



SHETLAND ISLANDS COUNCIL

SUPPLEMENTARY PLANNING GUIDANCE

Public Safety and Safeguarding Consultation Zones within Shetland

*Hazardous Substances, Pipelines, Explosives,
Quarries & Airports*



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Status

Although this Supplementary Planning Guidance is not itself part of the statutory plan, it provides the interpretation of Policy SP GDS4 relating to health and safety. It is the latest statement of Council Policy and is therefore a material consideration for all developments which fall within any of the established notifiable safeguarding consultation zones, or which involve the storage or use of Hazardous Substances

INTRODUCTION

Background

- 1.1 Hazards can arise in connection with industrial processes and the transmission and storage of fuels and explosives and these can have effects well beyond the boundaries of the site or area within which they are located.
- 1.2 Hazards can also arise in the vicinity of airfields, where for example high structures can pose risks to aircraft approaching and leaving the airfield and developments have the potential to obscure or confuse navigational aids, disrupt radar signals and air traffic control systems. In addition, the presence of birds in large numbers can increase the risk of a bird strike – birds being drawn into engines can cause catastrophic engine failures.
- 1.3 Developments may also have the potential to disrupt military and geophysical monitoring stations.

Legislation and Controls

- 1.4 There is an array of legislation and controls administered by the Health and Safety Executive, the Scottish Environment Protection Agency, the Ministry of Defence, the Department of Transport and the Civil Aviation Authority all of which seek to minimise the risks of accidents and numbers of people potentially affected. Zones have been defined around hazardous installations and aerodromes by these authorities within which they are consulted about development proposals. These are known as *safeguarding zones*. In terms of the Shetland Islands Council land use planning aims, policies and decision making are directed principally to ensuring that development within these zones does not increase the numbers of people at risk. It is also important that the proximity or type of development does not inhibit or interfere with the carrying out of industrial, military and aviation operations on these sites.

Sites within Shetland

1.5 Hazardous Substances

Shetland accommodates a number of licensed hazardous substances sites and pipelines that involve the use or movement of hazardous substances or explosives. The largest site is the Sullom Voe Oil Terminal located in Delting, with the Brent and Ninian pipelines coming ashore at Lunnasting and Delting and crossing land to the Terminal and the Clair and west of Shetland gas and Magnus EOR system gas pipelines coming ashore at the Terminal itself. There are two smaller sites located within Lerwick (the North Ness Fuel Storage Site and the gas storage site at Staneyhill).

1.6 Explosives

The Shetland Islands Council and a number of independent operators across Shetland hold an explosives licence. Most of these are for the transmission of explosives across piers, and there are two licensed storage sites located at Staneyhill and Gremista in Lerwick.

1.7 Aerodromes

There are two main aerodromes covered by safeguarding zones (Sumburgh and Scasta). In addition there are a number of smaller airstrips one of which (Tingwall) is operated by Shetland Islands Council.

1.8 Ministry of Defence

Four sites within Shetland are covered by safeguarding zones (Meterological Office, Lerwick, two sites related to Saxa Vord in Unst, and Collafirth Hill).

1.9 British Geological Survey

The British Geological Survey is a component of the UK Natural Environment Research Council and it provides geoscientific information and services to a wide client community in the UK and overseas. It operates a variety of geophysical monitoring equipment in Shetland, mainly at Lerwick Observatory, with seismological outstations at Sandwick, Walls and on Yell.

1.10 Quarries

The HSE require to be consulted on all developments at or "near" a quarry. For the purposes of Land Use Planning Consultations "near" is defined as up to 1km beyond the boundary to which the quarry operator has been permitted to extract material.

1.11 Appendix 1 contains a list of the major hazard and safeguarded sites in Shetland.

Purpose of this Supplementary Planning Guidance

1.12 This guidance details the location and extent of the main safeguarding consultation zones and any special constraints that apply within them. It also introduces three new policies which provide an interpretation of Shetland Structure Plan Policy GDS4. The guidance note will be updated at intervals as the Council is advised of any further changes to Scottish Government advice, the definition of new zones, or changes to existing zones.

