filling of a storage tank at a petrol filling station.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UN Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>(The UN System applies to the storage of packed stocks and for transportation)</td>
</tr>
<tr>
<td>Class 3 - Flammable Liquids</td>
</tr>
<tr>
<td>Liquids, or mixtures of liquids, or liquids in solution or suspension which give off a flammable vapour at not more than 60°C closed-cup test.</td>
</tr>
<tr>
<td>Class 3 PG I – Initial Boiling Point &lt;= 35°C</td>
</tr>
<tr>
<td>Class 3 PG II – Flash Point &lt;23°C, Initial Boiling Point &gt;35°C</td>
</tr>
<tr>
<td>Class 3 PG III – Flash Point =&gt; 23°C &lt;= 60°C, Initial Boiling Point &gt;35°C</td>
</tr>
<tr>
<td>Table available in ADR 2.2.3.1.3</td>
</tr>
<tr>
<td>ADR 2.2.3.1.1. Note 2 below is applicable for road and rail transport only.</td>
</tr>
<tr>
<td>NOTE 2 - By derogation from paragraph 2.2.3.1.1 above, diesel fuel, gasoil, heating oil (light) including synthetically manufactured products having a flash-point above 60 °C and not more than 100 °C shall be deemed substances of Class 3, UN No. 1202</td>
</tr>
</tbody>
</table>
Vapour Balancing
A system which allows vapour displaced from storage tanks during the delivery of petrol from a road tanker to be directed to the tanker via a vapour return hose. It ensures there is minimal discharge of vapour to atmosphere during tanker delivery.

Vapour Collection System
A system which allows vapour displaced from storage tanks during the delivery of petrol from a road tanker to be directed to the tanker via a vapour return hose. It ensures there is minimal discharge of vapour to atmosphere during tanker delivery.

Vapour Generation
The production of hydrocarbon vapour by evaporation of a volatile product. This can occur during filling of the tank or when the tank is undisturbed during periods when dispensing has stopped.

Vehicle Wash Separator
Part of the vehicle wash system, comprising at least two chambers, which separates the settleable solids from the waste water and retains the settled solids.

Verifying Authority
The authority for approving requests for access to petrol filling stations to commence work. This may be the developer's engineer or the nominated person employed by the contractor.

Volatile Organic Compound
Compound containing at least one carbon atom and which in liquid form readily evaporates at ambient temperature.

Working Stock
The volume of product in container/tank that can be used. NB this excludes tank bottoms and pipeline capacity.

Zoning
Hazardous places are classified in terms of zones based on the frequency and duration of the occurrence of an explosive atmosphere.

Zone 0
– A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour, or mist is present continuously or for long periods frequently.

Zone 1
– A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour, or mist is likely to occur in normal operation occasionally.

Zone 2
– A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour, or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period.

DSEAR 02 (HSE ACOP L138)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>UNECE</td>
<td>Agreement Concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>APFC</td>
<td></td>
<td>Air Portable Fuel Container</td>
</tr>
<tr>
<td>APOE</td>
<td></td>
<td>Air Port of Embarkation</td>
</tr>
<tr>
<td>ABCA</td>
<td>MOD</td>
<td>American, British, Canadian, Australian</td>
</tr>
<tr>
<td>API</td>
<td>MOD</td>
<td>American Petroleum Institute</td>
</tr>
<tr>
<td>AL</td>
<td>MOD</td>
<td>Amendment List</td>
</tr>
<tr>
<td>ATO</td>
<td>MOD</td>
<td>Ammunition Technical Officer</td>
</tr>
<tr>
<td>AAC</td>
<td>MOD</td>
<td>Army Air Corps</td>
</tr>
<tr>
<td>AESP</td>
<td>MOD</td>
<td>Army Equipment Support Publicaton</td>
</tr>
<tr>
<td>Army Headquarters Command</td>
<td>Army HQ</td>
<td></td>
</tr>
<tr>
<td>ALARP</td>
<td></td>
<td>As Low As Reasonably Practicable</td>
</tr>
<tr>
<td>AE</td>
<td></td>
<td>Authorising Engineer</td>
</tr>
<tr>
<td>AP Petroleum</td>
<td>(Petroleum)</td>
<td>Authorised Person Petroleum</td>
</tr>
<tr>
<td>AFDS</td>
<td>MOD</td>
<td>Automated Fuel Dispensing System</td>
</tr>
<tr>
<td>ATG</td>
<td>MOD</td>
<td>Automatic Tank Gauging</td>
</tr>
<tr>
<td>APU</td>
<td></td>
<td>Auxiliary Power Unit</td>
</tr>
<tr>
<td>BLB</td>
<td></td>
<td>Base Level Budget</td>
</tr>
<tr>
<td>BBFI</td>
<td></td>
<td>Battlefield Bulk Fuel Installation</td>
</tr>
<tr>
<td>BFCV Sub-committee</td>
<td>BFCV SC</td>
<td></td>
</tr>
<tr>
<td>BLEVE</td>
<td>MOD</td>
<td>Boiling Liquid Expanding Vapour Explosion</td>
</tr>
<tr>
<td>BSI</td>
<td></td>
<td>British Standards Institution</td>
</tr>
<tr>
<td>BFCV</td>
<td></td>
<td>Bulk Fuel Carrying Vehicle</td>
</tr>
<tr>
<td>BFI</td>
<td></td>
<td>Bulk Fuel Installation</td>
</tr>
<tr>
<td>BOD</td>
<td></td>
<td>Biological Oxygen Demand</td>
</tr>
<tr>
<td>CEPS</td>
<td></td>
<td>Central European Pipeline System</td>
</tr>
<tr>
<td>CHASP</td>
<td></td>
<td>Central Health and Safety Project</td>
</tr>
<tr>
<td>CC O</td>
<td></td>
<td>Certificate for Continued Operation</td>
</tr>
<tr>
<td>CFFP</td>
<td></td>
<td>Certificate of Fitness for Purpose</td>
</tr>
<tr>
<td>CE SO</td>
<td>MOD</td>
<td>Chief Environmental Safety Officer</td>
</tr>
<tr>
<td>CDM</td>
<td>MOD</td>
<td>Chief of Defence Material</td>
</tr>
<tr>
<td>CFS</td>
<td>MOD</td>
<td>Chief of Fleet Support</td>
</tr>
<tr>
<td>CST</td>
<td>MOD</td>
<td>Close Support Tanker</td>
</tr>
<tr>
<td>CP SD</td>
<td></td>
<td>Clinical &amp; Professional Support Division</td>
</tr>
<tr>
<td>CINC FLEET</td>
<td></td>
<td>Commander in Chief Fleet</td>
</tr>
<tr>
<td>CP TP</td>
<td></td>
<td>Competent Petroleum Trained Personnel</td>
</tr>
<tr>
<td>CO MAH</td>
<td>HSE</td>
<td>Control of Major Accident Hazards</td>
</tr>
<tr>
<td>CO SHH</td>
<td>HSE</td>
<td>Control of Substances Hazardous to Health</td>
</tr>
<tr>
<td>COD</td>
<td></td>
<td>Chemical Oxygen Demand</td>
</tr>
<tr>
<td>DSA03 DLSR, MSTR</td>
<td>DGM</td>
<td>Dangerous Goods Manual</td>
</tr>
<tr>
<td>DB</td>
<td></td>
<td>Decertification Board</td>
</tr>
<tr>
<td>DE &amp;S</td>
<td></td>
<td>Defence Equipment and Support</td>
</tr>
<tr>
<td>DFR</td>
<td></td>
<td>Defence Fire and Rescue</td>
</tr>
<tr>
<td>DE &amp;S MB</td>
<td></td>
<td>Defence Equipment and Support Management Board</td>
</tr>
<tr>
<td>DF&amp;GE SB</td>
<td></td>
<td>Defence Fuels and Gases Environment and Safety Board</td>
</tr>
<tr>
<td>DFOC</td>
<td></td>
<td>Defence Fuels Operation Centre</td>
</tr>
<tr>
<td>DIORG</td>
<td></td>
<td>Defence Information Integration Organisation</td>
</tr>
<tr>
<td>DLSR</td>
<td></td>
<td>Defence Logistic Support Regulations</td>
</tr>
<tr>
<td>DSEAR</td>
<td></td>
<td>Dangerous Substances and Explosive Atmospheres Regulations</td>
</tr>
<tr>
<td>DSA03</td>
<td></td>
<td>Dangerous Goods Manual (DSAR)</td>
</tr>
<tr>
<td>DI</td>
<td></td>
<td>Defence Information Integration</td>
</tr>
<tr>
<td>DLSR</td>
<td></td>
<td>Defence Logistic Support Regulations</td>
</tr>
<tr>
<td>MSTR</td>
<td></td>
<td>MOD</td>
</tr>
<tr>
<td>Description</td>
<td>Abbreviation</td>
<td>Source</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------</td>
<td>--------</td>
</tr>
<tr>
<td>Defence Petroleum Training Squadron</td>
<td>DPTS</td>
<td></td>
</tr>
<tr>
<td>Defence Research Agency ( Fighting Vehicles &amp; Systems)</td>
<td>DRA(FV&amp;S)</td>
<td></td>
</tr>
<tr>
<td>Defence Safety Authority</td>
<td>DSA</td>
<td></td>
</tr>
<tr>
<td>Defence School of Transport</td>
<td>DTS</td>
<td></td>
</tr>
<tr>
<td>Defence Standard</td>
<td>Def Sta n</td>
<td></td>
</tr>
<tr>
<td>Defence Supply Chain Operations and Movements</td>
<td>DS CO M</td>
<td></td>
</tr>
<tr>
<td>Defence Support Group</td>
<td>DS G</td>
<td></td>
</tr>
<tr>
<td>Defence Training Estate</td>
<td>DTE</td>
<td></td>
</tr>
<tr>
<td>Defence Works Advisor</td>
<td>DWA</td>
<td></td>
</tr>
<tr>
<td>Deployable Bulk Fuel Installation</td>
<td>DB FI</td>
<td></td>
</tr>
<tr>
<td>Defence Infrastructure Fire Standards</td>
<td>DIFS</td>
<td></td>
</tr>
<tr>
<td>Deployable Infrastructure Project Team</td>
<td>DIPT</td>
<td></td>
</tr>
<tr>
<td>Deployable Support Group</td>
<td>DS G</td>
<td></td>
</tr>
<tr>
<td>Deployed Permanent Installation</td>
<td>DPI</td>
<td></td>
</tr>
<tr>
<td>DFAPC, Environment, Safety &amp; Training Sub Committee</td>
<td>DFLAPC, ES&amp;</td>
<td></td>
</tr>
<tr>
<td>Defence Fire and Rescue</td>
<td>DFR</td>
<td></td>
</tr>
<tr>
<td>DE&amp;S Management Board</td>
<td>DE &amp;S MB</td>
<td></td>
</tr>
<tr>
<td>Defence Fuels and Gases Environment and Safety Board</td>
<td>DF&amp;GE SB</td>
<td></td>
</tr>
<tr>
<td>Deployable Support &amp; Test Equipment</td>
<td>DS &amp;T E PT</td>
<td></td>
</tr>
<tr>
<td>Diesel Fuel General Purpose</td>
<td>Dieso UK</td>
<td></td>
</tr>
<tr>
<td>Diesel Fuel Motor Transport (on Public Roads)</td>
<td>Diesel MT F-54</td>
<td></td>
</tr>
<tr>
<td>Diesel Fuel Naval Distillate</td>
<td>Dieso F-76</td>
<td></td>
</tr>
<tr>
<td>Directly Administered Units</td>
<td>DAU</td>
<td></td>
</tr>
<tr>
<td>Director Based Depots</td>
<td>DB D</td>
<td></td>
</tr>
<tr>
<td>Director Defence Health &amp; Safety</td>
<td>D Def H&amp;S</td>
<td></td>
</tr>
<tr>
<td>Director MOD Fire Service</td>
<td>D MOD FS</td>
<td></td>
</tr>
<tr>
<td>Director Joint Support Chain</td>
<td>DJSC</td>
<td></td>
</tr>
<tr>
<td>Director Supply Chain Operations</td>
<td>Di re c to r SC Op s</td>
<td></td>
</tr>
<tr>
<td>Emergency Pollution Response Service</td>
<td>EPRS</td>
<td></td>
</tr>
<tr>
<td>Environment Agency</td>
<td>EA</td>
<td></td>
</tr>
<tr>
<td>Environment, Safety &amp; Training Sub-Committee</td>
<td>ES&amp;TSC</td>
<td></td>
</tr>
<tr>
<td>Equipment Sub-Committee</td>
<td>ESC</td>
<td></td>
</tr>
<tr>
<td>Equipment Support</td>
<td>ES</td>
<td></td>
</tr>
<tr>
<td>European Standard (Norm)</td>
<td>EN</td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td>EU</td>
<td></td>
</tr>
<tr>
<td>Expiry Airfield Facilities</td>
<td>E AF</td>
<td></td>
</tr>
<tr>
<td>Expiry Logistics Wing</td>
<td>E LW</td>
<td></td>
</tr>
<tr>
<td>Filter Water Separator</td>
<td>FWS</td>
<td></td>
</tr>
<tr>
<td>Frontline Command</td>
<td>FLC</td>
<td></td>
</tr>
<tr>
<td>First Aid Fire Appliances</td>
<td>FAFA</td>
<td></td>
</tr>
<tr>
<td>Fleet Air Arm</td>
<td>FAA</td>
<td></td>
</tr>
<tr>
<td>Fuels and Gases Safety Regulator</td>
<td>FGSR</td>
<td></td>
</tr>
<tr>
<td>Fuels Lubricants &amp; Associated Products</td>
<td>FLAP</td>
<td></td>
</tr>
<tr>
<td>Fuels Lubricants &amp; Associated Products Working Party</td>
<td>FLAP WP</td>
<td></td>
</tr>
<tr>
<td>Focal Point</td>
<td>FP</td>
<td></td>
</tr>
<tr>
<td>Fuel Consumption Unit</td>
<td>FCU</td>
<td></td>
</tr>
<tr>
<td>Fuel Dispensing Rack</td>
<td>FDR</td>
<td></td>
</tr>
<tr>
<td>Fuel Safety Assurance Assessment</td>
<td>FGSAA</td>
<td></td>
</tr>
<tr>
<td>Fuel Safety Incident Investigating Officer</td>
<td>FSII</td>
<td></td>
</tr>
<tr>
<td>Fuels Safety Working Group</td>
<td>FSWG</td>
<td></td>
</tr>
<tr>
<td>Furnace Fuel Oil</td>
<td>FFO</td>
<td></td>
</tr>
<tr>
<td>General Support Tanker</td>
<td>GST</td>
<td></td>
</tr>
<tr>
<td>General Fuels Power Unit</td>
<td>GP</td>
<td></td>
</tr>
<tr>
<td>Furnace Power Unit</td>
<td>GP</td>
<td></td>
</tr>
<tr>
<td>Furnace Support Equipment</td>
<td>GSE</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Abbreviation</td>
<td>Source</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>--------</td>
</tr>
<tr>
<td>Hazardous Material</td>
<td>HAZMAT</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Safety at Work Act</td>
<td>H&amp;SWA</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Safety Executive</td>
<td>HSE</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Safety Guidance Note</td>
<td>HS(G)</td>
<td></td>
</tr>
<tr>
<td>Higher Explosive Limit</td>
<td>HE L</td>
<td></td>
</tr>
<tr>
<td>Higher Level Budget</td>
<td>HLB</td>
<td></td>
</tr>
<tr>
<td>HQ Air Command</td>
<td>HQ Air</td>
<td></td>
</tr>
<tr>
<td>HQ Land Forces</td>
<td>HQ LF</td>
<td></td>
</tr>
<tr>
<td>HQ Land Forces Directorate of Infrastructure</td>
<td>HQ LF D Infra Sp</td>
<td></td>
</tr>
<tr>
<td>HQ UK Support Command (Germany)</td>
<td>HQ UK SC(G)</td>
<td></td>
</tr>
<tr>
<td>Institution of Petroleum (Now Known as the Energy Institute (EI))</td>
<td>IP</td>
<td></td>
</tr>
<tr>
<td>International Air Transport Association Dangerous Goods Regulations</td>
<td>IATA DGR</td>
<td></td>
</tr>
<tr>
<td>Technical Instructions for the Safe Transport of Dangerous Goods by Air – ICAO TIs</td>
<td>ICAO TI</td>
<td></td>
</tr>
<tr>
<td>International Maritime Dangerous Goods Code</td>
<td>IMDG Code</td>
<td></td>
</tr>
<tr>
<td>International Maritime Organization</td>
<td>IMO</td>
<td></td>
</tr>
<tr>
<td>International Safety Guide for Oil Tankers &amp; Terminals</td>
<td>ISGOT T</td>
<td></td>
</tr>
<tr>
<td>International Standards Organization</td>
<td>ISO</td>
<td></td>
</tr>
<tr>
<td>Joint Air Publication</td>
<td>JAP Joint</td>
<td></td>
</tr>
<tr>
<td>Joint Force Command</td>
<td>JFC</td>
<td></td>
</tr>
<tr>
<td>Joint Force Logistic Component</td>
<td>JF Log C</td>
<td></td>
</tr>
<tr>
<td>Joint Operational Fuels System</td>
<td>JOFS</td>
<td></td>
</tr>
<tr>
<td>Joint Service Publication</td>
<td>JSP</td>
<td></td>
</tr>
<tr>
<td>Joint Air Publication</td>
<td>JAP Joint</td>
<td></td>
</tr>
<tr>
<td>Joint Force Command</td>
<td>JFC</td>
<td></td>
</tr>
<tr>
<td>Kerbsene Military</td>
<td>KE RO</td>
<td></td>
</tr>
<tr>
<td>Land Equipment Audit</td>
<td>LE A</td>
<td></td>
</tr>
<tr>
<td>Land Systems Fuels &amp; Lubricants Subcommittee</td>
<td>LSFLAPPSC</td>
<td></td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>LPG</td>
<td></td>
</tr>
<tr>
<td>Logistic Support Services</td>
<td>Log Sp SV CS</td>
<td></td>
</tr>
<tr>
<td>Long Term Costing</td>
<td>LTC</td>
<td></td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>LE L</td>
<td></td>
</tr>
<tr>
<td>Logistic Support</td>
<td>Log Sp</td>
<td></td>
</tr>
<tr>
<td>Maintenance Management Organisation</td>
<td>MMO</td>
<td></td>
</tr>
<tr>
<td>Major Accident Control Regulations</td>
<td>MA CR</td>
<td></td>
</tr>
<tr>
<td>Management of Joint Deployed Inventory</td>
<td>MJ DI</td>
<td></td>
</tr>
<tr>
<td>Marine Fuels Manager</td>
<td>MFM</td>
<td></td>
</tr>
<tr>
<td>Marine Gas Oil</td>
<td>MGO</td>
<td></td>
</tr>
<tr>
<td>Maximum Explosive Limit</td>
<td>ME L</td>
<td></td>
</tr>
<tr>
<td>Mechanical Transport Fueling Installation</td>
<td>MT FI</td>
<td></td>
</tr>
<tr>
<td>Military Works Force</td>
<td>MWF</td>
<td></td>
</tr>
<tr>
<td>Military Agency for Standardisation</td>
<td>MAS</td>
<td></td>
</tr>
<tr>
<td>Ministry of Defence</td>
<td>MOD or MOD</td>
<td></td>
</tr>
<tr>
<td>Mobile Pipeline Repair Team</td>
<td>MPRT</td>
<td></td>
</tr>
<tr>
<td>Motor Transport</td>
<td>MT</td>
<td></td>
</tr>
<tr>
<td>Movement and Transport Safety Regulator</td>
<td>MTSR</td>
<td></td>
</tr>
<tr>
<td>MOD Defence Works Functional Standards Safety Rules &amp; Procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
<td></td>
</tr>
<tr>
<td>NI</td>
<td>Northern Ireland</td>
<td></td>
</tr>
<tr>
<td>NEPS</td>
<td>North European Pipeline System</td>
<td></td>
</tr>
<tr>
<td>OFD</td>
<td>Oil Fuel Depots</td>
<td></td>
</tr>
<tr>
<td>OIEC</td>
<td>Oil Industry Emergency Committee</td>
<td></td>
</tr>
<tr>
<td>OM</td>
<td>Oil Mineral</td>
<td></td>
</tr>
<tr>
<td>OMD</td>
<td>Oil Mineral Detergent</td>
<td></td>
</tr>
<tr>
<td>OX</td>
<td>Oils (miscellaneous)</td>
<td></td>
</tr>
<tr>
<td>OA</td>
<td>Operating Authority</td>
<td></td>
</tr>
<tr>
<td>PJHQ</td>
<td>Permanent Joint Headquarters</td>
<td></td>
</tr>
<tr>
<td>PPE</td>
<td>Personal Protective Equipment</td>
<td></td>
</tr>
<tr>
<td>PRR</td>
<td>Personal Role Radio</td>
<td></td>
</tr>
<tr>
<td>PRV</td>
<td>Pressure Relief Valve</td>
<td></td>
</tr>
<tr>
<td>PSSR</td>
<td>Pressure System Safety Regulations</td>
<td></td>
</tr>
<tr>
<td>HSE</td>
<td>Health, Safety, Environment &amp; Fire Management Board</td>
<td></td>
</tr>
<tr>
<td>PE LG</td>
<td>Petroleum Enforcement Liaison Group</td>
<td></td>
</tr>
<tr>
<td>PHE</td>
<td>Petroleum Handling Equipment</td>
<td></td>
</tr>
<tr>
<td>PLT</td>
<td>Petroleum Laboratory Technician</td>
<td></td>
</tr>
<tr>
<td>PE A</td>
<td>Petroleum Enforcement Authority</td>
<td></td>
</tr>
<tr>
<td>PSD</td>
<td>Petroleum Supply Depot</td>
<td></td>
</tr>
<tr>
<td>PHE SC</td>
<td>PHE Sub Committee</td>
<td></td>
</tr>
<tr>
<td>PCE</td>
<td>Pollution Control Equipment</td>
<td></td>
</tr>
<tr>
<td>PCS</td>
<td>Pollution Control Sorbents</td>
<td></td>
</tr>
<tr>
<td>POLREP</td>
<td>Pollution Report (Marine)</td>
<td></td>
</tr>
<tr>
<td>PRV</td>
<td>Pressure Reducing Valve</td>
<td></td>
</tr>
<tr>
<td>PSC</td>
<td>Products Sub Committee</td>
<td></td>
</tr>
<tr>
<td>PTS</td>
<td>Professional Technical Service</td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>Project Team</td>
<td></td>
</tr>
<tr>
<td>PRO M</td>
<td>Property Manager</td>
<td></td>
</tr>
<tr>
<td>QA</td>
<td>Quality Assurance</td>
<td></td>
</tr>
<tr>
<td>QC</td>
<td>Quality Control</td>
<td></td>
</tr>
<tr>
<td>QS</td>
<td>Quality Surveillance</td>
<td></td>
</tr>
<tr>
<td>RT C</td>
<td>Railroad Tank Cars</td>
<td></td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td>Replacement at Sea</td>
<td></td>
</tr>
<tr>
<td>RIDD OR</td>
<td>Reporting of Injuries, Diseases and Dangerous Occurrences Regulations</td>
<td></td>
</tr>
<tr>
<td>PPD</td>
<td>Respiratory Protective Device</td>
<td></td>
</tr>
<tr>
<td>RPE</td>
<td>Respiratory Protective Equipment</td>
<td></td>
</tr>
<tr>
<td>RO</td>
<td>Role Office</td>
<td></td>
</tr>
<tr>
<td>RAF</td>
<td>Royal Air Force</td>
<td></td>
</tr>
<tr>
<td>RE</td>
<td>Royal Engineers</td>
<td></td>
</tr>
<tr>
<td>RFA</td>
<td>Royal Fleet Auxiliary</td>
<td></td>
</tr>
<tr>
<td>RLC</td>
<td>Royal Logistic Corps</td>
<td></td>
</tr>
<tr>
<td>RN</td>
<td>Royal Navy</td>
<td></td>
</tr>
<tr>
<td>RSME</td>
<td>Royal School of Mechanical Engineering</td>
<td></td>
</tr>
<tr>
<td>SHE FB</td>
<td>Safety, Health, Environment &amp; Fire Management Board</td>
<td></td>
</tr>
<tr>
<td>SDS</td>
<td>Safety Data Sheet</td>
<td></td>
</tr>
<tr>
<td>SPO E</td>
<td>Sea Port of Embarkation</td>
<td></td>
</tr>
<tr>
<td>S of</td>
<td>Secretary of State</td>
<td></td>
</tr>
<tr>
<td>SIM</td>
<td>Senior Infrastructure Management</td>
<td></td>
</tr>
<tr>
<td>SFP</td>
<td>Service Focal Points</td>
<td></td>
</tr>
<tr>
<td>SHR</td>
<td>Shipping Procedure</td>
<td></td>
</tr>
<tr>
<td>FUEL</td>
<td>Fuel</td>
<td></td>
</tr>
<tr>
<td>POLICY</td>
<td>Policy</td>
<td></td>
</tr>
<tr>
<td>SYST</td>
<td>System</td>
<td></td>
</tr>
<tr>
<td>M OD</td>
<td>Mode</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Abbreviation</td>
<td>Source</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Site Estate Authority Team</td>
<td>SE AT</td>
<td></td>
</tr>
<tr>
<td>Siting Board</td>
<td>SB</td>
<td></td>
</tr>
<tr>
<td>Small Container and Convoy Refueling System</td>
<td>SCCR S</td>
<td></td>
</tr>
<tr>
<td>Specialist Petrol Inspection</td>
<td>SPI</td>
<td></td>
</tr>
<tr>
<td>South Europe Pipeline System</td>
<td>SE PS</td>
<td></td>
</tr>
<tr>
<td>Specialist Team Royal Engineers (Bulk Petroleum)</td>
<td>ST RE (BP)</td>
<td></td>
</tr>
<tr>
<td>Spillage Report</td>
<td>SPILLRE P</td>
<td></td>
</tr>
<tr>
<td>Spillage Response Plan</td>
<td>SRP</td>
<td></td>
</tr>
<tr>
<td>Standard Operating Procedure</td>
<td>SOP</td>
<td></td>
</tr>
<tr>
<td>Standardisation Agreement (ABC A)</td>
<td>QST AG</td>
<td></td>
</tr>
<tr>
<td>Statement of Requirement</td>
<td>SOR</td>
<td></td>
</tr>
<tr>
<td>Statement of User Requirement</td>
<td>SUR</td>
<td></td>
</tr>
<tr>
<td>Status of Forces Agreement</td>
<td>SOFA</td>
<td></td>
</tr>
<tr>
<td>Statutory Instrument</td>
<td>SI</td>
<td></td>
</tr>
<tr>
<td>Suitably Qualified and Experienced Personnel</td>
<td>SQE P</td>
<td></td>
</tr>
<tr>
<td>Support Helicopter</td>
<td>SH</td>
<td></td>
</tr>
<tr>
<td>Tactical Aircraft Refueller</td>
<td>TAR</td>
<td></td>
</tr>
<tr>
<td>Tactical Aircraft Refueller (Trailer)</td>
<td>TAR (T)</td>
<td></td>
</tr>
<tr>
<td>Tactical Fuel Handling Equipment</td>
<td>TFHE</td>
<td></td>
</tr>
<tr>
<td>Tactical Fuel Handling Equipment Sub-Committee</td>
<td>TFHESC</td>
<td></td>
</tr>
<tr>
<td>Tactical Supply Wing</td>
<td>T SW</td>
<td></td>
</tr>
<tr>
<td>Takeover Board</td>
<td>TB</td>
<td></td>
</tr>
<tr>
<td>Tank Fabric Collapsible</td>
<td>T FC</td>
<td></td>
</tr>
<tr>
<td>Top Level Budget (Command)</td>
<td>T LB</td>
<td></td>
</tr>
<tr>
<td>Towed Flexible Barge</td>
<td>T FB</td>
<td></td>
</tr>
<tr>
<td>Towed Flexible Barge Discharge System</td>
<td>T FB DS</td>
<td></td>
</tr>
<tr>
<td>Transition to War</td>
<td>TT W</td>
<td></td>
</tr>
<tr>
<td>Unit Identification Number</td>
<td>UIN</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>UK</td>
<td></td>
</tr>
<tr>
<td>Unit Support Tanker</td>
<td>US T</td>
<td></td>
</tr>
<tr>
<td>United Nations Economic Commission for Europe</td>
<td>UN ECE</td>
<td></td>
</tr>
<tr>
<td>United Nations</td>
<td>UN</td>
<td></td>
</tr>
<tr>
<td>Unleaded Gasoline</td>
<td>ULG AS F-67</td>
<td></td>
</tr>
<tr>
<td>Vapour Recovery</td>
<td>VR</td>
<td></td>
</tr>
<tr>
<td>Vice Chief Defence Staff</td>
<td>VCD S</td>
<td></td>
</tr>
<tr>
<td>Wet Stock Management</td>
<td>WSM</td>
<td></td>
</tr>
<tr>
<td>Woking Partnership (Appointed by MO)</td>
<td>WS-M</td>
<td></td>
</tr>
</tbody>
</table>
Chapter Sponsor - D SF A - Governance and Policy