1.13 **It should be noted that the Shetland Islands Council does not define the zones, or the principal constraints on development within them. These are the responsibility of the relevant authority defining the zone, and are not open to discussion, negotiation or objection.**

DEVELOPMENT PLAN POLICIES

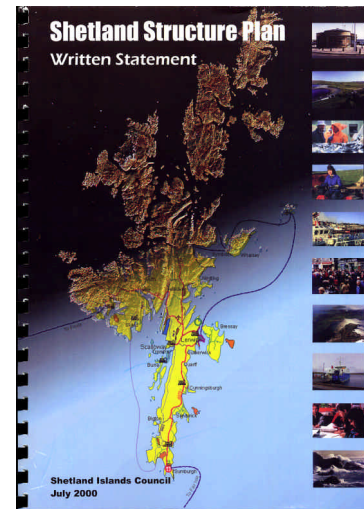
Existing Development Plan Policies

- 2.1 The Shetland policy context for ensuring public safety is currently provided by the Shetland Structure Plan (2000).

***Shetland Structure Plan
Policy GDS 4 : Natural and Built Environment***

New development will conserve and, where possible, improve the quality of life and the environment by:

- *controlling the location, sale and design of new development to respect, protect and conserve the natural and built environment*
- *minimising water, air and land pollution and waste generation;*
- *considering all opportunities for the re-use of land and buildings;*
- *avoiding hazards to health and safety.*



Modernising the Planning System

- 2.2 The planning system in Scotland is undergoing the most significant modernisation in over 60 years. The changes introduced by the Planning Etc. Scotland Act 2006 are substantial and far-reaching and the Scottish Government has already begun to implement the new provisions in secondary legislation. The Council's current Structure and Local Plan will eventually be replaced by a Local Development Plan prepared under the new legislation. The new legislation, when implemented, will allow supplementary planning guidance to be adopted and issued by a planning authority, which can be more easily updated if required and therefore more pro-active to changing local circumstances.

- 2.3 The Council's Planning Service is currently in the initial stages of preparing the work programme to deliver the Local Development Plan, but has progressed a review of public safety and safeguarding ahead of this work programme broadly based on guidance currently being provided by the Scottish Executive with regard to Supplementary Planning Guidance.

2.4 **SPP1 : The Planning System**

SPP1 identifies six aims and objectives which provide a useful framework for ensuring policies fulfill SPP1 requirements. One of these objectives is social justice which the Scottish Government wish to see delivered through the creation and maintenance of pleasant, healthy, safe and crime free environments.

2.5 Shetland Islands Council : Corporate Improvement Plan

The Council's Corporate Plan sets out the Council's high level aspirations in contributing to the achievement of the Community Planning vision for Shetland, 'The Shetland Resolution'. The Shetland Resolution is encapsulated in the following statement:

“We shall work together for a future that’s better and brighter. In particular, we aim to create a secure livelihood, look after our stunning environment and care well for our people and our culture”.

- 2.6 A specific aim of the Corporate Plan is to ensure that everyone in Shetland is able to live and participate in a safe, vibrant and healthy community.
- 2.7 The purpose of the 'Improvement Plan' is to translate the principles into actions and provide clarification for Members/officers with lead responsibility for achieving these. Consequently, any review of the development plan will require to take account of the Council's committed vision.
- 2.8 The following policies flow from the objectives identified in the national and local strategies and also comply with the requirements of EU Council Directive 96/82/EC (Seveso II) to control the kinds of developments permitted in the vicinity of hazardous installations, to prevent and limit the consequences of accidents and to maintain appropriate distances between such establishments and residential areas, areas of public use and sensitive environments.

Local Development Plan Policies

The Control of Major Accident Hazards Notifiable Installations and Hazardous Substances

Policy LDP SFG 1 Development near notifiable installations

Shetland Islands Council will formally consult the Health and Safety Executive (HSE) where development proposals fall within established consultation distances of existing hazard sites and pipelines. In determining such applications the Council will have regard to specialist advice from the HSE. Development within the vicinity of these sites will not be permitted where there would be an unacceptable risk to the life or health of the public.

Policy LDP SFG 2 Developments Involving Hazardous Substances

Proposals for developments involving the storage, use or transport of hazardous substances, as defined in the Planning (Hazardous Substances) (Scotland) Act 1997 as amended, will only be permitted when it can be demonstrated that there will be no unacceptable risk to the public or to nature conservation or other environmental interests, and they would not prejudice the appropriate use or development of adjoining land.