Introduction

1. The Secretary of State for Defence requires that all employees, as far as reasonably practicable, comply with legislation and accepted Code of Practice concerning the health, safety and welfare of themselves and others, regardless of any exemption which may apply to the Ministry of Defence.

2. This publication is based on the following applicable sources:
   a. Statutory Legislation (and international convention where applicable).
   b. Regulated Approved Codes of Practice and Guidance Notes.
   c. International and British Standards (ISO and BS-EN).
   e. Defence Standards (Def Sta n).
   f. MOD Publications (JSPs, MRPs, JAPs, B Rs, AE SPs, APs).

3. The above standards provide the minimum requirements for the storage, handling and working with Fuels and Lubricants on the MOD estate. Regardless of the authority of the publications listed in paragraph 2 (above); all processes/references stated within this publication, both in the Annexes to this chapter, and the chapter specific bibliographies shall be deemed mandatory unless otherwise stated.

Legislation

4. Of relevance to this publication are Regulations enforced under the primary legislation (Acts) for health, safety, and the environment when storing, handling and working with Fuels and Lubricants. Further information can be obtained from the legislation below and the HSE / EA / DfT websites, which are summarized at Annex A:


5. Other Government departments and executive non-departmental public bodies such as Department for Transport (DfT) Environment Agency (EA, SEPA), and Health and Safety Executive (HSE) publish applicable Codes of Practice and Guidance Notes.

6. Approved Code of Practice - ACOPS. These ACOPS are approved by the respective Secretary of State and provide practical advice on how to comply with the law. If you follow the advice, you will be doing enough to comply with the law in respect of those specific matters on which the Code gives advice. However, the Code has a special legal status. If you are prosecuted for breach of health and safety law, and it is proved that you did not follow the relevant provisions of the Code, you will need to show that you have complied with the law in some other way or a Court will find you at fault.

7. Guidance. Guidance Notes, Pollution Prevention Guidance (GNs, PPGs) are approved by the respective Secretary of State and provide practical advice. If you do follow the guidance, you will normally be doing enough to comply with the law. Regulators and inspectors seek to secure compliance with the law and may refer to the GNs/PPGs. Relevant publications titles are at Annex B. Publications from HSE, DfT, and EA can be sourced from the following websites:

   a. https://www.hse.gov.uk/pubs/books/index-hsg-ref.htm
   d. International and National Standards for Gas Products and Cylinder Design and Manufacture (ISO, CEN, BS-EN)

8. ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies of which CEN (Comité Européen de Normalisation), and BSI (British Standards Institute) participate in. Through respective national and international technical committees, (competent authorities) approve/validate fuel installation specifications and the design, maintenance and testing of fuel standards and specifications.

9. Standards become a mandatory requirement when specified in a Regulation. Throughout the design, construction, manufacture and testing of a fuel installation, it is of importance that these standards are adhered to. Relevant standard titles are at Annex C. Refer to the BSI website for applicable fuel standards and specifications:


10. The Oil and Gas Industry provides industry best practice by publishing standardized publications that enhance safety practice and prioritize environmental protection. Examples of such organizations are the HSE ACOP, Energy Institute and the APEA. These Industry...
COPS are produced with full consultation with executive non-departmental public bodies (HSE, DfT, etc).

Defence Standards – (Def Stans)

11. A Defence Standard is established by broad consensus, achieved by stakeholders from MOD, Industry and Academia that deliver against a specified and continuing MOD requirement in support of the MOD acquisition process. Defence Standards specify material, procedures or process guidance and use normative reference from other open standards bodies as appropriate. Defence Standards are the main instruments used to define the procurement standard for Fuels and Lubricants used in MOD. For specific fuel Defence Standards refer to the DefStan 01-005 Issue 19.

The storage and handling of Fuels and Lubricants is a multidisciplinary process on the MOD estate. As such, to carry out the process safely and environmentally requires the observance of other MOD publications e.g., generic Health and Safety – JSP 375 and Environmental Policy JSP 418. Domain specific MOD publications are also available for specific gas applications (e.g., Air Publications, APs, Naval Books of Reference BRs, and Army Equipment Support Publications – AESPs). For MOD publications, refer to the defnet.
1. European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR).

2. BS EN 50020 - Electrical Apparatus for Potentially Explosive Atmospheres. Intrinsically Safe 'i'.

3. HSE HS(G)51 - The Storage of Flammable Liquids in Containers.


7. JSP 317 Pt 1 (v 6.4 April 20) Management of Environmental Protection.

8. DBR 1754 - Safety Regulations for Storing and Handling Petroleum Oils, Lubricants and Certain Other Hazardous Stores in HM Ships.

9. DSA 02 & 03 - UK MOD Fuels & Gases Environmental and Safety Management.
The list below outlines the main pieces of statutory legislation that support the safe storage and handling of industrial gases and cryogenic liquids.

1. Health and Safety at Work, etc., Act 1974
   Places duties (e.g. duty of care) on defined individuals to ensure minimum health and safety standards at work; and general duties on all staff to take reasonable care of their own health and safety, not to intend or recklessly interfere with safety equipment and to cooperate with their employer to enable the employer to comply with his duties of care.

2. Environmental Protection Act 1990
   Produced in 2 parts (Part I and II), and outlines the principles underlying the UK approach to pollution control across all environmental media.

   Provides a legislative link between health, safety and environmental issues concerning hazardous substances.

   Known as CLP and aims to ensure that purchasers, handlers and users of hazardous chemicals are provided with sufficient hazard information to protect their health and safety.

   Defines confined spaces and imposes controls on access.

   Known as CDM, it imposes health and safety controls on construction projects that fall within the scope of the Regulations.

   Known as COMAH, it is implemented within the MOD through the Major Accident Control Regulations (MACR - JSP 498).

   Collectively, known as “COSHH” and covers exposure to most hazardous substances.

   These Regulations apply to sites holding certain quantities of listed substances. Its main aim is to ensure site access for fire fighting services.

    Known as DSEAR, it imposes requirements of eliminating or reducing risk from fire, explosion or other events arising at work from the hazardous properties of a dangerous substance. It supersedes previous regulations specifically concerned with highly flammable liquids and LPG.

Controls the discharge of pollutants under a permitting regime.


14. Notification of Installations Handling Hazardous Substances Regulations 1982, (SI 1982 No 1357). Under these Regulations the HSE must be notified of premises where substances listed in the Regulations may be present in the quantities stated.


Known as PUWER, it provides requirements for the provision of safe work equipment and its safe use, irrespective of age or place of origin.


This imposes obligations on manufacturers, importers (into the EU), downstream users (and distributors, retailers and storage providers) of certain substances. These requirements are being phased in over the period 1 June 2007 to 31 May 2018.


Known as RIDDOR, it provides a mechanism by which certain categories of work-related injuries, diseases, and dangerous occurrences are reported to the Health and Safety Executive.


This requires compliance with the UN regulations for the carriage of dangerous goods.
The list below outlines the main ACOPs and Guidance Notes that support the safe storage and handling of fuels, lubricants and associated products.

<table>
<thead>
<tr>
<th>Publication Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE – L5</td>
<td>Control of Substances Hazardous to Health Regulations 2002 – ACOP and guidance</td>
</tr>
<tr>
<td>HSE – L21</td>
<td>Management of Health and Safety at Work Regulations 1999 – ACOP</td>
</tr>
<tr>
<td>HSE – L23</td>
<td>Manual Handling Operations Regulations 1992 (as amended)</td>
</tr>
<tr>
<td>HSE – L82</td>
<td>A guide to Pipelines Safety Regulations (1996)</td>
</tr>
<tr>
<td>HSE – L111</td>
<td>A guide to the control of Major Accident Hazards Regulations COMAH (2015)</td>
</tr>
<tr>
<td>HSE – L138</td>
<td>Unload Petrol from road tankers – ACOP and guidance</td>
</tr>
<tr>
<td>HSE – HSG – 53</td>
<td>Respiratory protective equipment at work (Fourth edition)</td>
</tr>
<tr>
<td>HSE – HSG – 140</td>
<td>Safe use and handling of flammable Liquids (2015)</td>
</tr>
<tr>
<td>HSE – HSG – 159</td>
<td>Managing contractors (2011) - A guide for employers</td>
</tr>
<tr>
<td>HSE – HSG – 167</td>
<td>Biological monitoring in the workplace - A guide to its practical application to chemical exposure</td>
</tr>
<tr>
<td>HSE – HSG – 250</td>
<td>Guidance on permit-to-work systems: (2005) - A guide for the petroleum, chemical and allied industries</td>
</tr>
<tr>
<td>HSE – HSG – 262</td>
<td>Managing risks from skin exposure at work (2015)</td>
</tr>
<tr>
<td>HSE – INDG – 143</td>
<td>Manual handling at work (2020) - A briefing guide</td>
</tr>
<tr>
<td>HSE – INDG – 174</td>
<td>Personal protective equipment (PPE) at work (2013)</td>
</tr>
</tbody>
</table>

Additional information regarding any of the above can be found on the https://www.hse.gov.uk website.
The list outlines the main ISOs and BS-ENs that support the safe storage and handling of fuels, lubricants and associated products.

<table>
<thead>
<tr>
<th>Standard No</th>
<th>Standard Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS ISO 4266-1:2002</td>
<td>Petroleum and liquid petroleum products. Measurement of level and temperature</td>
</tr>
<tr>
<td></td>
<td>in storage tanks by automatic methods. Measurement of level in atmospheric tanks</td>
</tr>
<tr>
<td>BS ISO 4266-6:2002</td>
<td>Petroleum and liquid petroleum products. Measurement of level and temperature in atmospheric tanks</td>
</tr>
<tr>
<td>BS EN 14161:2011</td>
<td>Petroleum and natural gas industries. Pipeline transportation systems.</td>
</tr>
<tr>
<td>BS EN 60079-10-1:2015</td>
<td>Explosive atmospheres. Classification of areas. Explosive gas atmospheres</td>
</tr>
<tr>
<td>BS EN 60079-14:2014</td>
<td>Explosive atmospheres. Electrical installations design, selection and erection.</td>
</tr>
<tr>
<td>BS EN 858-1:2002</td>
<td>Separator systems for light liquids (e.g. oil and petrol). Principles of product design, performance and testing, marking and quality control</td>
</tr>
<tr>
<td>BS EN 858-2:2003</td>
<td>Separator systems for light liquids (e.g. oil and petrol). Selection of nominal size, installation, operation and maintenance</td>
</tr>
<tr>
<td>BS EN 13616-1:2016</td>
<td>Overfill prevention devices for static tanks for liquid petroleum fuels.</td>
</tr>
</tbody>
</table>
The list below outlines the main industry ACOPS and GNs that support the safe storage and handling of fuels and lubricants.

<table>
<thead>
<tr>
<th>Title</th>
<th>Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI 1529 Aviation fuel hose and hose assemblies.</td>
<td></td>
</tr>
<tr>
<td>EI/JIG 1530 Quality assurance requirements for manufacture, storage and distribution of aviation fuel to airports.</td>
<td></td>
</tr>
<tr>
<td>EI 1540 Design, Construction, Commissioning, maintenance and testing of Aviation facilities.</td>
<td></td>
</tr>
<tr>
<td>EI 1541 Performance requirements for protective coating systems used in aviation fuel storage tanks.</td>
<td></td>
</tr>
<tr>
<td>EI 1542 Identification markings for dedicated aviation fuel manufacturing and distribution facilities, airport storage and mobile fueling equipment.</td>
<td></td>
</tr>
<tr>
<td>EI 1550 Handbook on equipment used for the maintenance and delivery of clean aviation fuel.</td>
<td></td>
</tr>
<tr>
<td>EI 1570 Handbook on electronic sensors for the detection of particulate matter and/or free water during aircraft refueling.</td>
<td></td>
</tr>
<tr>
<td>EI 1581 Specification and laboratory qualification procedures for aviation jet fuel filter/separators.</td>
<td></td>
</tr>
<tr>
<td>EI 1584 Four-inch hydrant system components and arrangements.</td>
<td></td>
</tr>
<tr>
<td>EI 1585 Guidance in the cleaning of aviation fuel hydrant systems at airports.</td>
<td></td>
</tr>
<tr>
<td>EI 1590 Specifications and qualification procedures for aviation fuel microfilters.</td>
<td></td>
</tr>
<tr>
<td>EI 1594 Initial pressure strength testing of airport fuel systems with water.</td>
<td></td>
</tr>
<tr>
<td>EI 1597 Procedures for overwing refueling to ensure delivery of the correct grade to the aircraft.</td>
<td></td>
</tr>
<tr>
<td>EI 1599 Laboratory tests and minimum performance levels for aviation fuel dirt defense filters.</td>
<td></td>
</tr>
</tbody>
</table>

Energy Institute Model Code Of Safe Practice (MCOSP)

<table>
<thead>
<tr>
<th>Title</th>
<th>Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI MCOSP Part 1 The selection, installation, inspection and maintenance of electrical and non-electrical apparatus in hazardous areas.</td>
<td></td>
</tr>
<tr>
<td>EI MCOSP Part 2 Design, Construction and operation of petroleum distribution installations.</td>
<td></td>
</tr>
<tr>
<td>EI MCOSP Part 15 (Blue Book) Area Classification for installations handling flammable liquids.</td>
<td></td>
</tr>
<tr>
<td>EI MCOSP Part 16 Tank cleaning safety code.</td>
<td></td>
</tr>
<tr>
<td>EI MCOSP Part 19 Fire precautions at petroleum refineries and bulk storage installations.</td>
<td></td>
</tr>
</tbody>
</table>
Chapter Sponsor - DSFA Governance and Policy

Scope

1. The aim of this chapter is to outline the various organisations and their responsibilities within the Defence Fuels and Lubricants environment. Contact details for each area of expertise have also been included in this chapter.

ACDS Ops - DEFENCE STRATEGIC FUELS AUTHORITY (DSFA)

2. The DSFA is an element of the ACDS (Ops) area of responsibility and sits within the JFC TLB. It has been established to effectively manage, coordinate and provide empowered oversight of the entire Defence Fuels business. The DSFA operates under the authority of ACDS (Ops) as the Defence Authority for Logistics and operates within a 3-tier governance structure which includes a 2-led Defence Fuels Steering Working Group (DFSWG), an OF-5 led Defence Fuels Working Group (DFWG) and an OF-4 led Defence Fuels Requirements Working Group (DFRWG). The governance hierarchy includes representation at an appropriate level from all stakeholders and will, depending on the issues concerned, report variously into the Defence Logistics Board (DLB) through the Defence Logistics Steering Group (DLSG), the Sustainable MOD Energy Steering Group (SME SG) and it will have the ultimate recourse to the Armed Forces Committee (AFC) and the Defence Board (DB).

3. The DSFA consists of 5 separate Branches which have the following roles and responsibilities:

a. Defence Fuels Technical Authority (DFTA).

DFTA is the nominated Technical Authority and is responsible for:

- JSP 317 Pt 1 (v 6.4 Apr 20)
Coordinating, developing and maintaining quality assurance policy and procedures.

Providing advice on petroleum technology to Service users, equipment suppliers and design authorities.

Identifying and contracting an approved test laboratory for analysis of samples pertaining to routine Quality Assurance monitoring in accordance with JSP 317, and to facilitate investigation into product quality arising from service defects.

Providing recommendations and advice to Units regarding the fitness for use of fuels, lubricants and associated products, and appropriate remedial action based upon the analysis conducted.

Contact details:

ACDS SpOps
DSFA Larch 3B MP #2317
NH2, MOD Abbey Wood
Bristol BS34 8JH

Abbey Wood Mil (9679)

Air Tech Manager: 83593
Email: Tina.Gleaves522@mod.gov.uk

Marine Tech Manager: 83591
Email: Theresa.Rooke226@mod.gov.uk

Multiuser Email: DefLog-Ops Cap-DSFA Fuels Tech@mod.gov.uk

Out of hours Tel: +44 (0)7810 771611

Capability Coherence.

The Capability Coherence Branch works with Users, the FLCs, the Requirements Managers, as well as the Acquisition and Support Communities, to ensure all fuel-related products and services within the JFC sub-portfolio, are specified correctly, procured, delivered, managed and supported in a coherent and policy compliant manner. The products and services covered include Aviation Fuel, Ground Fuel, Marine Fuel, Oils, Lubricants and Non-Medical Compressed Gases, as well as Fuel Handling Equipment (FHE), Fuels Assurance Equipment (FAE) and Fuels Information Systems such as BFIS/GFMS. The Branch...
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Major fuel incidents resulting in loss or potential loss of operational capability.

Major Fuel Spillages (Tier 2 and Tier 3 Spillages) which may result in risk to operations or UK MOD reputation. Part 1, Chapter 10, Para 20 refers.

Fuel Contamination Incidents resulting in a loss or potential loss of operational capability. Volume 3, Chapter 1, Annex M refers.

Incidents that affect airworthiness and/or air safety resulting in a loss or potential loss of operational capability.

Any other incidents where MOD and in particular ACDS Sp Ops, DSFA, at a strategic level, should be informed to develop a Pan-Defence outcome/solution in order to make timely assessments and offer guidance where required.

Defence Safety Authority - Fuels and Gases Safety Regulator

5. The FGSR Stakeholder Committee (FGSR SC) exists as a safety board established under the authority of PUS in accordance with the Secretary of State for Defence statement and JSP 815, Defence Environment and Management. The FGSR SC takes direction and reports to the Defence Environment and Safety Board (DESB) chaired annually by DDSA. The FGSR SC provides pan-departmental direction on fuels, gases and lubricants safety and ensure the continual effectiveness of the MOD Safety Management System. It provides assurance to the Secretary of State that procedures and processes for the safety and environmental management of fuels, gases and lubricants are defined and effective across MOD and TFLB interfaces (especially the relationship with Command TFLBs in particular the tasks of the FGSR SC include:

a. Enforcement of fuels safety policy, standards and procedures as described in JSP 317.

b. Assisting the Defence Estates Competent Authority and the Competent Authority for Major Accident Control with the interpretation of fuels related risk management and safety policy direction.

c. Monitoring the Command TFLBs compliance with JSP 317, Air Safety Publications and other safety legislation applicable to fuels, gases and lubricants.

Management, Assurance and Licensing of Fuels within MOD estate

6. The regulations in the following chapters apply to all permanent and semi-permanent fuelling installations. Regulations for installations constructed from TFHE/JOFS or other in-service fuel handling equipment are set down in Part 2, Vol 2, Chap 6.

Semi-permanent covers installations designed to comply with the statutory codes and regulations for permanent infrastructure, but able to be readily relocated.
7. Before any permanent or semi-permanent fuel installation can be licensed, it will be necessary for it to be certified and commissioned. Similarly, before a fuel installation can be declared redundant, it will be necessary for it to be decommissioned. This chapter explains the procedures to be followed in each case.

8. The Fuel & Gas Safety Regulator (FGSR) role is to review fuel and gas safety across the MOD state on behalf of the Secretary of State. The FGSR is tasked to monitor gas risk, provide advice and guidance on how to control or mitigate risk, to explain the implications of operating at risk and to provide the Heads of Establishment and TLBs with Subject Matter Expert (SME) advice on gas safety.

The MOD currently provides independent self-regulation through the application of the Fuel (and Gas) Safety Assurance Assessment (FGSAA) process by the FGSR. FGSR audit flying/gliding clubs IAW DSA 02 as storage of 2-6 JSP 317 Pt 1 (v 6.4 Apr 20).

Bulk fuel is regarded as a high-risk activity. Most fuel for flying/gliding clubs is stored in a container as described in Oil Storage Regulations (OSR) 151. OSR applies to holdings above 201L, consequently, FGSR will audit all fuel holdings above 201L. Guidance can be found on the homepage of JSP 317.

6. The End to End process of fuel and lubricant storage facilities.

- Licensing storage on the Defence Estate.
- Compliance with current legislation/regulation.
- Competence of all personnel with fuel safety responsibilities.

- The following types of facilities:
  1. Permanent and semi-permanent bulk fuel installations (BFI) (Aviation and Ground fuels).
  2. Oil Fuel Depots (OFDs).
  3. Mechanical Transport Fuelling Installations (MTFI's).

4 Storage containers include: "oil drums and fixed tanks, intermediate bulk containers (IBCs), and mobile bowsers – containers designed to store and dispense oil that can be moved between locations but not under their own power."

5 Note, this not to be confused with the 275L threshold detailed in the Petroleum Consolidation Regs 2014 which applies to storage only where dispensing occurs.

6 End to End is defined as 'the point when fuel is received from the delivery vessel into MOD infrastructure, through the storage process, until issued to the end platform'. It also covers the procurement process.
U n m a n n e d  Ae ria l V e h icl e  (U AV )
re fu e llin g .
C o n tra ct o r s to ra g e  ta n ks.
B u lk Fu e l C a rr y in g  V e h icl e  (B FCV )
p a rks.
W a s te  Oil & Fu e l Re c o v e r y  Sy st e m s.
Ga s st o ra g e  a re a s, o il, lu b rica n ts a n d  p a cke d  st o ck st o ra g e
a n d  m a n a g e m e n t (RAF a n d  AAC  u n its o n ly ).
G lid in g  a n d  fly in g  sch o o ls.
C lu b s a n d  E n cr o a ch m e n ts.

9. FGSR p e rso n n e l a re  a v a ila b le  o n  th e  fo llo w in g  n u m b e rs to  p ro v id e  a d v ice
a n d  g u id a n ce  o n  issu e s su rro u n d in g  th e  fu e l s a fe ty  a ssu ra n ce  p ro c e s s:

2-7
JSP 317 Pt 1 (v 6.4 Ap r  20)

Ad d r e c t  de t a i l s :
FGSR, DLSR
Hazel, level 1 # 0019
MOD Abbey Wood North
BS34 8QW

MOD Abbey Wood Mil (9679)
Ext: 83803
SO1: 83804
Email: Iain.Cresswell910@mod.gov.uk
SO2: 83804
Email: Samuel.Dove561@mod.gov.uk
Compliance: 83802
Email: Anthony.Higgins882@mod.gov.uk
Gas: 83797
Email: Gary.Bennett817@mod.gov.uk
FGSR MULTIUSER: DSA-DLSR-FGSRIns grp @mod.gov.uk

10. Ar m y  Ho w  C o mba t  Fue l s :
The  C o m b a t Fu e ls te a m  is
re sp o n si b le  fo r im p le m e n ta tio n  o f p o licy  a n d  p ro ce d u re s w ith in th e  LAND
d e p e n d e n cy  a n d  fo r m o n ito rin g  th e  se rv ice , p ro d u ct s a n d  in fra st ru c tu r e  p ro v id e d
b y  th e  DE &S. It p ro v id e s SM E  a d v ice  a n d  re p re se n ts  th e  u s e r/o p e ra to r
re q u ire m e n t to  AHQ E q p Gr o u p a n d  C E SO(A), D In fra , RLC  He a dq u a rte rs .
11. The HQ Regional Command Petroleum Inspectorate, consisting of the United Kingdom (UK) Petroleum Inspectorate North, (UK) Petroleum Inspectorate South are staffed by RLC Petroleum Operators identified against RC units establishments.

a. The Inspectorate’s primary operational role is to deploy as Subject Matter Experts (SMEs), in order to advise the deployed Command. This will require the SME to give technical advice on the storage and handling of Fuels and Lubricants (FLAP), Gases and pipeline operations.

b. The HQ RC Petroleum Inspectorate conducts Fuel & Gas Safety Assurance Assessments (FGSAA) in order to maintain operational capability and ensure that current legislation, MOD Policy and best practice is adhered to. This applies to units based within the UK, Germany, LW C dependencies and operational theatres.

c. To meet operational and peace time roles, RLC Petroleum Operators employed within the Inspectorates must be of WO/SNC O rank and qualified to the minimum grade of Class 1 Petroleum Operator.

SCOPE OF RESPONSIBILITY

12. HQ RC UK Petroleum Inspectorate North & South assume primacy for conducting the Audit & Inspection regime for UK based Army HQ units and overseas.
The operational roles of the HQRC Petroleum Inspectorate are as follows:

a. To provide SME staff support to the deployed Joint Force Logistic Component (JFLog C), National Support Element (NSE) or Log Brigade HQ.

b. To provide technical direction and SME advice on the storage and handling of FLAP, Gases and deployed JOFS components.

c. Carry out Fuel & Gas Safety Assurance Assessments (FGSAs) in support of Logistic Support Assurance Framework (LSAF) on operationally deployed 1st line units and where applicable contractors employed in support to operations.

PEACE TIME ROLE

14. The peace time role of the HQRC Petroleum Inspectorate is as follows:

a. Undertake the annual Fuel & Lubricants Audit and Inspection Regime in accordance with the requirements of Army Command Standing Order (AC SO) 9001.

b. As authorised by the DSA FGSR and directed by HQ RC, the Petroleum Inspectorate is to conduct FGSAs of all fuel & gas infrastructure on the Army HQ estate for all intervening years between FGSR licensing visits in accordance with the requirements of the DSA Fuel Safety Management Plan and DSA 02 & DSA 03.

2-9 JSP 317 Pt 1 (v 6.4 Apr 20)

(1) Attend Sitting, Acceptance and Decommissioning Boards for bulk/packed fuel and gas cylinder storage facilities.

(2) Advise units on petroleum matters and provide technical training to personnel if access to central training is not practical.

(3) Investigate and report on significant petroleum related incidents and technical problems as directed by HQ Regional Command, Logistic Support Branch.

(4) Provide the technical focal point between units and HQ RC Logistics Branch on all FLAP matters.

(5) Attend DSFA Sub Committees / Working Groups as directed by HQ RC Logistics Branch.

(6) Provide input to DE & S and Army e Bulletin to encourage best practice and keep units up-to-date on prevalent problems and new information/regulations with respect to FLAP and Gases.

(7) Report any environmental, health and safety issues to HQ RC, Logistics Branch, FGSR and CE SO (A) Environmental Protection (EP).
The relevant authorities are as follows:

a. Defence Strategic Fuels Authority (DSFA). DSFA is the Commodity Manager for MOD FLAP products and gases; the authority for Fuel, Lubricants and Gases Policy and is the sponsor for the JSP's that contain policy relating to Fuel and Gases Safety Assurance and provide the procedures for storage and handling of FLAP products and gases.

b. Defence Safety Authority (DSA) & Fuel and Gases Safety Regulator (FGSR). The Fuel & Gases Safety Regulator (FGSR) role is to review fuel and gas safety across the MOD on behalf of the Secretary of State. The FGSR is tasked to monitor gas risk, provide advice and guidance on how to control or mitigate risks, to explain the implications of operating at risk and to provide the Heads of Establishment and TLBs with Subject Matter Expert (SME) advice on gas safety.

c. Defence Supply Chain Management (Policy) (DSCM(Pol)). DSCM(Pol) is the Defence Equipment and Support (DE&S) focus for supply chain policy.

d. Joint Operational Fuels Systems Project Team (JOFS OIP). JOFS OIP are responsible for the throughout life management of all Tactical Fuel Handling Equipment (TFHE) and the Joint Operational Fuel System (JOFS).

e. Army Headquarters Equipment Directorate. The Equipment Directorate is the lead on all new and existing equipment requirements, in the LAND dependency.

f. The Directorate of Infrastructure Operations (D Infra). D Infra provides the lead for the provision and maintenance of infrastructure throughout the Regional Command Structure, Reserves Forces and Cadet Associations (RFCA) and the Defence Training Estate (DTE).

g. Chief Environmental Safety Officer (Army) (CESO(A)). Policy for the Environment and Health & Safety rests with the Chief Environmental Safety Officer (Army) (CESO(A)), HQLF.

h. Military Design Authority (MDA) - Joint Operational Fuels Systems. The Military Design Authority for JOFS is the 516 Specialist Team Royal Engineers (Bulk Petroleum). Contact details are:

   Address Contact details:
   516 STR
   170 Works Group
   Chetwynd Barracks
   Chilwell
   Nottingham

   Chiw e ll M il (94451) Ext:
   GE: 2384
   TWO: 2167
   UPWO: 2484
   Ftr U&P SNCOs: 2479/2328
   Email: 66 WKSRE 516 STR Fuels Offr 1
16. Team LEIDOS has responsibility for the implementation of policy pertaining to liquefied and Industrial Gases within the Army including units of the Adjutant General, GOC Northern Ireland, Army units of the JHC, units of the Field Army and the Army Training Estate (ATE).

17. DIO SD EUSS Sutton Coalfield have the responsibility for the provision and advice on the supply of LPG. The Army HQ D Infrastructure is responsible for coordinating and planning the supply of LPG to operational theatres. Land Logistics Ops is responsible for the coordination and planning of IG supply to operational theatres.

18. Units. Unit Quartermasters are responsible for ordering of liquefied and Industrial Gases, either from the Team LEIDOS managed gas contract or the DIO SD EUSS Sutton Coalfield sponsored LPG contracts. They are also responsible for the receipt, issue and return of compressed gas cylinders and monitoring of liquefied gas deliveries from the current LPG contractors. The Army rules for accounting for LPG are contained in the Army Infrastructure Manuel Leaflet available on the Army HQ D Intranet Website.

a. Accommodation Services Units are responsible for the receipt, validation and payment of all LPG both bulk and cylinders. They are also responsible for the procurement of LPG cylinders except in NI where the responsibility lies with CSS.