Such proposals will only be permitted on sites in, or allocated for, industrial and/or business use. In determining an application for any development introducing hazardous substances, Shetland Islands Council will formally consult with the Health and Safety Executive, *Scottish Natural Heritage and the Scottish Environment Protection Agency as required by the Town and Country Planning (General Development Procedure) (Scotland) Order 1992 as amended*, and have regard to the specialist advice provided by this consultation.

The purpose of these policies is to enable developments involving hazardous substances necessary for commercial purposes without jeopardising the health and safety of the public, or the quality of the environment; and also to control development within the vicinity of existing notifiable sites and installations.

Sites are designated as notifiable installations by virtue of the quantities of hazardous substance present. Whilst these sites and pipelines are subject to stringent controls under existing health and safety legislation, it is also a requirement of EU Council Directive 96/82/EC (Seveso II) to control the kinds of development permitted in the vicinity of these installations, to prevent and limit the

consequences of accidents and to maintain appropriate distances between such establishments and residential areas, areas of public use and sensitive environments.

For this reason, the planning authority has been advised by the HSE of consultation distances for these installations. These distances are typically made up of outer, middle and inner zones, with a presumption against sensitive developments progressively increasing towards the inner zone. Appendix (1) lists all notifiable installations within Shetland and the relevant consultation distances. Developers should also refer to advice on the siting of development in the vicinity of major hazard sites contained in the HSE Document PADHI – HSE's Land Use Planning Methodology (<http://www.hse.gov.uk/landuseplanning/padhi.pdf>)

**Policy LDP SFG 3
Development in Other Safeguarding Consultation Zones**

Development in the vicinity of areas notified as being in use for the storage or transmission of explosives, as aerodromes or as sensitive monitoring sites will not be permitted where there would be an unacceptable risk to the life or health of the public or the safe operation of the notified area.

This policy is intended to control developments in the vicinity of notified installations for the purpose of maintaining public safety and in the case of aerodromes, the safe operation of the airfield and minimising risk to the public. It is intended to accord with Circular 2/2003 Safeguarding of Aerodromes, Technical Sites and Military Explosives Storage Areas. In determining planning applications in the vicinity of notified installations and aerodromes, the Council will consult the relevant authorities. Appendix (1) lists these notified sites.

CONTROL OF HAZARDOUS SITES

Legislation and Advice

- 3.1 The relevant legislation for the control of hazardous substances in Scotland is the **Planning (Hazardous Substances) (Scotland) Act 1997**. The Act is given effect by the **Planning (Hazardous Substances) (Scotland) Regulations 1993** as amended by **Planning (Control of Major-Accident Hazards) (Scotland) Regulations 2000** (the COMAH Regulations).
- 3.2 Advice on the implications of this legislation for planning is contained within **Circular 5/1993 Planning Controls for Hazardous Substances**. Further advice for developers is contained within **Circular 16/1993 Hazardous Substances Consent: A Guide for Industry**.

Background

- 3.3 In November 1996 the European Council adopted a new EC Directive on the Control of Major Accident Hazards involving dangerous substances (known as COMAH or Seveso II). This replaced the original Seveso Directive and clarified and strengthened the existing provisions for environmental protection. Principally, the Directive is aimed at health and safety issues at installations with a major accident potential but it also addresses the environmental protection aspects of major accident hazards and mitigation of the effects on people and the environment.
- 3.4 Article 12 of the Seveso II Directive relates to land use planning and was implemented by the Planning (Control of Major Accident Hazards) (Scotland) Regulations 2000, which amended aspects of the planning system relating to consideration of planning applications, the preparation of development plans and hazardous substances consent.
- 3.5 The COMAH Regulations are enforced jointly by the Health and Safety Executive (HSE) and the Scottish Environment Protection Agency (SEPA). The Regulations aim to prevent major accidents that involve dangerous substances and to limit the consequences of any such accidents, both for the public and the environment.
- 3.6 PAN 51 : Planning, Environmental Protection and Regulation (2006) advises that amendments to the Seveso II Directive have now been made and the COMAH Regulations have now been amended. As far as the amendment of related planning provisions is concerned, a consultation paper was issued in August 2005, with the main changes to the current arrangements being a revised classification and definition of some dangerous substances and preparations and changes to the qualifying quantities that determine whether an establishment falls within the scope of the Directive. The draft Planning (Control of Major Accident Hazards) (Scotland) Regulations issued for consultation in 2005, however, have as yet not been enacted. It is also expected that a revised Circular will accompany the new Regulations when implemented.