Air Command

19. Air Command HQ. For HQ Air Command units, A4 Fuels Office is able to advise units. Contact details are:

2-11
JSP 317 Pt 1 (v 6.4 Apr 20)
Address Contact details:
Air Command 38 Gp
A4 Fuels Office
Room 46
Gladiator Block
1 Site, RAF High Wycombe
Buckinghamshire, HP14 4UE

RAF High Wycombe MIL (95221) Ext:
SO2: 6214
SO3: 7215
WO: 7043
Email: Air-A4 Fuels Grp Mail@mod.gov.uk

20. Air Command HQ External Quality Audit (EQA) Team. The RAF has chosen to apply the ISO 9000 series of QA requirements to its Logistics (engineering and supply) activities and therefore undertakes EQA activity on their units.

Navy Command

21. Navy Command HQ. For shore-based RN and RM establishments, the Navy Logistics and Infrastructure Desk can advise units. Contact details are:
DE &S, Directorate of Engineering and Safety (DE&S) Quality Safety and Environmental Protection (QSEP) DE&S CE SO office is available to advise units and Industry/Delivery Partners. Contact details are:

**Address Contact details:**
DE &S CE SO EP
MP #1260
Spruce 2C, NH1
MOD Abbey Wood
Bristol, BS34 8JH

**DES TECH-QSEP Env-Man**
Tel: 030 679 82509
Lees. Sanders@mod.gov.uk

**Address Contact details:**
Navy Log Infra SP SO2
Navy Command HQ Leach, Whale Island
Portsmouth, PO2 8BY
Navy Log Infra SP SO2, HMS Excellent (Whale Island)
Mil: 93832 Ext: 5789.
Mark. Capewell873@mod.gov.uk
1. The MOD Fuel Incident Report should be given a unique serial number by the reporting unit. The report should be sent, by email, within 1 hour of the occurrence to the address at Part 1 Chap 2 Para 3b. The report format is:

2-A-1

JSP 317 Pt 1 (v 6.4 Apr 20)

a. ALPHA – The location of the incident, e.g. Theatre, unit, installation/building number, off-base location.

b. BRAVO – Incident Date/Time. The date and approximate time (local) that the incident was discovered.

c. CHARLIE – Type of incident, e.g. Ruptured pipeline or Tier 2/3 Spillage.

d. DELTA – Initial action carried out by unit.

e. ECHO – Follow up action being carried out by Unit.

f. FOXTROT – Assessed level of public interest, e.g. Media involvement.

g. GOLF – Operational capability affected – Yes/No. Give details on areas affected.

h. HOTEL – Initial POC and Tel No. The initial POC at the unit reporting the incident.
This chapter has been removed in entirety and details should be sought directly from DSA FGSR Host Page. This is to prevent duplicate copies of information and prevent the risk of outdated information being published.

a. DSA 02 - DLSR - Fuels and Gas Safety and Environment Regulations.
b. DSA 03 - DLSR - Fuels and Gas Safety and Environment Regulations - DCOP's.
c. JSP 375 - Part 2 Vol 1 Chap 11 - Management of Hazardous Substances
1. This chapter has been removed entirely and details should be sought directly from DSA FGSR Host Page. This is to prevent duplicate copies of information and prevent the risk of outdated information being published.

a. DSA 02 - DLSR - Fuels and Gas Safety and Environment Regulations.
b. DSA 03 - DLSR - Fuels and Gas Safety and Environment Regulations - DCOP's.
Chapter Sponsor - DIO SEE ENG MECH

Scope

1. This chapter outlines the policy and procedure to be applied during the siting, certification and commissioning of FLAP installations on the MOD estate. A permanent or semi-permanent fuel installation cannot be brought into use until the installation has been agreed to by all interested parties, certified as fit for purpose, commissioned and taken over for use and maintenance.

General

2. Before a Siting Board (SB) can be convened, a Statement of Requirement (SOR) must have been prepared to determine the actual details of the work to be undertaken as this will influence the correct stakeholders to attend for the SB. A Land Quality Assessment (LQA) should be conducted either before the SB, or just afterwards; before construction commences. This will ascertain if contamination or pollution exists at the site and to what level. LQAs are conducted by 170 (Infra Sp) Eng Group.

Siting Board

3. The SB is a mandatory requirement. All permanent and semi-permanent FLAP facilitation are to be subject to a properly constituted SB prior to the placing of Project Management or construction contracts. It is the responsibility of the User and/or Senior Infrastructure Manager (SIM) to arrange for the SB to be held.

4. The SB will consider the siting and layout of the proposed installation, primarily based on safety, efficiency and economy. Due regard to the proximity of associated military installations such as explosive stores, airfield runways and buildings and HM Ships and their associated instruments (e.g. radio, radar and lasers) shall be taken. In some cases, Local Authority Planning Permission may be required. The amenity value and environmental aspects of the site and its surroundings must be considered.

5. Installations must be sited, wherever possible, on level, well-drained, open and ventilated areas, as far from explosive stores, airfield runways and buildings as is practicable and, in any case, outside the prescribed safety distances for such installations or areas. Consideration must be given to the most efficient traffic flow and proximity to utilities such as water, power and fire fighting facilities. When the SB is satisfied that all conditions have been met, it is empowered to issue the appropriate service document that will authorise the siting of the installation. SBs for other infrastructure proposals are to fully consider the proximity of FLAP installations.

6. A properly constituted SB is to comprise:

   a. A qualified fuel officer/SNC O/W O from T LB, Regional Command Petroleum Inspectorate, Air, JFC etc. Appropriate sections of the FGSAA must be used.
   
   b. SIM (Senior Infrastructure Manager).
c. Maintenance Management Organization (MMO).
d. Project Manager.
e. Contractor.
f. DFR Officer.
g. Unit/Station Environmental Officer.
h. Proposed Operator.
i. The following may also be required:
   (1) Ammunition Technical Officer (ATO) (or Service equivalent).
   (2) Communications Officer/Radiation Hazard Officer.

7. The siting of FLAP storage lockers does not require a formal Sitting Board. It is sufficient that the Operating Authority (OA) (Chapter 8 refers) consult at a unit level with the H&S and Fire Safety Advisor to determine a suitable and safe location.

8. Section 3.2 of the Defence Works Functional Standard, Design and Maintenance Guidance (DMG) includes the Segregation of Dangerous Goods in Storage and Transit Areas when planning segregation and separation of Dangerous Goods of different classes to meet the requirements of Health and Safety Guidance. The SB members are required to check proposed storage arrangements for packed product stores or storage areas for compliance with DMG 03. This includes stores intended for equipment containing residual fuel.

9. A Certificate of Fitness for Purpose (CFFP) represents formal confirmation by the Project Manager that new, or modified installations are fit for the purpose for which they are intended. A CFP should be provided before first fill or use. Where works commissioning actions follow first fill, the formal confirmation is repeated by the Project Manager that the facility is fit for purpose and use after the completion of the commissioning works. This forms one of several requirements which must be fulfilled to enable the FGSR to license the installation.

10. The CFP may be issued by the Project Manager, the contractor or MMO. It must state that the installation has been constructed, or modified, in accordance with the approved design and that it is fit for its intended purpose. The certificate must be countersigned by:
a. Project Manager.
b. Principal Contractor.
c. DFR Officer.
Commissioning

11. Commissioning of an installation is a contractor's responsibility. To commission an installation, the appropriate living product(s) must be used. Prior to receiving living product, a CFFP must be issued. The AP (Pet) is to be provided with the commissioning procedure adopted by the contractor and all relevant method statements and risk assessments to enable control under JSP 375, Vol 3, Chap 5. FLAP facilities that are used for the bulk storage and movement of product require Commissioning, examples of which are as follows:

a. Bulk Storage Tanks (including Uninstalled Engine Test Facilities).

b. MTIFs.

c. Hydrant Refuelling Systems.

d. Pipelines.

e. Waste Oil and Fuel Recovery systems.

Take over

12. Once an installation has been commissioned and considered ready for takeover by the OA, the original SB is to reconvene as a Take-Over Board (TB). The TB is to ensure that the installation has been constructed in accordance with all safety, legislative and SB requirements, has been correctly commissioned and is in a fit and proper state for use. When the TB is satisfied that these conditions have been met, it is empowered to issue the appropriate Service documentation that will authorise takeover. This is to be signed by all members of the TB and is to accept the installation for the following reasons:

a. For use by the OA.

b. For maintenance by the MMO.

Certification of Fitness for Continued Use

13. The SIM is responsible for ensuring that the MMO conducts a professional inspection of fuel installations and flammable dangerous goods stores (PG 06/12) 12 months after the takeover date, then on an annual basis thereafter and, where appropriate, issue the Certificate of Fitness for Continued Use (CFCU). A CFCU confirms that existing installations have been maintained and remain fit for the purpose for which they are intended. The facilities to be inspected include the following:

a. Bulk storage for flammable liquids or aviation fuel including sumps and buffer tanks.

b. Fuel transfer facilities (e.g. cross-base pipelines and naval fuel jetties) including pigging facilities where appropriate.

c. Aviation fuel hydrant systems.
d. Mechanical Transport Fuel Installations (MTFI).
e. Flammable dangerous goods stores.
f. Specialist facilities, e.g. semi-permanent installations, jerry can filling plants.
g. Major bulk storage facilities for plant diesel fuel oil.
h. Ancillary installations; including small plant diesel, fuel oil and waste oil installations.

Site Specific Operator Training
14. As part of the takeover process, the SIM is to arrange for any installation-specific familiarisation training required for the AP (Petroleum), the maintainer, and the operators of the installation. An appropriate record of those personnel who have received training is to be maintained by the OA.

Transfer
Operating authorities are required to inform the FGSR when planning a unit move or the transfer of site ownership from one TLB to another. JSP 375 Volume 2

Leafllet 16 should be consulted.

Closure
15. For units/sites that are closing, Defence Infrastructure Organisation Functional Standard, Design and Maintenance Guide 12 - Site Closure Guide, is to be consulted. Fuel installations should be considered for retention if DIO advise that they would add to the value (and therefore receipt) of the site.

Decommissioning
16. This section is intended to provide direction for the TLBs and unit fuel operators who have an operational bulk fuel storage infrastructure asset that is no longer required on either a temporary or permanent basis. The specialist petroleum engineering needed to carry out this type of work is not included in this document; responsibility to ensure such work is carried out competently and that it complies with all relevant legislation is the responsibility of DIO, the MMO and any specialist sub-contractors as required. If a TLB or one of their units perceive there is no longer a requirement to retain an operational bulk fuel storage infrastructure asset, be it temporarily or on a permanent basis, it will predominantly be a result of one of these factors:

n.b. this is not an exhaustive list

a. A temporary reduction in operational requirement to store petroleum products has created a redundant bulk fuel storage infrastructure asset, however, it is expected to be required again in the future and will need to be returned to service.
b. A permanent reduction in the operational requirement to store petroleum products has created a redundant bulk fuel storage infrastructure that will not be returned to service.

c. A bulk fuel storage infrastructure that is beyond economical repair.

17. If a situation relating to the information provided in paragraph 17 materializes, the bulk fuel storage infrastructure is not to be abandoned; instead the asset is to transition from an operational state to one of three other recognized states, detailed below in this paragraph. In such instances, shareholder actions for the entire life of the project, associated costs and the detailed work required to achieve the required new state is to be planned, authorized and carried out as part of the activity detailed in paragraph 19 (this is of paramount importance and must be adhered to).

a. Motballing.

This defines a bulk fuel storage infrastructure asset that is not in use but is undergoing a maintenance programme that will enable it to be returned to an operational state in a predetermined time period.

(1) Tanks.

The time period for a tank to remain in a motball state cannot exceed the next periodic inspection (clean, inspect, repair). As this is typically a periodicity of 5 to 8 years, that would be the maximum time scale a tank could remain in a motball state. The exact deadline for each specific project would need to be discussed and officially recorded as part of the specific asset project activity detailed in paragraph 19.

(2) Pipelines.

The time period for a pipeline is harder to define, but it should be based on the known condition and ongoing maintenance requirements. The exact deadline will depend on the specific asset project. It would need to be discussed and officially recorded as part of the specific asset project activity detailed in paragraph 19.

b. Decommissioning.

When a bulk fuel storage infrastructure asset is no longer required on a permanent basis, it can be decommissioned. This is defined as subjecting the bulk fuel infrastructure asset to an engineering process that leaves it in a safe state without the need for further maintenance 9. It is an irreversible process. As part of the specific asset project activity in paragraph 19, it would need to be decided whether the asset was going to be either:

(1) Demolished in a short timeframe; or,

(2) Decommissioned for the long term and demolished at a later date.

c. Demolition.

Once an asset is decommissioned it will ultimately require full demolition at some point i.e. it is completely removed 10 and a land quality assessment is undertaken. As with the other two options, the detailed planning and work needed to achieve this option state will form part of the specific project activity detailed in paragraph 19.

---

8 In terms of security, health & safety and environmental.

9 Periodic checks will still need to be carried out and agreed as per paragraph 19.

10 Cross-country pipelines are typically filled with foam or concrete and not removed.
Authorization to proceed with changing a bulk fuel storage asset from an operational state to any one of the other three options detailed in paragraph 18 can only be provided by the relevant TLB. To enable the TLB to make an informed decision based on factors such as: operational requirements, health, safety and environmental impacts, financial cost, security and risk, comprehensive planning and execution processes must be undertaken and a detailed project plan produced that spans the entire life cycle of the specific project (this is to include a Management of Change (MoC) procedure). The detailed project plan and MoC shall be completed within a 12-month period from the TLB’s initial decision on the operational requirement of the asset. To ensure this occurs, suitable representation from the following stakeholders, as a minimum, must be included to meet the requirement:

a. The Unit OA/chain of command (initial lead and responsible for ensuring stakeholder representation).

b. Relevant elements of the TLB.

c. Relevant members of the Unit’s fuel operations team.

d. Other relevant unit departments/SMEs as required.

e. DIO (who will inform the MMO and other relevant stakeholders depending on the specific project scope; lead for all engineering aspects).

f. The respective single Service fuel office (see JSP 317 Part 1 Chapter 2 for contact details). They are responsible for informing:
   (1) DSFA Ops & Plans (see JSP 317 Part 1 Chapter 2 for contact details).
   (2) DSA – SO2 FGSR (see JSP 317 Part 1 Chapter 2 for contact details).

MoC procedure ensures all relevant health, safety and environmental risks are controlled when the asset changes from operational to one of the other recognised state options. MoC must detail the changes that are taking place, provide the necessary records as to why the decision was taken and show endorsement and acceptance by all appropriate stakeholders. It also ensures operating and maintenance procedures and inspection records are updated to reflect the change. A temporary MoC would be issued for a mothballed asset; whilst a permanent MoC would be needed for an asset that is either decommissioned or demolished.
1. This chapter is concerned with planning, organizing and managing the maintenance and repair of fuel infrastructure. This may include the design and construction of modifications and new works. The Maintenance Management Organisation (MMO) is the organization responsible for planning and executing these tasks which need to be coordinated with the Head of Establishment (HoE) / Operating Authority (OA) who is responsible for the safe and proper operation of fuel installations. The MMO may be a Contractor, DIO or Military.

2. The MOD operates a range of fuel infrastructure which is maintained by the MMO. An annual professional inspection of fuel infrastructure and flammable dangerous goods stores is mandatory in order to comply with the requirements of this JSP as the professional inspection is an integral element of the Licensing and Fuel Safety Assurance Assessment (FGSAA) regime. The professional inspection shall be annual, and its purpose is to:
   a. Confirm that all currently applicable legislation and legal requirements are adhered to.
   b. Confirm that there is a maintenance management system in place (with details) and that the facilities are being maintained to the appropriate standard.
   c. Provide a report based on a thorough visual inspection of the facilities.
   d. Review non-destructive examination data to ensure appropriate future actions are programmed as part of the asset management strategy.
   e. Confirm that the facilities can continue to be used until the next annual inspection or to precisely define the actions required for the facilities to continue to be used.

3. It should be noted that the annual Professional Inspection of Fuel Infrastructure and Flammable Dangerous Stores – DIO PG 06/12, does not include the evaluation of operating procedures or fuel quality checks, which are detailed elsewhere in this JSP.

4. Petroleum installation fixed equipment and its associated storage and distribution that forms part of the installation must be maintained in accordance with the requirements DIO PG 05/12 - Inspection, Maintenance & Testing of Equipment Installed at Petroleum Installations on MOD Property which covers the scope and frequency of planned inspections and maintenance work. To ensure the facility remains compliant,
Attention must be paid to periodic inspection of electrical equipment and regular inspection and cleaning of interceptors and separators, bunds, vents, slop tanks and buildings where flammable vapour may be present. Additional information on fire precautions is provided at Chapter 7 and OWI design and operation is detailed at Part 2 Vol 1 Chap 7.

5. Compliance with JSP 375, Vol 3, Chapter 5 is mandatory for all persons working on petroleum installations, under the control of the Ministry of Defence from their initial specification and design through installation operation maintenance and eventual commissioning.

Design and Construction Works

6. Construction works are defined within the Construction (Design and Management) Regulations (CDM) and include construction, alteration, conversion, fitting out, renovation, installation, commissioning, maintenance, repair, upkeep and removal of services. For CDM works procedures, roles and responsibilities refer to JSP 375 Part 2 Volume 1 Chapter 33.

7. The CDM Client or Principal Designer is to:
   a. Ensure that design and construction take account of the requirements of JSP 375 Part 2 Volume 3 so they can be satisfactorily implemented throughout the life of the facility or installation.
   b. Ensure that the effects of the works and the completed facility or installation upon the existing site infrastructure are fully understood and taken into account so as to ensure continuing compatibility.
   c. Ensure that familiarisation training is provided for those AEs and APs who are to be appointed for the management of the risk activities associated with the facility or installation on completion.

8. At the initial design stage of a project the CDM Client and/or Principal Designer and other relevant stakeholders to initiate the necessary exchange of pre-construction information and to inform design and build deliberations. The MMO is to ensure key stakeholders within their organisation including the CAE have been notified and that any issues are identified before work commences. The MMO is to liaise with the Client and/or Principal Designer as appropriate. The CDM Client and Principal Designer are to coordinate and manage the flow of health and safety information between all stakeholders in the pre-construction phase of a project; once the construction phase commences, the Principal Contractor takes the lead role for coordination.

9. Further information on the process between project works and MMO AE and AP(s) including design reviews, commissioning, handover familiarisation and training can be found in JSP 375, Vol 3, Chapter 2 ‘Common Requirements’.
1. The likelihood of a major fire can be minimized by good plant design and layout, sound engineering, good operating practice and proper instruction, supervision and training of personnel in both routine operations and emergency procedures. Plant design and layout must include the provision of adequate water supplies IAW DIFS, fire protection and fire fighting equipment, means of escape for employees and means of access for fire brigades in the event of fire. The level of protection afforded to petroleum facilities will very much depend upon the size, complexity and nature of business conducted at each location.

2. The DFR Hd SCP is to be consulted in order to ensure that Fire Risk Assessment (FRA), Defence Infrastructure Fire standards (DIFS) and Fire Risk Resilience Assessments (FRRA) comply with relevant fire safety legislation, legal, regulatory policy and guidance for Defence.

3. The objective is the elimination of all sources of ignition from areas of petroleum ignition risk and where risks cannot be eliminated, to establish safe systems of control.

4. Operations and maintenance activities performed in hazardous areas can only be carried out if actions to eliminate potential sources of ignition are taken.

5. Ignition risks apply to IP Class I and II products but may also apply to IP Class III products (generally classified as non-hazardous) in certain circumstances, if the product is stored or heated to or above its flash point, or when flammable mist is formed. In these circumstances, it may be appropriate to consider the provisions of Chapter 7 paras 10 to 17. All operating and AP (Pet) procedures inclusive of JSP 375, Vol 3, Ch 5 - Petroleum Installations must be adhered to at all times. If there is any doubt, concerning the possibility of working practice causing ignition risks, reference must be made to the Operating Authority for operational matters, and to the AP (Pet) for maintenance work on fixed petroleum installations.

6. A comprehensive fire plan must be provided for all locations storing and handling petroleum products. This is to take account of the guidance on fire protection and safety precautions described in this section. Factors to be considered when formulating the fire plan must include:

   a. The nature and quantity of materials processed and stored.
   b. The proximity of other process plant, storage vessels, works and public buildings and vegetation.
   c. Fire Service response times.
   d. Accessibility to the site for fire fighting appliances.
Emergency escape routes for staff.

Site security.

Liaison with all DFR fire service providers, local fire authorities, medical services and water authorities.

Environmental effects.

7. The fire plan is to provide details of:

a. Fire detection and alarm systems
b. Water and other chemical fire fighting agents
c. Fire fighting equipment
d. Emergency plant shutdown procedures
e. Emergency evacuation procedure and assembly points in a safe location, including, where necessary, the establishment and staffing of a fire control centre
f. Staff fire training.
g. The duties of all persons nominated in the plan.
h. Arrangements for the testing and updating of the plan.

Communication / Alarms

8. There should be an effective means of both raising the alarm and giving warning in case of fire. It should be audible to all those likely to be affected by the fire. Advice should be sought from the Establishment Fire focal point (EFFP). Communications are required as follows:

a. BFI.
   A telephone is to be provided on the installation.

b. Mechanical Transport Fuel Filling Installation (MTFI).
   If the installation is unmanned, i.e., it has a Ground Fuel Management System (GFMS), a telephone is to be provided. The telephone is to be in a prominent position and readily identifiable in case of emergency. If the installation is manned, attendants must be made aware of the location of the nearest telephone as part of their induction training.

c. FLAP Store.
   There is no requirement for a telephone to be installed, although establishments may do so if they see fit.

9. Whenever petroleum products are stored or handled, even in small quantities, hazardous conditions can arise. Therefore, the extent of all hazardous areas is to be clearly indicated using notices such as 'PETROLEUM SPIRIT – HIGHLY FLAMMABLE – NO SMOKING – NO NAKED LIGHTS', conspicuously displayed in the appropriate language, with other appropriate hazard warning and supplementary signs conforming in shape, size and colour with the requirements of the Health and Safety (Safety Signs and Signals) Regulations 1996. Units in Germany requiring dual language signs should contact Regional Command Petroleum Inspectorate for advice.
10. Personnel entering or working in hazardous areas are to be made aware of the dangers, particularly the need to ensure that adequate ventilation is available. They are to converse with the use and operation of the fire fighting equipment provided and the method of calling the fire service. Fire Safety Notices & Fire Action Notices must be displayed and comply with the Health and Safety (Safety Signs and Signals) Regulations 1996. Locations and quantities should relate to the local risks and be the result of a risk assessment.

11. Smoking or smoking materials are not permitted in a hazardous zone. Before personnel enter a hazardous zone or likely hazardous area, all smoking materials should be deposited at a safe and designated contraband appointed place. However, within certain petroleum installations or depots, smoking may be permitted in an area or an area set aside for the purpose, and where express authority is given. This area must be outside of the area technically classified as a hazardous zone. Equipment for cateining purpose and other equipment which potentially is a source of ignition located in such buildings or areas must be of a type which cannot be removed and taken into the defined hazardous zone.

12. The following precautions are to be observed in the selection and use of equipment and clothing within hazardous areas:

a. Footwear studded or tipped with exposed metal must not be worn unless approved over-shoes are also worn. All footwear must be worn in accordance with Part 2, Vol 1 Chap 1.

b. The wearing or carrying of non-ATEX100 certified portable equipment containing dry batteries, such as transistor radios, portable tape recorders, video cameras, automatic cameras, flash attachments, electronic keys, calculators (including wrist watch types), mobile phones and other SMART electronic devices is prohibited.

c. The wearing of hearing aids is forbidden at Class I and II installations unless they are certified intrinsically safe. Batteries must not be exposed or changed within the Hazardous Area. This rule applies at Class III installations when the product is stored at high temperatures (above its flash point) or under extreme pressure. In certain circumstances, the facility manager may approve the wearing of hearing aids. In each case the facility manager must complete a suitable risk assessment and annotate the individual's Certificate of Competence accordingly.

d. Equipment and tools are to be used only for the purposes for which they are designed, and care should be taken to prevent improper use. So-called safety or non-sparking tools of non-ferrous metal are to be used with caution, as their use can be more dangerous than ferrous tools in certain circumstances.

e. Equipment must be certified for the hazardous zone and limited to application in that zone. Equipment with electrical protection suitable for use in Zone 1 can be used in Zone 1 and Zone 2 applications. See Part 1, Chapter 3 and JSP 375, Part 2, Vol 1, Chapter 9 for details.

f. All fixed electrical apparatus and associated connections, and all portable items must conform to BS EN 60079-14 applicable to the zone. (Refer to Part 2, Chapter 1 for
g. Safety cans, safety taps and drip trays are to be utilised whenever possible.

13. Additional precautions to be applied during the handling of petroleum products in hazardous areas are:

a. When packed products are handled in a hazardous area, adequate precautions are to be taken to avoid the risk of sparks being caused by movement of either the package or any ancillary equipment. (Part 2 Vol 1 Chap 5)

b. Any spillage is to be mopped up immediately using sand or approved absorbent material, which must be removed from the area for safe disposal. (Part 1 Chap 9)

c. Any leakages are to be reported immediately and action is to be taken to reduce the leakage until permanent repairs are carried out. (Part 2, Vol 4, Chap 3)

d. Rags used for cleaning purposes are to be removed from the area immediately after use and disposed of as hazardous waste. Cotton waste is not to be used for cleaning purposes.

e. Loading, offloading, gauging or sampling of vehicles, rail tank cars, ships or tankage involving flammable liquids is not to be undertaken during thunderstorms, snow storms or hail storms, or where there is reason to believe that disturbed atmospheric electrical conditions could occur. (Part 2, Vol 2 Chap 5)

f. Oxidisers and acids are not to be stored with flammable liquids.

g. Glass bottles and broken glass must not be left in a hazardous area due to possible ignition conditions in sunlight.
b. Open fires, naked light heaters, open electrical or gas elements and stoves are prohibited.

17. Grass and vegetation are to be cut and removed to a minimum of 15m from the source of the hazard. Grass cutting and the removal of vegetation within the hazardous area must be carried out in accordance with the MOD Safety Rules and Procedures for Work on Petroleum Installations. Isolated deciduous trees may be left but coniferous trees are not permitted within the hazardous area. Where it is necessary to use weed-killers to control vegetation, they are to be of a chlorate-free type.

Duty of Care

18. Personnel are to take the following precautions in petroleum installations:

a. All personnel working in the installation must be conversant with their duties in order that the current procedures for operating are followed. Personnel are to be trained and certified as a competent person in accordance with Part 1 Chap 8.

b. All personnel working in the installation are to be fully instructed in, and have easy access to, all relevant information and safety regulations concerning the installation. In particular they must be conversant with the action to take in the event of an emergency and the method of calling the fire service. Comprehensive records of all personnel training are to be maintained.

c. Smoking is prohibited in an installation, except in such buildings or areas as may be set aside for the purpose, i.e. where express authority has been given. A source of ignition is to be provided in such buildings or areas and must be of a type that cannot be removed.

d. Matches, cigarette lighters or any other means of causing ignition shall be withdrawn into safe custody from personnel entering the installation.

e. Footwear of personnel working in, or entering, the hazardous area of an installation, are not to have exposed metal studs or tips unless approved over shoes are worn.

f. When clothing is splashed with FLAP products, it is to be removed as soon as possible and then washed before reuse. However, the friction caused by changing or removing clothing can, in certain circumstances, cause a source of ignition due to electrostatic discharge. For this reason, clothing should be changed within a hazardous area, where applicable, drench showers should be used.

g. Personnel are not to smoke or go near any open flames while wearing working clothing if it is contaminated in the slightest degree with FLAP.

Miscellaneous

19. Inspections.

Hazardous areas are to be inspected regularly by a competent person delegated by the Commanding Officer to ensure necessary precautions are being observed. The appropriate authority must inspect all equipment, apparatus, tanks,
20. **Emergency Isolation.**

The MT Fuel pump isolation switch (Fireman's Switch) should be located to enable ease of access and operation for emergency switching by all installation operators and users. The resetting of an emergency switch shall not restore the electrical supply. This shall only be achieved by an AP Electrical from a restricted access reset control point. The isolator shall be clearly identified with a sign stating, "FUEL PUMPS SWITCH OFF HERE."

21. **Repair of Cans, Drums and Vehicle Fuel Tanks.**

There have been many accidents, some fatal, due to inadequate precautions being taken before the repair of cans, drums and vehicle fuel tanks. Before repairs requiring the use of heater or ferrous tools, all FLAP containers must be cleaned and made gas-free. These precautions must be taken irrespective of the Class of product that the container has previously held, or the time that the container has been empty. Closures must be opened, or bungs removed before welding takes place.

22. The risks of the siting of radio, radar or laser equipment near the Hazardous Area must be assessed, to ascertain if ignition conditions can be created.

23. The siting of a petroleum installation within the sphere of influence of radio, radar or laser equipment must be checked for the risks of the creation of ignition conditions.

24. Dispensing and receiving equipment for loading and discharge operators to and from Bulk Fuel Installations, as distinct from Mechanical Transport Fuelling Installations, must be electrically bonded to ensure **equi-potential** before the operation can commence. The hazards associated with static are detailed at Part 2 Vol 1 Chap 1.

25. **Administration.**

The following administrative action is to be taken:

a. If a catastrophic release of product occurs, the MACR plan, if applicable, is to be investigated. If such an area is outside the jurisdiction of the Services, the cooperation of the police is to be sought in enforcing the appropriate precautions.

b. Emergency procedures are to be prepared and exercised regularly.

c. Liaison is to be established and a joint plan agreed and practised with local civil and military emergency services. A copy of the Fire Plan is to be held at the main gate/reception and handed to local fire brigade officers when attending an incident at the site.

d. A good housekeeping standard is to be maintained. Rubbish and refuse of any kind are to be removed.

e. Installations are to be protected by security fences, unless inherently secure, as with in a secure area.

f. No vehicle is to be allowed to enter an installation unless authorised to do so. Only authorised equipment, plant, vehicles or locomotives may enter a Hazardous Area.
g. Pipes and fittings are to be marked for identification purposes in accordance with British Standard 1710: Identification of Pipelines and Services, and DEF STAN 05-052 Part 2: Markings for the Identification of Fuels, Lubricants and Associated Products – Containers Over 205 Litres and Pipelines.

h. Bonding connections, particularly on standard pipes and hydrant points, are to be kept free from paint and corrosion and be subject to periodic test.

i. Where a formal safety system of work is required, the requirements of JSP 375, Volume 3, Chapter 5 - MOD Safety Rules and Procedures for Work on Petroleum Installations are to be adhered to.

Fire Occurrence Reporting

26. Incidents involving fire can involve the loss of assets, the death or injury of personnel and, in the case of the MOD, could also have an adverse effect on its operational capability. It is therefore essential that the MOD has a system for recording fire incidents so that not only can statistical information be maintained for assessing future fire protection policies, but also, timely action can be taken on any developing trend.

27. All fires and related incidents are required to be reported to the appropriate TLB Hds and Hq DFR. MOD Form 1059 should be used for this purpose. Additionally, all serious fires or any emergency incident which results in the death of, or injury to, any person, where arson is suspected or where chemicals are involved, are to be communicated to the appropriate Regional DFR Office (out of hours the DFR HQ Duty Officer) within 24 hours of their occurrence. Where possible, initial notification is to be by telephone followed up by MOD Form 1059.

Fire Fighting Equipment - Sizing and Situating

28. The likelihood of a major fire can be minimised by good plant design and layout, sound engineering, good operating practice and proper instruction and training of personnel in routine operations and in emergency procedures. Plant design and layout must include the provision of water supplies, fire protection equipment, fire-fighting means of escape, means of access for fire brigade, appliances, protection of fire fighters and arrangements to ensure an early call-out of the fire brigade in the event of fire. The DFR must be consulted on these matters, at the planning stage in the case of new or altered facilities as well as reference to the DIFS.

29. Fire Notices.

Fire Action Posters in the Event of Fire are to be placed close to all fire extinguishers, on notice boards and at the park entrance point.

30. Pack FLAP Locations.

The number and location of all fire-fighting equipment is to be determined by a DFR Fire Officer.

31. MTFI.

The number and location of fire-fighting equipment is to be determined by a DFR Fire Officer. Table 1.7.1 lists the minimum scaling to prevent any small incipient fire spreading to the MTFI facilities.
1. Equipment shall be in accordance with the DIFS.
2. It is recommended that these extinguishers should be either AFFF 9 ltr Foam (temperate conditions) or Dry Powder with a capacity of at least 4.5kg (where temperatures can be expected to remain below freezing for lengthy periods).
3. Hydrants if required are to be sized and located to enable the requirements of DIFS to be met.
4. On Operations the number of fire extinguishers must be commensurate with the increased risk. Up to four dispensers are at least four extinguishers are required and one more for each additional dispenser.

Table 1.7.1 - Portable Fire Extinguishers.

32. BFC V Parks. Extinguishers Fluorochemical Foam 90 Litre are to be provided to the scale of two for the first 12 BFCVs and one for each additional 12 or part thereof. Extinguishers are to be sited not less than 15 m from any BFCV in an easily accessible position.

33. Permanent Bulk Fuel Installations. The number, type and location of all fire fighting equipment is to be determined by a DFR Fire Office. Hydrants are to be sized and located to enable the requirements of DIFS Fire Fighting Water Supplies to be met.

34. Manually operated fire alarm systems are to be in accordance with DIFS.

35. Roads and hard standing shall meet the requirements of DIFS.

Table 1.7.2 - Tank Cooling Chart.

36. Where tank cooling is deemed to be necessary, either due to spacing between the tanks or due to a specific requirement from the Defence Fire Service; this should be in accordance with Table 1.7.2. IP Model Code of Practice, Part 19 also specifies the required duration of tank cooling and how to calculate the required surface area. Cooling water should not be applied to the roof of floating tanks. Consideration is to be given to installation of measures to contain the fire-fighting water run off.

Note: Further guidance on the above can be obtained from DIO Fuels and Mechanical.

37. Waste FLAP Installations. The number and location of all fire fighting equipment is to be determined by a DFR Fire Office.

Deployed FLAP Installations

38. This section will detail the fire cover for all deployed sites that store FLAP products within a deployed and operational FLAP installation.

39. Suitable and sufficient fire fighting equipment will be required to cover the event of a breakout of fire within the installation and to ensure that all personnel are adequately protected from the fire where there is no DFR cover.

40. To assist in establishing a suitable fire cover and fire plan, the competent fire representative is to use the deployed FLAP risk assessment at Appendix A, and in consultation with DFR HQ.
All personnel who are required to work in a FLAPs compound are required to meet organizational training standards and to maintain competency. (Action in the event of fire specific to the working environment).

These standards are additional to the required standards laid down in DSA02 Fire Safety requirements in consultation with DFR HQ.
1. Defence Infrastructure Fire Standards (DIFS)
2. Fire and Rescue Services (Northern Ireland) Order 2006
3. Regulatory Reform (Fire Safety) Order 2005
4. Building Regulations 2010
5. The Building (Scotland) Amended Regulations 2010
6. Health and Safety at Work Act 1974
7. Safety at Work (NI) Order 1978
8. The Control of Industrial Major Accident Hazards Regulations 1984 (CIMAH) and the Control of Major Accident Hazards Regulations (NI) 1985 (as amended in 1988 and 1991)
9. The Control of Substances Hazardous to Health Regulations 1994 (COSHH) and the Control of Substances Hazardous to Health regulations (NI) 1990 (as amended in 1972 and 1993)
13. Defence Works Functional Standards
14. British Standards Series
15. MOD Fire Safety Management Plan (FSMP)
16. Resource Allocation Risk Management (Re-ARM)
Chapter Sponsor - Air Command A4 Fuels Office

Scope
1. This chapter has been written to assist MOD Establishments to correctly scale, train and appoint competent persons within FLAP environments. It should be used in conjunction with MOD Policy detailing mandated training requirements of personnel for all Arms and Services.

2. Legislation.

The Health & Safety at Work Act 1974 (HSWA) and enabling regulations to provide the legislative framework for the safe storage and handling of fuel, lubricants and associated products within the MOD. The MOD does not exercise any exemption to the Act, however it should be noted that there are certain derogations that apply within Military Works Areas, where the principle of 'so far as is reasonably practicable (SFAIRP)' is replaced with 'as low as reasonably practicable (ALARP)'. Further to the criteria laid out in this publication, JSP 375 requires that MOD policy regarding HSWA is to be applied at all units/establishments worldwide, unless an existing Status of Forces Agreement (SOFA) requires the application of more onerous or stringent Host Nation legislation, regulation or requirements. In all cases JSP 375 is to be used as a point of reference.

General
3. Legislative compliance.

The HSWA requires all employers to provide suitable and sufficient information, instruction, training and supervision as necessary to ensure so far as reasonably practicable, the health and safety at work of their employees, and anyone affected by their activities. This duty may be formally delegated although the responsibility is retained by each employer.

4. Head of Establishment.

The Head of Establishment (HoE) has primacy in site wide arrangements and is to ensure that all personnel are made aware of and comply with the health and safety arrangements applicable to the site. This includes visitors, members of the public and contractors. Contractors may already have their own separate company policy or arrangements, but it is stressed that any separate policy must be compatible and augment the arrangements made by the HoE.

a. Operating Authority.

OA is a responsibility given to the HoE specifically for petroleum installations. Responsibility for the safe and proper operation of petroleum installations rests with the HoE; authority, but not responsibility, may be formally delegated to an appropriate person who may carry out tasks on behalf of the HoE (see Annex C). The OA is required to exercise duty of care over all activities at the installations and ensure that Petroleum and base wide operations are fully taken into account before the MMO is given authority to undertake intrusive work. Where any infrastructure or related work is required, liaison, control and 'hand-over' of the facility...
is to be done in accordance with processes contained within JSP 375, Vol 3, Chap 5; this also contains further details of the OA duties.

5. Maintenance Management (MMO). The MMO is the organization responsible for planning, organizing and managing the maintenance and repair of equipment; this may include the design and construction of new works. The MMO may be a Contractor, DIO or Military and hold the duty to enforce JSP 375 Volume 3 within the scope of their deliverables and will discharge this duty by appointing:

a. Authorising Engineers (AEs). The role of the AE is to implement, administer, monitor and audit the Safety Rules and Procedures laid down in JSP 375 Volume 3. The duties of the AE are detailed in JSP 375 Volume 3 Chapter 2.

b. Authorised Person Petroleum (AP (Pet)). The role of the AP (Pet) is to implement a safe system of work on Petroleum Installations for which they have been appointed. The general duties of an AP are detailed in JSP 375 Volume 3 Chapter 2. In addition, specific to FLAP installations, the duties of the AP (Pet) include:

(1) Communication with the OA of the Petroleum Installation at the planning stage.
(2) Preparing an AP Risk Assessment.
(3) Preparing a Safety Programme to ensure adequate control of a Petroleum Installation prior to the issue of any Permits to Work for that installation.
(4) Defining the condition of the petroleum installation that is required immediately before planned work can commence.
(5) Acceptance of the Petroleum Installation from the OA for the purpose of planned work.
(6) Handing over of a Petroleum Installation to the OA on completion of work.
(7) Production of a Site Review.