Hazardous Substances Consent

- 3.7 The legislation controls the presence of hazardous substances on, over, or under land by means of *Hazardous Substances Consent*. This is separate from any requirement for planning permission. Consent is, however, granted by the Planning Authority.
- 3.8 In dealing with planning applications or hazardous substances consent applications, local authorities are required to consult the competent authorities, which in this case are the HSE and SEPA. Separately the HSE is required to notify local authorities of consultation zones around sites where dangerous substances are present, which are defined on the basis of an assessment of the risks associated with the substances and the processes involved. Both the HSE and SEPA advise on applications for hazardous substances consent, and for planning applications in or near sites and transport links where such substances are stored and/or used or moved. Procedures and criteria for such consultation are set out in the General Development Procedure (Scotland) Order 1992 (Art.15(1)(g) and (h)). Scottish Natural Heritage (SNH) may require to be consulted as appropriate.
- 3.9 The HSE and SEPA only provide advice to the local planning authority – it does not determine applications. The local planning authority can make a decision contrary to this advice, but in the case of planning applications, is required to notify the application to the Scottish Ministers and the relevant consultee (Circular 5/2007 Notification of Applications) The consultee can then decide whether to ask the Scottish Ministers to call in the application and determine it.
- 3.10 Circular 5/1993 advises that local planning authorities, in considering hazardous substances consent applications, or planning applications for development at or in the vicinity of a hazardous installation, must have regard to the provisions of the development plan, unless material considerations indicate otherwise in compliance with s.25 of the Town and Country Planning (Scotland) 1997 Act. The Circular further advises:

In preparing development plans, planning authorities should formulate, as appropriate, policies and proposals for the development and use of land at or near to hazardous installations and for the siting of future hazardous developments (Annex B paragraph 7).

- 3.11 In addition, s.7 of the 1997 Act indicates that the authority may have regard to any current or contemplated use of the land to which the application relates; to the way in which land in the vicinity is being used or is likely to be used; to any planning permission that has been granted for development of land in the vicinity; and to any advice which the HSE or SEPA have given following formal consultation. The 1997 Act provides for a wider consideration of the Hazardous Substances Consent and therefore it is quite possible for a premises to be granted planning permission, but refused HSC, or vice versa.

Hazard Consultation Zones in Shetland

Hazardous Substances

4.1 The HSE has notified this authority of the following installations involving hazardous substances. HSE requires to be consulted on the following types of development which fall into the Consultation Distance (CD):

- all residential accommodation
- more than 250 sq.m. of retail floor space
- more than 500 sq.m. of office floor space
- more than 750 metres of floor space to be used for an industrial process
- transport links (railways, major roads, etc)
- a material increase in the number of persons working within, or visiting a CD and then only if the development is within the CD

4.2 The HSE have defined a three part consultation zone around sites comprising an inner, middle and outer zone. Appendix 2 details the defined procedures relating to these zones and the sensitivity of development which informs HSE advice.

4.3 **Sullom Voe Oil Terminal**

Sullom Voe Oil Terminal (a top tier COMAH site) was granted deemed consent under the COMAH Regulations by virtue of established presence (HSC granted in 1983). The HSE recently reassessed the risks to the surrounding areas from the likely activities resulting from the Hazardous Substances Consent held for this site and a three-part Consultation Distance extending in some instances up to 1200 metres from the site boundary has been lodged with the Council for this site.



4.4 **North Ness Fuel Storage**

The North Ness storage facility (a lower tier COMAH site) was granted a temporary Hazardous Substances Consent in June 2007 (three years). A zero metre Consultation Distance has been set for the site, as the risk to the surrounding population with regard to the substances which require Hazardous Substances Consent were so small that there were no significant reasons for setting a Consultation Distance. The condition imposing a temporary three year limit is currently under appeal at the time of preparation of the draft Supplementary Planning Guidance.