6. Establishment appointments. The size and complexity of FLAP infrastructure will dictate the appropriate scale of staff. For example, a MT FI comprising a single dispensing point will require fewer installation operators than a major air/avionics hub serving both ground and airborne platforms. This JSP does not dictate a FLAP management structure; rather the TLBs, establishments and supporting contractors have scope to develop a management structure to suit their needs. However, personnel involved in managing and operating FLAP installations will require specific fuels training pertinent to their role (see Annex A) and, in all cases, individuals filling the following key roles should be identifiable:

a. Office in Charge (OiC). The officer or person appointed to oversee the FLAP site does not necessarily have to be fuels trained. The OiC may also be the HoE in the case of smaller establishments, whereby the HoE directly assumes management of the fuels site. The OiC may be appointed solely for the fuels site (OiC Fuels), or may be a secondary role.
FLAP Manager.

Hazardous environments containing products classified by the Energy Institute (EI) as Class I, II or III are to be managed/supervised by a person who has been formally trained and deemed as Suitable Qualified and Experienced Person (SQEP). In the case of FLAP; training, qualification and competency is certified with the appointment of an FLAP Manager. The FLAP Manager may manage a single fuel site, a group of local fuel sites, or indeed a complete region of fuel sites; the workload being dictated by the specifics of the site(s). For example, disparate Search & Rescue fuel sites may be managed by a single appointed FLAP Manager, whereas a major garrison may dictate the scaling of numerous FLAP Managers to cope with the scale of the infrastructure and fuel throughput. The FLAP Manager may also be the Officer in Charge or Head of Estate in the case of the smallest MOD establishments. The roles and responsibilities of a FLAP Manager should be included within individual Terms of Reference (ToR); these roles and responsibilities include, but are not limited to:

1. Management of Installation Operators. The FLAP Manager oversees the line management of installation operators and coordination of in-unit FLAP training, which includes spill response exercises. He/she ensures that personnel have the correct formal training competence, are correctly trained on all installations and hold a valid Certificate of Competence (CoC), in accordance with Appendix B.

2. Stock management. The FLAP Manager is to ensure that all accounting procedures for FLAP products are fully implemented in accordance with the Defence Logistics Framework. It is preferable that there is a separation of duties between the site operators and the accountant; however, if this is not practical, regular management checks should be carried out.


4. Monitoring FLAP site infrastructure. The FLAP Manager is to ensure periodic maintenance tasks have been conducted by the MMO and raise work requests for faulty equipment/infrastructure, as required. The FLAP Manager should also ensure the fuel infrastructure is not operated without:
   a) An in-date Professional Inspection of Fuel Installations and Flammable Goods Store Report, containing a valid Certificate of Fitness for Continued Use, which is produced annually by a DIO appointed Professional Inspector.
   b) An in-date Electrical Installation Condition Report and supporting Electrical Certificates which has been graded 'satisfactory' (also completed by the MMO).
   c) The FLAP Manager should record, track, and where appropriate, note progress against each defect listed. Any lapses in the validity of 8-3 JSP 317 Pt 1 (v.6.4 Apr 20)
The Certificate of Fitness for Continued Use, Electrical Test Certificates and/or any other health, safety and Environmental Protection risks are to be reported immediately to the Chain of Command.

(5) Coordination of Fuel and Gas Safety Activity. The FLAP Manager is responsible for the coordination of any FGSR activity at the unit, including progression of any non-compliance and liaison with their TLB and FGSR.

(6) Liaison with the MMO, Command & Control (C2) and the Project.

The FLAP Manager should maintain a good working relationship with external organisations to facilitate coordination and sharing of safety information and ensure that routine inspections and infrastructure works are completed as required.

c. Operating Authority (OA) - Maintenance Guidance

(1) It is vital that any work undertaken in a petroleum installation is coordinated with agreement between the OA and the AP (Pet). This instruction supplements JSP 375, Pt 2, Vol 3 - High Risk Activities on JSP 317 Pt 1 (v 6.4 Apr 20) Defence Infrastructure with JSP 375, Vol 3, Chap 5 pertinent to Petroleum Installations.

d. Maintenance Occurrence:

(Notice of maintenance can occur in the following circumstances, but the list is not exhaustive).

(1) Professional Inspection Report PG 06/12 - completed annually.
(2) Electrical Condition Report - completed annually.
(3) Scheduled/Planned Maintenance PG 05/12.
(4) OA Requested Works - submitted on identification of infrastructure/equipment failure.

e. Safety Programme (SP) and Formal Hand Over

(1) Prior to commencement of work a Safety Programme (SP) will be raised by the AP (Pet). A template of the SP can be found at this Link.

(2) The OA is required to sign a hard copy as an authorising the work to be carried out. The signed SP for authority to commence works is also formal hand over of the installation to the MMO. The SP should not be closed until the AP (Pet) is wholly satisfied that integrity of the installation is achieved, and normal operation can resume. When this is confirmed the OA is required to sign the SP in hard copy to acknowledge return of the installation back to the OA for normal operations. A duplicate of the signed SP should be provided to the OA for reference.

f. Permit To Work (PTW)

(1) No work covered by a Safety Programme should commence until a PTW has been issued and signed by the AP (Pet). The installation or parts

Thereof may be subject to a Restricted Area and therefore, out of bounds to OA representatives. This should be indicated on the Fuel State Board and personnel informed to observe restriction signage. Access/Security keys should be subject to HO/TO with the AP (Pet) and signed In/Out of a key register.

Standing Instruction (SI)

(1) When low level risk or non-intrusive maintenance is defined in JSP 375, Vol 3, Chap 5, the AP (Pet) is to provide details of the task and the OA must acknowledge and sign the SI prior to work commencement. All work mechanical, Electrical or husbandry (e.g. Painting) must be authorised by the OA and restrictions to normal operations agreed with the AP (Pet).

Installation Operator. Typically, of rank range Pte to Cpl, or another Service/civilian organisation equivalent. An operator is to hold a CoC in accordance with Annex B. In-unit instruction as per the requirements of the CoC is to be primarily coordinated by the FLAP Manager. Specifically, personnel that are to be employed in FLAP duties on aviation fuel installations are to attend the RAF Fuels Operators Course, at DPTS West Moors, as a pre-employment requirement. Other operators need not undertake any further formal training above that covered in the CoC unless their JST ORs dictate otherwise. Main roles are to undertake the receipt and issue of fuel undertake fuel quality testing, replenish stocks of PPE and PCS on site, undertake tank dipping as required, assist in the management of wet stock, site husbandry, and reporting of any infrastructure failure.

(1) SME input to Sitting Boards.

The FLAP Manager may be expected to provide SME input to unit sitting boards.

7. Project AQUATRINE.

The AQUATRINE Service Provider (ASP) is responsible for the maintenance of water drainage systems (British mainland only) from the point at which water leaves a building, to the point at which the drainage system discharges into:

a. A non-MOD watercourse.

b. The local water company sewerage network.

This includes the management and maintenance of Oil Water Interceptors (OWIs) associated with bulk fuel infrastructure. For Northern Ireland, Germany, Rest of World and Aspire Defence sites, drainage management principles should be sought from the local water drainage governing body.

8. It is key that the FLAP Manager establishes liaison with the ASP or other relevant body, to ensure the OWI serving the fuel installation is maintained and serviceable, and that the Unit Spillage Response Plan is fit for purpose. Where this does not occur, and Environmental Protection risks exist, the FLAP Manager is to report this to the Chain of Command immediately. To speedup inspection, the following basic information should be held by the FLAP Manager and be available on site:

a. Location of OWI.
Training / Competence of MOD Personnel / Civil Contractors

9. Trade training.

Certain trade training goes above and beyond the scope of this chapter (e.g. the cleaning of sea vessel petroleum bulk tanks (RN only)). Training establishments must ensure that staff are adequately trained to undertake specific FLAP duties, unless dispensation is given on a task basis. This dispensation is to be written and logged as part of a risk assessment.

10. Aviation fuel installation specific training. Annex D details specific training requirements for personnel employed in the management and operation of aviation fuel installations of which they must undertake at the beginning of their employment.

11. Validity. Where training qualifications are not lifetime awards, i.e. have a set expiry date, the individual and the chain of command must ensure personnel in FLAP posts undertake refresher or re-training as required.

12. Fuel Practitioner Log Books. In conjunction with an individual's Certificate of Conformity, all Military personnel employed in a fixed or deployable petroleum environment are to ensure all fuels activities, training qualifications, Exercises and deployments, are captured in a Fuel Practitioner Log Book. Fuel Practitioner Log Books will be issued to every individual upon initial completion of their respective fuel's course. Personnel who are already employed in a petroleum environment will have the opportunity to download the Log Book from JSP 317, define. The Fuel Practitioner Log Book is optional for civilian employees.

13. Training providers. The training and qualification for FLAP Managers within the MOD is provided by the Defence College of Logistics, Policing and Administration (DCLPA) and delivered at the Defence Petroleum Training Squadron (DPTS). Military and civilian staff employed as FLAP Managers are to undertake the required training for their posts through this training unit.

14. External training. Training support for bespoke courses not delivered at DPTS or LSTS may be sourced from external providers, subject to TLB authority.
15. SOTR Course Planning.

JSP 822 - Defence Direction and Guidance for Training and Education, which sets out the Statement of Trained Requirement (SOTR) process used to identify the scale of training requirements. Any interested party who wishes to have input on course contents should contact the relevant single service Training Requirements Authority.


The Mandated Course Trained Personnel as detailed in Pt 1, Chap 8 for an Army Unit to have an All Arms FLAP Manager. All units involved in the management of a aviation fuel installation must have a LST Qualified Fuel Manager as detailed in Annex A.


DC LPA, hosts the following pamphlets, which detail the course dates of both the All Arms Fuel & Lubricants Manager and RAF Fuel Manager:

a. Pam 10F - DCLPA, DLS, Defence Petroleum Training Squadron.

b. Pam 10H - DCLPA, DLS, RAF Logistics & Supply Training Squadron.

18. IT D (A) Course Bids.

Course bids should be submitted to the relevant training establishment dependent on the bulk fuel infrastructure type:

a. Ground Fuels Only (DPS TS Worth Down).

Military and MoD civilian personnel are to submit their course applications via email to DC LPA-WD-ResourceBooking@mod.gov.uk no later than 2 weeks prior to the start of the course. Course information application forms and details of how to apply can be found on the Supply and Movement Training Wing website.

b. Aviation Fuels (DPS TS Worth Down).

Military and MoD civilian personnel are to submit their course applications via email to DC LPA-WD-ResourceBooking@mod.gov.uk no later than 2 weeks prior to the start of the course.

Annexes:

(1) Appointment of Staff to Undertake Petroleum Duties.

(2) Certificate of Competence for Personnel Operating Bulk Fuel Installations.

(3) Specific Requirements for Personnel Employed in the Management and Operation of Aviation Fuel Installations.

(4) Aviation Fuels Environment Pre-Employment Training Requirements Matrix.
ANNEX A - APPOINTMENT OF STAFF TO UNDER TAKE PETROLEUM DUTIES

1. Responsibilities

HEAD OF ESTABLISHMENT (Operating Authority)

The HoE is responsible for ensuring that all personnel under their command/management have received specific fuel training as required and are qualified for the specific petroleum duties on which they are employed. The HoE is required to appoint an individual to act as an OA, i.e. Paragraph 5 a in the main body of this chapter. The HoE can choose to retain OA depending on site specific considerations, such as manpower.

OFFICER IN CHARGE

As delegate by the HoE, the QM/OC Logs (or equivalent) is to identify any fuel installations within the geographical boundaries of the establishment, i.e. an MTFI, BF1, Bulk Fuel Carrying Vehicle (BFCV) Park, gas cylinder compound etc. Specifically, for an MTFI or BF1, a FLAP Manager must be appointed. The FLAP Manager may cover a single establishment or indeed be responsible for the fuel installations over a number of establishments, the decision being taken by the local chain of command. A FLAP Manager, where appointed, is to undertake either the All Arms Fuel & Lubricants Manager Course and/or the RAF Fuel Managers Course via the Course Selection Flow Chart at Paragraph 2.

FLAP MANAGER / APPOINTED OPERATING AUTHORITY

Where the FLAP Manager holds the role of Fuels Operating Authority, he/she must also hold formal delegation from the HoE. Once trained, the FLAP Manager is to coordinate the completion of CoCs for any operators employed in petroleum duties on that site. For example, an Army unit MTFI will typically have a FLAP Manager (Sgt/SSgt), and 2-3 operators (Pte-Cpl); a large RAF unit may require many more suitably qualified individuals.

INSTALLATION OPERATOR

2. FLAP Managers' Course Selection.

Units which have both aviation and ground fuel installations are to attend the RAF Fuel Managers' Course.

GROUND FUEL MTFI

AL L ARMS FUEL & LUBRICANTS MANAGERS' COURSE

Defence Petroleum Training Squadron
Worthy Down

AVIATION FUEL BF1

COURSE NUMBER 1891 (RAF FUEL MANAGERS' COURSE)

Defence Petroleum Training Squadron
Worthy Down
1. All personnel employed in the operation of aviation fuel installations are to hold a valid Certificate of Competence 17 (COC), at Appendix 1 to this Annex.

2. All personnel employed in the operation of ground fuel installations are to hold a valid COC, at Appendix 2 to this Annex.

Appendices:

Exemption – ACOC is not required for JOFS fuel infrastructure built to a standard design. Any infrastructure which is constructed to non-standard design will require a COC for all operators signed off by the respective deployed Fuel Manager.
Part B Mandatory Briefings - to be delivered by an appropriate representative of the MMO

I have briefed the person named in Part A for each of the installations listed in Part E in the following subject areas:

1. Roles and Responsibilities of the MMO
2. Roles and Responsibilities of AP (Pet) and outstanding defects
3. An overview of the permit to work system (JSP 375) and outstanding defects
4. The roles and duties of the OA towards maintenance activities
5. Details of site specific routine maintenance tasks
6. The defect reporting procedure
7. Details of future maintenance tasks
8. An overview of the Professional Inspection Report
9. An overview of the current electrical certificates
10. An overview of how to electrically isolate the installation including emergency shutdown procedures
11. An overview of how to mechanically isolate system components including emergency shutdown procedures

Date  Name  Signature  Appointment

Part C Fire Training

The person named in Part A has been briefed to operate Fire Apparel and Fire Hydrant Systems appropriate to local procedures for Fuel Operators and Managers

Date  Name  Signature  Appointment
Part D Training/Familiarisation - to be delivered by a qualified Fuel Manager holding a valid COC for each installation

1. Demonstrate the location of fire fighting equipment and how to use it
2. Interpret theUSR P and identify the location of all Pollution Control Points and demonstrate the correct use of Pollution Control Sorbents and Equipment.
3. Understand and describe how to electrically isolate the installation
4. Identify and comply with the following SHE Asse ssments:
   (i) COSSH RA.
   (ii) H&S RA.
   (iii) MSDS.
   (iv) DSEA R RA.
   (v) Complete Fire Plan.
5. Understand and describe how to mechanically isolate components
6. Understand and describe equipment and site-specific anomalies
7. Conduct emergency procedures/IAS for each installation
8. Conduct manual tank dipping
9. Operate automatic tank gauging system
10. Complete Before Use Inspection on FWS
11. Complete Before Use Inspection on pump set
12. Issue fuel to a BFC 
   
   Trained Tested Date By Date By
13. Conduct an inter-tank transfer of fuel
14. Issue fuel from a hydrant system
15. Receive fuel from a BFCV
16. Receive fuel from the CLH PS or Ocean Tanker (where relevant)
17. Operate the PRE
18. Conduct a cross-base transfer of fuel
19. Complete Quality Assurance testing
20. Complete checks and drain off tanks
21. An overview of the site-specific schematic
22. Understand & describe specific hazards of product stored in each installation and demonstrate the correct use of PPE.
23. Conduct Before Use Inspection of ancillaries (valves, pipework etc)
24. Accounting procedures
25. Other site-specific operations:

Note: Some though where not appropriate

Part E Installations authorised to operate
I have received the mandatory briefings at Part B and training at Part D, which is sufficient for me to operate the installations at Part E unsupervised. I will inform my Line Manager of any physical conditions or medical conditions and circumstances that may impact on my ability to work in a Fuels Environment or impact the Health and Safety of others within a Fuels Environment.

Date Name Signature Rank/Grade

Part H Declaration by the appointed Operating Authority of the installation(s)

The persons named at Part A have received specific Fuels training and has demonstrated their competency to operate the installations listed at Part E unsupervised.

Rank/Date Name Signature Grade

Annual review by the appointed Operating Authority, Fuels Manager or Person in Charge

Date of Review Rank & Name Signature Remarks
Part A. Details of the operator to be deemed competent.

Part B. The briefing shall be carried out by a representative from the MMO who has in-depth knowledge of the site fuel installations, the equipment, maintenance and operation. The MMO Authorized Person Petroleum (AP Pet) shall provide an overview of the MOD Safety Rules and Procedures Petroleum (JSP 375, Vol 3, Chap 5), with specific reference to the roles and duties of the AP Pet and Operating Authority.

Part C. A competent fire authority is to deliver fire training on the specific fire fighting appliances deployed at the installation(s). This part is signed by the fire instructor.

Part D. An FLAP Manager holding a valid CoC for the subject installation(s) is to ensure training is delivered in all relevant areas detailed in this part. The FLAP Manager may delegate training activities to a competent and suitably experienced operator, holding a valid CoC. The trainer can then sign and date the training column upon completion; however, the FLAP Manager must then test the operator, and sign and date once satisfied with the operator’s competency. Although the FLAP Manager can train and subsequently test an operator, independence of each activity could be considered.

Part E. Lists the fuel installations that the operator is deemed competent to operate.

Part F. This part is not applicable to all fuel installations. The minimum colour perception standard for Installation Operators whose duties include driving on active airfields is normally CP2. Similar conditions may apply in other locations and should be taken into consideration by the fuels officer, who will decide if a test is required.

Part G. This part is the operator's declaration that he/she has successfully completed all aspects of the training objectives and is sufficiently confident to execute duties on the sites recorded. By signing this part the operator also confirms that he/she has informed line managers of any physical or medical conditions which may be aggravated as a result of working in fuel environments.

Part H. The appointed Operating Authority signs this part on completion of all training and testing to certify the person named at Part A is competent to operate the installation(s) unsupervised.

Part I. The FLAP Manager (or nominated competent person) is to re-test the operator on an annual basis from the date of the initial training. If the operator fails any test they are to be re-trained in the specific area(s) and re-tested until deemed competent. Once confirmed the appointed Operating Authority is to sign this part and sign the individual's Fuel Practitioner Log Book. This process is to be repeated annually.
I have briefed the person named in Part A for each of the installations listed in Part E in the following subject areas:

1. Roles and Responsibilities of the
2. Roles and Responsibilities of AP
3. An overview of the permit to work
4. The roles and duties of the
5. Details of site-specific routine maintenance tasks including emergency shut down procedures
6. The defect reporting procedure
7. Details of future maintenance tasks
8. An overview of the Professional Inspection Report (Pet) and outstanding defects
9. An overview of the current electrical test system (JS 375) certificates and outstanding defects
10. An overview of how to electrically isolate the towards maintenance activities including emergency shut down procedures
11. An overview of how to mechanically isolate system components including emergency shut down procedures

Date  Name  Signature  App
<table>
<thead>
<tr>
<th>Part C</th>
<th>Fire Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>The person named in Part A has been trained to operate First Aid Fire Appliances and Fire Hydrant Systems appropriate to local procedures for Fuel Operators and Managers.</td>
<td></td>
</tr>
</tbody>
</table>

Date  Name  Signature  Appt

Part D  Training/Familiarisation - To be delivered by qualified Fuel Manager holding a valid CoC for each installation

1. Identify the type and location of installation fire fighting equipment.
2. Interpret the Unit Spillage Response Plan, identify the location of all Pollution Control Points and demonstrate the correct use of Pollution Control Sorbents and Equipment, specific to the installation.
3. Understand & describe how to electrically isolate the installation; to include emergency shutdown procedures.
4. Understand & describe how to mechanically isolate components; to include emergency shutdown procedures.
5. Conduct Wet Stock Management; Automatic Tank Gauge & Manual dips as applicable.
6. Bulk Receipt Procedures as applicable:
   (i) Operator Controlled Delivery.
   (ii) Driver Controlled Delivery.
7. Quality Assurance Procedures specific to installation, to include Water Checks.
8. Identify and comply with the following SHEF Assessments:
   (i) COSHH RA.
   (ii) H&S RA.
   (iii) MSDS.
   (iv) DSEAR RA.
   (v) Comp Fire Plan.

Train Tested
Date  By  Date  By
9. Operate installation iaw local operating procedures.

10. Demonstrate the correct use of PPE.

11. An overview of the site-specific schematic.

Note: Score through when not appropriate to provide details of other site-specific operations: unit.

Site Fuel & Lubricant Manager

Date Name Signature

I have received the mandatory briefings at Part B and training at Part D, which is sufficient for me to operate the installations at Part E unsupervised. I will inform my Line Manager of any physical conditions or medical conditions and circumstances that may impact on my ability to work in a Fuels Environment or impact the Health and Safety of others within a Fuels Environment.

Date Name Signature Rank/Grade

Part G Declaration by the appointed Operating Authority of the installations

The person named at Part A has received specific fuels training and has demonstrated their competency to operate the installations listed at Part E unsupervised.

Date Name Signature Rank/Grade

Part E Installations authorised to operate
<table>
<thead>
<tr>
<th>Date of Review</th>
<th>Rank &amp; Name</th>
<th>Signature</th>
<th>Remarks</th>
</tr>
</thead>
</table>

CERTIFICATE OF COMPLETION

NOTES: Part A. Details of the operator to be deemed competent.

Part B. The briefing shall be carried out by a representative from the MMO who has an in-depth knowledge of the site fuel installations, the equipment, maintenance and operation. The MMO Authorised Person Petroleum (AP Pet) shall provide an overview of the MOD Safety Rules and Procedures Petroleum (JSP 375, Vol 3, Chap 5), with specific reference to the roles and duties of the AP Pet and Operating Authority.

Part C. A competent fire authority is to deliver fire training on the specific fire fighting appliances deployed at the installation(s). This part is to be signed by the fire instructor.

Part D. An FLAP Manager holding a valid CoC for the subject installation(s) is to ensure training is delivered in all relevant areas detailed in this part. The FLAP Manager may delegate training activities to a competent and suitably experienced operator, holding a valid CoC. The trainers can then sign and date the training columns upon completion; however, the FLAP Manager must then test the operator, and sign and date once satisfied with the operator's competency. Although the FLAP Manager can train and subsequently test an operator, independence of each activity could be considered.

Part E. Lists the fuel installations that the operator is deemed competent to operate.

Part F. This part is the operator's declaration that he/she has successfully completed all aspects of the training objectives and is sufficiently confident to execute duties on the sites recorded. By signing this part, the operator also confirms that he/she has informed line managers of any physical or medical conditions which may be aggravated as a result of working in fuel environments.

Part G. The appointed Operating Authority signs this part on completion of all training and testing to certify the person named at Part A is competent to operate the installation(s) unsupervised.

Part H. The FLAP Manager (or nominated competent person) is to re-test the operator on an annual basis from the date of the initial training. If the operator fails any test they are to be re-trained in the specific area(s) and re-tested until deemed competent. Once confirmed the appointed Operating Authority is to sign this part and sign the individual's Fuel Practitioner Log Book. This process is to be repeated annually.

I n t r o d u c t i o n

1. I n o r d e r t o p r e se rv e A i r Sa f e t y a n d re d u ce R i s k t o L i f e (RtL) a n d R i s k t o E n v i ro n m e n t (RtE), a ll p e r s o n n e l e m p lo y e d o n a n a v ia tio n f u e l in s ta lla tio n a re t o b e s p e ci fica lly tra in e d a n d q u a lifie d. T h e r o l e o f Op e ra tin g Au th o r i t y (OA) ultim a te ly r e st s w ith th e H e a d o f E s ta b lish m e n t (Ho E) w h o is r e q u ire d t o e x e r c i s e d u ty o f ca r e o v e r a ll a c t iv itie s. H o w e v e r, th e Ho E m a y c h o o se t o f o r m a ll y d e le g a t e a u th o r i t y t o a n a p p ro p r ia te p e r s o n , a l th o u g h o v e r a ll r e s p o n s i b i l i t y m u s t b e r e ta i n e d. W h e n a u th o r i t y is t o b e d e le g a t e d, a n OA is t o b e fo r m a lly a p p o in te d b y th e Ho E v ia L e t t e r o f A p p o in t m e n t (Lo A). T h e Lo A sh o u l d b e a h e a d e d le tte r w r i t t e n i n a c c o r d a n c e w ith C h a p te r 2 t o J S P 1 0 1; th e r e c o m m e n d e d co n te n t a n d s t r u c tu r e o f th e Lo A c a n b e fo u n d a t A p p e n d i x 1 t o th is A n n e x.

A p p o i n t e d O p e r a t i n g A u t h o r i t y

O A is a r e s p o n s i b i l i t y g iv e n t o th e Ho E sp e ci fica ll y f o r p e tro le u m in s ta lla tio n s. R e s p o n s i b i l i t y f o r th e s a f e a n d p r o p e r o p e ra tio n o f p e tro le u m in s ta ll a tio n s re st s w ith th e H o E ; a u t h o r i t y , b u t n o t r e s p o n s i b i l i t y

2. T h e in d iv id u a l a p p o in te d t o b e c o m e th e OA m u s t s a ti sf y th e fo llo w in g c r i t e r i a :

a. T h e y m u s t b e fo r m a lly d e le g a t e d a u th o r i t y b y th e Ho E / Stn C d r / F o r c e C o m m a n d e r a n d h o ld a Lo A.

b. T h e y m u s t b e th e m o s t s e n io r q u a lif ie d F u e ls M a n a g e r w h o h o ld s d i r e c t r e s p o n s i b i l i t y f o r th e o p e ra tio n o f a v ia tio n f u e l in s ta lla tio n s. A t a M O B th is w o u ld ty p ic a lly b e O f f ic e r C o m m a n d in g F u e ls a n d L u b rica n ts F l i g h t; a t a d e p lo y e d lo ca tio n th is m a y b e th e d e p lo y e d f u e ls D e p a r t m e n t C o m m a n d e r.

c. T h e y m u s t b e a m in in u m ra n k o f S N C O o r ci v il ia n e q u i va le n t. T h e Ho E o f e s ta b lish m e n ts w h e r e c o n tra c te d ci v i l ia n p e r s o n n e l a re in c h a rg e o f a v ia tio n f u e l in s ta lla tio n s, a re a lso t o a p p o in t a su ita b le ca n d id a te.

3. D u r i n g a n y p e rio d s w h e n th e a p p o in te d OA is a b s e n t, a d e p u ty m u s t b e a p p o in te d t o p r o v id e c o v e r. T h is d e p u ty m u s t a lso fu lfil th e c r i t e r i a la id d o w n a t p a ra g ra p h 2 a b o v e a n d m u s t b e c o n v e rsa n t w ith th e co n te n ts o f th e Lo A. P rio r t o a n y h a n d o v e r o f OA d u tie s , th e Ho E is t o b e n o tifie d v ia th e c h a in o f c o m m a n d.

F o r m a l W r i t t e n O p e r a t i n g I n s t r u c t i o n s

4. I n o r d e r t o e n s u r e that fu e ls in s ta lla tio n s a re b e in g o p e ra t e d s a f e l y a n d w ith in th e p a ra m e te rs o f th e e q u i p m e n t, th e a p p o in te d OA is t o e n s u r e th a t a ll lo c a lly p ro d u ce d in s ta ll a tio n o p e ra tin g in str u c tio n s:

8-C -5
JSP 317 Pt 1 (v 6.4 Ap r  20)
Include a signed declaration from the DIO Infrastructure Manager (IM) or Service Delivery Managers stating: “I confirm that, if followed correctly, the procedures contained within this operating instruction will maintain the safe operation of this installation with equipment parameters.”

b. Are included within Air Engineering Standing Orders (AESOs) or equivalent, as well as the FLAP formal document pack detailed at Para 5 below.

Formal Document Pack-up

5. The appointed OA is to own and maintain a formal document pack-up for all installations within their Area of Responsibility (AoR). This formal document pack-up is to be made available during audits and assessments of their AoR. The formal document pack-up is to contain the following documents:


c. Current Electrical Installation Condition Report and supporting Electrical Certificates for all installations.

d. A register of all Oil Water Interceptors (OWI) within their AoR. This register is to detail all information highlighted at Para 8 of this chapter.

e. In conjunction with the above documents, the appointed OA is to maintain a register of all outstanding defects and non-compliance present on the installations within his/her AoR. The register is to detail all progress towards rectification of all defects and non-compliance.

f. All locally produced instructions for the operation of the installations.

g. All Risk, COSHH and Environmental Impact Assessments and Material Safety Data Sheets (MSDS) applicable to their AoR.

h. A copy of all installation schematic diagrams.

i. All installation Explosive Atmosphere Regulations (DSEAR) risk assessments, including a copy of the hazardous area schematics.

j. A copy of the Unit Spillage Response Plan.

6. This formal document pack-up can be maintained either electronically or in hard copy and is to be formally handed over during any transfer of appointed OA duties between individuals.

7. In addition to the formal document pack-up the appointed OA is to ensure that records of all training are maintained for personnel employed within their AoR.

Pre-employment Training Requirements

8-C-6

JSP 317 Pt 1 (v 6.4 Apr 20)
8. In order to ensure that personnel are competent to work with the aviation fuels environment, the relevant Pre-employment Training (PET), specified at Annex D, is to be completed. It is acknowledged that, in certain circumstances, completion of this PET may not be achievable prior to taking up post. In these instances, PET is to be completed at the earliest opportunity. All aviation core fuels training courses have a 5 year life and personnel should re-qualify, if required, within this time period.

Appendices:
1. Letter of Appointment to be the Appointed Fuels Operating Authority

JSP 317 Pt 1 (v 6.4 Apr 20)
LETTER OF APPOINTMENT TO BE THE OPERATING AUTHORITY

References:
A. JSP 317 Part 1 Chapter 8
B. Defence Logistics Framework
C. JSP 317 Part 2 Volume 3.1 (Quality Control)

LETTER OF APPOINTMENT TO BE THE OPERATING AUTHORITY FOR <INSERT UNIT NAME>

1. I hereby appoint you to be the Operating Authority (OA) for <Insert unit name>. In accordance with Ref A, you are responsible and accountable to me, through your chain of command, for the safe and proper operation of all fuel installations under my command.

2. As the appointed OA you are to:
   a. Coordinate all Defence Safety Authority (DSA), Fuel and Gas Safety Regulator (FGSR) activity within your AoR. This includes ownership of a Fuel Safety Assurance Assessment (FGSAA) Action Plan and progression of any non-compliance identified within your AoR, ensuring resolution at the earliest possible juncture.
   b. Ensure that all personnel employed on unit fuels installations hold the correct formal training competence, are correctly trained on all installations they are expected to operate and hold a valid Certificate of Competence (CoC), in accordance with Ref A.
   c. Ensure that all accounting procedures for Fuel and Lubricant products are fully implemented in accordance with Ref B. This includes the mandated physical dips and end of month stock accounting action.
   d. Ensure that the fuel infrastructure has an in-date Professional Inspection of Fuel Installations and Flammable Goods Stores Report, containing a valid Certificate of Fitness for continued use, which is produced annually by a DIO appointed Professional Inspector, along with an in-date electrical test certificate which has been graded 'satisfactory'. Any lapse in the validity of the Certificate of Fitness for continued use or Electrical Test Certificates should be reported to me immediately via your chain of command.
   e. Investigate a robust quality assurance and husbandry regime, in accordance with Ref C, to ensure that the fuel contained within your installations is fully fit for intended use.
   f. Ensure that locally produced operating instructions include a signed declaration from the DIO Infrastructure Manager (IM) or MMO Service Delivery Managers stating: “I confirm that, if followed correctly, the procedures contained within this operating instruction will maintain the safe operation of this installation with in equipment parameters.” These instructions must also be included within <insert appropriate standing order>.
   g. Inform me immediately via your chain of command of all other risks being held across my fuels infrastructure.

3. Your authority as appointed OA applies throughout your tenure but can be delegated, during any periods of your absence, to a nominated individual holding a valid RAF Fuel Manager qualification and who is conversant with the criteria laid out in this letter. Prior to the permanent handover of OA duties, you are to provide written notification to me via your chain of command.

4. You are to acknowledge receipt of this Letter of Appointment and accept your appointment as the OA, in writing, within 2 weeks.

<Insert HoE/Staff Signature>

8-C-1-8
JSP 317 Pt 1 (v 6.4 Apr 20)
18 e.g. Air Engineering Standing Orders (AES Os)
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Fuel Management</th>
<th>Fuel Operator Course</th>
<th>Deployed Fuels Operator Course</th>
<th>RAF Fuel Operators Course</th>
<th>RAF Fuel Operators Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. To conduct Permanent Installation Manager duties, personnel must hold either the RAF Fuel Operators Course or the Deployed Fuels Operator Course.
2. Only required for a post that requires this capability.
3. To conduct Permanent Installation Operator duties, personnel must hold either the RAF Fuel Operators Course or the Deployed Fuels Operator Course.
4. To conduct Ocean Terminal duties, personnel must hold either the RAF Fuel Operators Course or the Deployed Fuels Operator Course.
5. To conduct fuel blending duties, personnel must hold either the RAF Fuel Operators Course or the Deployed Fuels Operator Course.
6. To conduct PLT, personnel must hold either the RAF Fuel Operators Course or the Deployed Fuels Operator Course.
Chapter Sponsor - D SF A SO2 Ops

Further Details Can be found in:
JSP 418, Part 2, Vol 2, Leaflet 02, Pollution Prevention.

Scope

1. This Part of the JSP defines MOD policy for the prevention and control of oil pollution, which encompasses pollution by any petroleum product and chemical products covered under the MOD's Emergency Pollution Response Service contract.

General

2. The MOD Policy for the Management of Safety and Environmental Protection is set by the Secretary of State for Defence and is detailed in JSP 375, Part 1-Directive.

As a major user of petroleum products, the MOD has a particular duty to protect the environment from oil pollution. To fulfil this duty, the MOD must ensure that procedures, equipment and training are in place to prevent oil pollution or, in the event of a spillage, to contain and recover the oil with minimum environmental damage.

3. Definition of Spillage.

For the purposes of this publication a spillage is an "uncontrolled release of product from the Primary Container (Part 2 Vol 1 Chap 6), pipeline, tank, road tanker, refueller, vessel or other container in which it was held."

4. To ensure that as many aspects relating to pollution prevention and clean-up are covered this Part of the JSP has been expanded to include information considered both essential and helpful to the user.

5. JSP 317 Part 2 Vol 4 Chap 1 - Pollution Control Planning. This Chapter provides guidance on bringing together an unit plan to control pollution that may occur due to the unit's activities.

6. JSP 317 Part 2 Vol 4 Chap 2 - Pollution Risk Assessment. This Chapter outlines the need for a unit to conduct a Risk Assessment of its FLAP activities to highlight the areas of risk and the potential impact of a spillage incident.

7. JSP 317 Part 2 Vol 4 Chap 3 – Inland/Shoreline Pollution. This Chapter defines Inland pollution including land, inland water ways and shoreline/harbour areas. In each case the chapter outlines the legislative requirement and includes information on the liaison with other agencies and stakeholders.

8. JSP 317 Part 1 Chap 10 - Inland Pollution Reporting. This Chapter details the hierarchy of inland spillage reporting (Tier 1, 2 and 3) reporting process and explains the MOD Forms used to report inland spillages.

9. JSP 317 Part 2 Vol 4 Chap 4- Pollution Control Sorbents and Equipment. This Chapter deals with the Pollution Control Sorbents (PCS) and Pollution Control Equipment...
that are available in-service and to touches on the local purchase of supplementary items.

10. JSP 317 Part 2 Vol 4 Chap 5 - Spillage Response Plan

This chapter gives guidance on the legal requirements for the production of a Unit Spillage Response Plan (USRP) and the items to be considered when planning a response. The planning structure requires units to design incidents into tiers which equate to their clean-up capability, and any assessment must take account of the sensitivity of the site, the capabilities of the unit concerned, and the hazards posed by the products handled.

11. JSP 317 Part 2 Vol 4 Chap 6 - Emergency Pollution Response Service Contract UK, NI & International Maritime Waters

This chapter details the services provided by the MOD's emergency spillage response contract within the UK, NI and International Maritime Waters and the actions required of a unit/authised person to activate the contract.

12. JSP 317 Part 2 Vol 4 Chap 7 - Emergency Spillage Response Contract outside UK & NI

This chapter details the arrangements for emergency spillage response outside the UK and NI that need to be carried out by Theatre Commands.

Legislation & MOD Bulk Fuel Implications

13. The most likely environmental hazard arising from a FLAP spillage is the contamination of surface watercourses, ground water supplies, or coastal waters. Environmental legislation therefore focuses on the environmental effects of FLAP pollution on water sources.

14. It is policy that, within the UK, the MOD will comply with environmental law and any additional requirements arising from international treaties and protocols to which the UK is a signatory. Overseas, the MOD will apply UK standards where reasonably practicable and in addition, comply with relevant host country standards. Where the MOD has been granted specific exemptions, derogations from legislation, international treaties or protocols, Departmental standards and arrangements are to be introduced which will be, so far as reasonably practicable, at least as good as those required by the legislation. It is UK Government Policy that the polluter pays.

15. The environmental policy lead on pollution legislation is detailed JSP 418, Part 2, Vol 9-11 JSP 317 Pt 1 (v 6.4 Apr 2022). - The MOD Sustainable Development and Environment Manual. JSP 418 is framed to ensure activities of the MOD are conducted in compliance with the law and international conventions. However, JSP 418 does not provide specialist guidance on the prevention and clean-up of oil pollution. This JSP has been notified as the lead for such matters and it is the purpose of this Part of JSP 317 to provide suitable guidance.

Legislative Development


16. The Water Resources Act 1991 (WRA 91) consolidated existing water laws. With regard to water pollution WRA 91 (Section 104) defines "Controlled Waters" and covers practically all-natural waters in England and Wales. Controlled waters are defined in Scotland by the Control of Pollution Act 1974. In Northern Ireland Articles 7-10 of the Water (NI) Order 1999. "Controlled Waters" are defined as follows:

[Censored]
The parts of the WRA 91 that deal with water offences and permits have been replaced by the Environmental Permitting Regulations 2010 (EPR). The EPR regulates discharges into Controlled Waters via a permitting regime managed by the Environment Agency (EA) and is based on the polluter pays principle which requires polluters to pay for the environmental costs of their discharges into controlled waters. This EPR is broadly mirrored in Scotland as; The Water Environment (Controlled Activities) Scotland Regulations 2011. The EPR has the potential to specifically impact the following MOD bulk fuels areas.

- Bulk storage of "Petrol".
- Storage of waste FLAP.
- Pollution from bulk fuel storage sites.

**Bulk Storage of "Petrol"**

Part 2, Section 1.2 of EPR identifies that the storage of "Petrol" or the loading/unloading of "Petrol" (MOD Class I fuels – e.g. U LGAS, AVGAS) into or from "Road Tankers" is defined as a Part B activity. This means that the activity may have the potential to produce air pollution. The Part B regime (Local Air Pollution Control) regulates air polluting emissions and Local Authorities are the Regulators.

19. "Petrol" and "Terminal" are defined in the EPR. It is highly likely that these definitions encompass AVGAS bowser and Aviation BFIs issuing AVGAS into bowser. It may also include BFIs storing U LGAS and issuing bulk U LGAS into Tankers and Jericnas. Operators of such sites shall apply via their respective Local Authorities for Part B permits as appropriate.

20. Part 2, Section 1.2 of EPR also identifies the unloading of "Petrol" (U LGAS) into stationary storage tanks at a service station (MOD MTFI) if the total quantity of Petrol unloaded in a 12-month period is greater than 500m³ (500,000 litres). Operators of such sites are responsible for identifying their annual U LGAS throughput and shall apply via their respective Local Authorities for Part B permits as appropriate.

**Storage of Waste FLAP**

21. The EPR does not apply to the temporary storage of Waste at the establishment before it is collected. The quantity must be kept to a minimum and stored in a secure place with secondary containment, compatible products must be stored separately. The waste must not be stored for longer than 12 months, Policy and guidance on waste disposal including hazardous waste is detailed in JSP 418, Part 2, 9-12 JSP 317 Pt 1 (v 6.4 Apr 20) Vol 2, Leaflet 03 Controlled Waste.
22. The EPR states that storage of waste FLAP with a flash point below 21°C is not exempt. Operators of such hazardous waste sites are responsible for identifying whether they store waste FLAP with a flash point below 21°C and shall apply via their respective Local Authorities for Part B permits as appropriate.

23. Under the mandate of the EPR, Regulators will no longer issue consents to discharge from OWI. Section 12 (and 38) of the EPR states, "it is an offence to cause or knowingly permit a water discharge activity or groundwater activity unless it is authorised by an environmental permit".

24. Historically under the previous regime, permits to discharge from class 1 or 2 OWI were obtained from the regulator/sewage operator (Part 2, Vol 1, Chap 7). However, EPR states that discharges of FLAP out of/from new OWI will not be issued; as any release of pollutant from an OWI will be considered as pollution into Controlled Waters.

25. The Environmental Protection Act 1990 Part IIA Section 78A(2) defines contaminated land as being: "any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that:

a. Significant harm is being caused or there is a significant possibility of such harm being caused; or

b. Pollution of Controlled Waters is being, or is likely to be, caused."

26. The Control of Pollution (Oil Storage) (England) Regulations 2001 require that above ground storage tanks over 200 litres must be provided with secondary containment (a bund or drip tray) to ensure that any leaking or spilt oil cannot enter Controlled Waters. Further information can be found at the Environment Agency, Pollution Prevention Guidelines – PPG 21 Above Ground storage tanks, PPG 26 Storage and handling of drums and intermediate bulk containers (IBCs), and the DEFRA Guidance note for the Control of Pollution (Oil Storage) (England) Regulations 2001.

27. The general requirements for all storage of oil on MOD sites are as follows:

a. Oil shall be stored in a container, which is of sufficient strength and structural integrity to ensure that it is unlikely to burst or leak in its ordinary use.

b. The secondary containment system should be impermeable to oil and water and there should be no direct outlet when connecting the bund to any drain, sewer or watercourse, or discharging onto a yard or unmade ground.

c. The capacity of the secondary containment system must provide storage of at least 110% of the tank's maximum capacity. If more than one container is stored, the system must contain 110% of the biggest container's capacity or 25% of the total tank capacity whichever is the greater.
The regulations do not apply to the following activities, processes or infrastructure within the MOD:

a. Any container with a storage capacity of 200 litres or less.

b. Any container which is situated in a building or wholly underground.

c. On any premises used as a private dwelling if the storage capacity of the container in which it is stored is 3500 litres or less.

The Water Environment (Oil Storage) (Scotland) Regulations 2006 are broadly in line with The Control of Pollution (Oil Storage) (England) Regulations 2001. The Water Environment (Oil Storage) (Scotland) Regulations 2006 require that above ground storage tanks over 200 litres, stored outside or in buildings must be provided with secondary containment (a bund or drip tray) to ensure that any leaking or spilled oil cannot enter the environment.

Whilst SEPA would prefer use of "traditional" secondary containment systems within buildings, the 110% secondary containment requirements of the Scottish Regulations may be met within the building itself by construction of an impermeable floor and lip on doorways.

Application of The Control of Pollution (Oil Storage) (England) Regulations 2001 & The Water Environment (Oil Storage) (Scotland) Regulations 2006 in the MOD

If there is a requirement to store 205 litre drums, Intermediate Bulk Containers (IBCs) at permanent locations, the secondary containment area must be designed and constructed as a permanent piece of infrastructure in accordance with current building regulations. Units may purchase suitable "bunded" containers for 205 litre or IBCs, but must ensure that they are compliant with the respective regulations.

Where existing bulk fuel sites are not fully compliant with the regulations or the requirements of the regulations are not appropriate for technical reasons (for example - complex installations), the Environment Agency/SEPA will take a pragmatic approach in line with their enforcement policy. This view will be acceptable by the Environment Agency/SEPA as long as the objectives of the regulations can be achieved through an equivalent level of protection to the environment, taking into account both the risks to the environment and costs to the operator. In any case, where the regulations are not being fully applied, detailed Risk Assessments showing safety measures and controls put in place must be prepared.
32. The International Maritime Organization (IMO), a specialized agency of the United Nations, has established international regulations which set minimum standards for vessels in order to control pollution at sea. The principal regulations dealing with various discharges of pollutants from ships are found in the International Maritime Organization's Convention for the Prevention of Pollution from Ships 1973, subsequently modified by the Protocol of 1978, collectively known as MARPOL 73/78. These have been adopted with the consent of maritime nations across the world. MARPOL regulations apply directly to vessels in international waters and are applied through national legislation in territorial waters. The UK is a signatory to MARPOL and is committed to implementing its requirements; the MOD is required to comply with MARPOL legislation.

33. Article three of the 1973 Convention (MARPOL 73/78) contains information with respect to its application. The Secretary of State for Defence has issued an Environmental Policy statement to meet the regulatory requirements of MARPOL and other like legislation, detailed at JSP 418, and is to be applied across Defence.

34. It is therefore MOD policy (JSP 418) to comply with the letter and the spirit of UK and international environmental regulations to which the UK is a signatory without, where at all possible, compromising the operational capability of the MOD. Regulations covering the various sources of ship generated pollution are contained in six Annexes of the MARPOL 73/78 Convention, which are then implemented through specific UK legislation such as the Environmental Protection Act 1990, Control of Pollution Act (Land Filled Ships Waste) 1987 and 1989, the Merchant Shipping (Prevention of Oil Pollution) Regulations 1995, the Waste Acts and relevant Statutory Instruments (SIs).

MARPOL applicability

35. MARPOL Annex I - Prevention of Pollution by Oil entered into force 2 October 1983 and is enacted in the UK by the Merchant Shipping (Prevention of Oil Pollution) Regulations 1995. It applies to all Government Owned vessels on government business where it is reasonable and practical for them to comply without affecting their operational capability.

Waste being landed from ships and the duty of care

36. Waste oil and other wastes contaminated with oil are classified as Hazardous Waste by the Hazardous Waste (England and Wales) Regulations 2005, and in Scotland the Special Waste Regulations 1996. The Environmental Protection Act from which there is no Crown Immunity, places certain responsibilities on the disposers of waste. Part II, Section 34 of the Act covers waste and places a 'Duty of Care', the general principle of which is that the responsibilities of a waste for disposal rest with the waste producer. The legal requirements of the Act extend to all types of waste landed from HM ships. It is normal practice for HM Naval Bases to provide the appropriate waste disposal facilities that may normally be expected to be landed from ships, but it is the waste producer's responsibility to ensure that correct disposal action has been taken.
37. The OPRC 1998 Regulations are the principal legislation on counter pollution from a harbour authority. In particular the OPRC obligation arises for cooperation with:

a. Any harbour and oil handling facility offering berths alongside, on buoys or at anchor, to ships of more than 400 gross tons (GT), or oil tankers of more than 150 GT.

b. Any harbour and any oil handling facility which the Secretary of State has served the harbour authority or operator with a notice that he is of the opinion that maritime facilities are undertaken at the harbour or facility which involve a significant risk of discharge of more than 10 tonnes of oil.

c. Any harbour and any oil handling facility which the Secretary of State has served the harbour authority or operator a notice stating that he is of the opinion that it is located in an area of significant environmental sensitivity, or in an area where discharge of oil or other substances could cause significant economic damage.

38. The OPRC 98 Regulations state that harbour authorities or oil handling facilities identified must have either:

a. A minimum level of pre-positioned oil spill combating equipment commensurate with the risk involved and programmes for its use.

b. A programme of exercises for oil pollution response organizations and training of relevant personnel.

c. Detailed plans and communication infrastructure for responding to an oil pollution incident.

d. Sufficient pollution control equipment to adequately deal with a Tier 1 spill.

e. Have in place a contract with a competent oil spill response company that has the capability to respond to a Tier 2 spill. There is no requirement for a harbour authority or oil handling facility to have in place arrangements with a competent response company, but there must be a formal agreement in place to ensure that a response will be guaranteed in the event of an accident.

STANAG 7102 – Environmental Protection Handling Requirements for Petroleum Handling Facilities and Equipment

39. STANAG 7102 covers the responsibilities of both host nations and deployed units about the minimum environmental requirements that nations should adopt during petroleum handling operations on both fixed and tactical fuel installations.

Pollution Risk Assessment

40. Before any credible preventive measures and Unit Spillage Response Plan (USRP) can be designed, a detailed Site / Environmental Risk Assessment will need to be carried out. The aim of a risk assessment is to identify all potential pollution risks and their effects.
On the environment if a spillage incident were to occur. JSP 375, provides guidance on managing Health & Safety in Defence, JSP 418, Part 2, Leaflets 1 & 2 provides guidance on Environmental Management Systems and associated Risk Assessment processes. Additional guidance on conducting Pollution Risk Assessment is detailed in JSP 317 Part 2 Vol 4.
2. JSP 375 - Management of Health & Safety in Defence.
3. JSP 418 - Management of Environmental Protection in Defence.
7. The Water Environment (Oil Storage) Scotland Regulations.
8. STANAG 7102.
Chapter Sponsor - DSFA Ops

Scope
1. The purpose of this chapter is to outline the MOD policy for reporting inland and shoreline fuel or oil spillages that occur as a result of an incident or accident. It introduces a requirement to report any occurrences involving fuel spillages to the Fuel and Gas Safety Regulator (FGSR). Pollution Response Planning guidance is contained within JSP317 Part 2 Volume 4.

General
2. The legislative requirement to report incidents is laid down in the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations- (RIDDOR) (INDG453), which has been translated into the MOD Health and Safety Handbook - JSP 375, Part 2, Vol 1, Chap 16.

3. Inland / shoreline FLAP spills have the potential to contaminate land and pollute Controlled Waters in contravention to the EPR 2010.

4. Controlled Waters are defined by WRA 91; spills which migrate from land establishments into coastal waters, and spills from vessels in harbours are to be reported by the spill originator. MOD units shall report all significant FLAP spillages as SPILLREPs, or POLREPs as appropriate. Spills from Shoreline Establishments / vessels in harbours are also to be reported to the QHM / Statutory Harbormaster as the QHM / Statutory Harbormaster has a duty of care for pollution response in harbour areas. See Part 2, Vol 4, Chap 3 for demarcation of responsibilities in shore areas.

5. MOD Major Accident Control Regulations (MACR) reporting may also be required in accordance with JSP 498 MACR.

6. The spillage reports within this chapter have been designed to meet the environmental requirements of DSA 01.

RIDDOR
7. RIDDOR, INDG453, identifies the reporting action to be complied with when work related accidents and dangerous occurrences occur. There is also a requirement to report any diseases or medical disorders proven to be caused by contact with petroleum products, such as poisoning due to Benzene or Lead in Petrol, skin cancer, and occupational dermatitis. Reportable dangerous occurrences applicable to RIDDOR are:

a. Dangerous occurrence on a Pipeline.

b. A road tanker carrying a dangerous substance overturns or suffers serious damage or catches fire or the substance is released.
c. Sudden uncontrolled release in a building of 100kg (approximately 125 litres), or more of flammable liquid.

d. Sudden uncontrolled release in the open air of 500kg (approximately 625 litres), or more of flammable liquid.

Major Accident Control Regulations

8. Control of Major Accident Hazard Regulations (COMAH) is UK legislation made under 10-10 JSP 317 Pt 1 (v 6.4 Apr 20)

the Health and Safety at Work Act (HSWA) 1974. It has been developed in response to a European Union (EU) Directive (96/82/EC) under the terms of the European Communities Act 1972 and for technical legal reasons cannot be applied to the Military Forces or Defence Establishments of Member States.

9. MOD - Major Accident Control Regulations (MACR), discharges that policy in the context of prevention of a Major Accident (MA) and the mitigation of consequences to human health and/or the environment should one occur. The MOD Competent Authority (CA) is empowered by 2nd Permanent Under Secretary (2nd PUS) to introduce and regulate MACR, this is effected through JSP 498 MACR.

10. MACR Reporting. Establishments should notify the MOD MACR CA of an incident as defined at JSP 498 MACR Chap 1.

Inland Spillages

11. All spillages are to be recorded in the originating Unit/Section Spill Register. The Pollution Control Officer (PCO FLAP), is to maintain the Establishment Spill Register, which is to be retained by the establishment for the life of the site. The PCO FLAP is to collate all Unit and Section Spill Registers into the Establishment Spill Register MOD Form 7771. The PCO FLAP is to investigate reported spills and instruct originating units as necessary to raise subsequent SPILLREPs as appropriate.

Spillage Reporting

12. The reporting of the extent of an incident utilises the Tier system and the SPILLREP reporting system shall be raised.

13. The MOD spillage reporting system is based on the capability for containment and clean-up of an incident. The MOD applies 3 Tier spillage classification system based on this capability. The Tiers are defined as follows:

a. Tier 1: Operational spillages where the clean-up is entirely within the unit’s or establishment’s capability.

b. Tier 2:

(1) Spillages that require assistance from another Service unit.

(2) Spillages that require assistance from external civilian contractors or Specialists.
Spillage reports to Environmental Regulators that have resulted in the "pollution" of controlled waters, groundwaters or other environmentally sensitive areas.

Spillage reports under RIDD OR.

c. Tier 3: Spills beyond the capability of local and regional resources that require major external or national assistance.

14. All significant in land spillages from Tier 1 to Tier 3 should be reported using the SPILLREP procedure using MOD Form 7772 – MOD Form 7773. A flow chart summarising the process to be followed is at Annex A.

15. The term “significant” is defined as a spillage that means any of the following:
   a. Exceeds 500 litres in total fuel spilled from a primary containment.
   b. Is not contained by secondary or tertiary containment and so contaminates the environment.
   c. Disrupts operational activity.
   d. Comes to public attention or attracts media interest.

16. Spills that do not meet the above criteria are still to be recorded on the Unit Spillage Register and investigated by PCO FLAP.

17. Units are reminded that in addition to a SPILLREP, any accident / incident that occurs on equipment or systems and results in a spill may need to be investigated by the Equipment Sponsor. Any additional investigation required should be reported through existing procedures established by units’ respective chain of command. The SPILLREP is not the mechanism to report equipment failure, operator error etc.

18. Where units are on detachment / exercise, the DTE manager / host PCO FLAP / Liaison Officer, must be informed immediately of any spillage occurring on the site, irrespective of quantity spilled. The DTE manager / estate PCO FLAP may have on-site knowledge or appropriate specialist equipment to aid in a more efficient spill clean-up than that of the visiting unit. The visiting unit maintains responsibility with regard to the cause of the spill and subsequent clean-up cost, irrespective of the extent of assistance offered by the host.

19. The SPILLREP procedure requires a report in 2 parts. An initial (Part 1) report, MOD Form 7772 issued by e-mail is used to alert staff that an incident has or is occurring. Part 1 reports shall be submitted within 12 hours of an incident, to enable support staff to provide and coordinate assistance where necessary. A follow-up (Part 2) report provides staff with information, which will be used to support equipment requirements and quantify the financial expense of pollution spills. Part 2 reports (MOD Form 7773) shall be issued at the conclusion of the spillage incident or at convenient points during an extended clean-up process; any number of successive Part 2 reports may be submitted. Subsequent Part 2 reports should have the same serial number as its Part 1 report. Once clean-up is complete.

10-11 JSP 317 Pt 1 (v 6.4 Apr 20)
20. Recipients for Part 1 & Part 2 SPILLREPs (MOD Form 7772 - MOD Form 7773) are, DSA-DLSR-FGSRIn sp Group @ mod.gov.uk and WO1 Policy at DSFA. In addition, copies should be sent to TLB POCs as follows:
- Air: A4 Fuels and CE SO
- Army: SO2 Fuels, Log Span and CE SO
- Navy: Incident Reporting Officer
- JFC: CE SO

21. There is also a requirement to report any spillage or injury involving dangerous goods in transit, including the loading, unloading, in-transit storage, filling, discharge, and carriage to Movement and Transport Safety Regulator if any of the following criteria are met.
   a. Requires intensive medical treatment;
   b. Requires a stay in hospital of at least one day; or
   c. Results in the inability to work for at least three consecutive days.
   Loss of product means the release of dangerous goods
d. Of transport category 0 or 1 in quantities of 50 kg / 50 l or more;
e. Of transport category 2 in quantities of 333 kg / 333 l or more; or
   f. Of transport category 3 or 4 in quantities of 1000 kg / 1000 l or more.

Inshore Marine / Shoreline Spillage Reporting

22. FLAP spills which migrate from land establishments into coastal waters, and spills from vessels in harbours are to be reported by the spill originator in accordance with their reporting procedure (SPILLREP / POLREP as required). However, once FLAP has entered the inshore marine environment (Controlled Water), the responsibility for marine spill clean-up and subsequent reporting lies with MOD QHM, Statutory Harbour Master, and relevant Local authority. Relationship between shore line MOD establishments and QHM / Harbour Master is detailed at Part 2 Vol 4 Chap 3.

23. Once any FLAP has entered the marine environment MOD QHM, Statutory Harbour Master, relevant Local authorities are duty bound to clean up spillages in accordance with MCA approved maritime spillage response plans in accordance with section 293 of the Merchant Shipping Act 1995, amended by the Merchant Shipping and Maritime Security Act 1997, Marine Safety Act 2003; and the Marine and Coastal Act 2009.

24. The spillage reports within this chapter have been designed to meet the environmental requirements of JSP 418, and the Merchant Shipping (Oil Preparedness, Response and Co-operation Convention) Regulations 1998; guidelines for which are within the Maritime and Coastguard Agency (MCA) Oil Spill Contingency Plan Guidelines for Ports, Harbours and Oil Handling Facilities Manual.
Spillage Investigations

25. All spills are to be investigated at an appropriate level. Normally this will be at unit level, led by PCO FLAP forms or spills. For Tier 2 and above spills, FLC advice on an appropriate level of investigation should be sought.
2. International Carriage of Dangerous Goods by Rail, RID and Agreement Concerning the International Carriage of Dangerous Goods by Road, ADR
3. Environmental Protection Act 1990 (EPA 1990)
5. Water Resources Act 1990
6. Statutory Instrument 2001/2954 - Control of Pollution (Oil Storage) (England) Regulations
7. Environmental Permitting (England & Wales) Regulations 2010
8. The Water Environment (Controlled Activities) Scotland Regulations 2005

10-14 JSP 317 Pt 1 (v 6.4 Apr 20)
Any spillage or injury involving dangerous goods in transit, including the loading, unloading, in-transit storage, filling, discharge, and carriage to Movement and Transport Safety Regulator see Para 21 of this chapter for more information.