4.5 However, a single tank storing petroleum which does not trigger a requirement for Hazardous Substances Consent in itself, has a filling mechanism similar to the type which triggered the Buncefield incident in Hertfordshire and which caused HSE to look at its policy on land use planning in relation to developments around large scale petrol sites. Following a consultation exercise the HSE is to adopt a precautionary approach to land use planning advice for this type of site. This is an interim policy as more research is required to investigate the mechanisms of the Buncefield explosion although this may take some time. This precautionary approach has resulted in this site being set a CD of 400m from the boundary. This includes a development proximity zone (DPZ) of 150m. The HSE will provide cautious advice on developments within the CD and will normally advise against development within the DPZ.

4.6 **Peterson SBS Base, Greenhead, Lerwick**

A lower tier COMAH site at Greenhead has been notified by the HSE as storing hazardous substances. An Interim Alert Distance of 1000 metres has been set around this site requiring all new development located within the IAD to be notified to the HSE. An application for Hazardous Substances Consent has been lodged and is being processed.

4.7 **Lerwick Power Station**

The Lerwick Power Station site has been notified by the HSE as storing hazardous substances. An Interim Alert Distance of 1000 metres has been set around this site requiring all new development within the IAD to be notified to the HSE. An application for Hazardous Substances Consent has been lodged and is being processed.

4.8 **Gas Storage Staneyhill Industrial Estate, Lerwick**

Hazardous Substances Consent was granted to Rearo In April 2008 for their proposal to relocate to a new development site at Staneyhill Industrial Estate, Lerwick. HSE Consultation Zones will remain around both sites until the hazardous substances consent for the existing site is revoked following relocation.

Pipelines

- 4.9 The east Mainland area of Shetland contains a number of pipelines associated with the oil industry. The Ninian pipeline makes landfall at Grutwick in Lunna Ness and traverses south west to Culness where it proceeds across Lunna Sound to Firthsness (Mossbank) and then in a westerly direction to connect to Sullom Voe Terminal. The Brent pipeline comes ashore at Firth (Firths Voe) and runs parallel with the Ninian pipeline into Sullom Voe Terminal. The west of Shetland pipelines for oil (Clair) and gas (coming from Foinaven and Schiehallion and going to the Magnus EOR system) make landfall at Orca Voe on the north east side of the Sullom Voe Terminal.



- 4.10 It should be noted that this guidance relates to those sites which have been notified by the HSE which have land use planning implications. As the Clair Pipeline, Foinaven and Schiehallion Gas Line and Magnus Enhanced Oil Recover Gas Line pass across Orca Voe and make landfall at the Terminal itself, they do not have any implications for land use planning and are therefore outwith this guidance.
- 4.11 Hazardous Substances Consent does not apply to controlling the substances in these pipelines (although when a pipeline lies within a site where there are hazardous substances, the substance it contains is added into the calculation of the total present on the site). An overall consultation distance of 100 metres has been set for the onshore elements of these pipelines:

inner zone : 50 metres
middle zone : 50 metres
outer zone : 100 metres

The HSE are consulted on development proposals indicated at paragraph 3.12.

- 4.12 The HSE recommend that the developers contact the pipeline operator prior to submitting an application (and the planning authority during the processing of the application) as:
- the operator may have a legal interest (servitude, wayleave, etc.) in the vicinity of the pipeline which may restrict certain developments within a certain proximity of the pipeline; and
 - the standards to which the pipeline is designed and operated may restrict occupied buildings or major traffic routes within a certain proximity of the pipeline. Consequently, there may be a need for the operator to modify the pipeline, or its operation, if the development proceeds.

Explosives and Airfields

- 4.13 The storage and transport of explosives is licensed under the Explosives Act 1875 and the Manufacture and Storage of Explosives Regulations 2004 and the Dangerous Substances in Harbour Regulations 1987 (DSHR) rather than the hazardous substances regulations, the licensing authority being dependent on the type and amount of explosives being held or moved. The HSE notify the relevant planning authority of licensed sites within the authority area.
- 4.14 The HSE have defined safeguarding zone maps for licensed explosives sites and any relevant applications for development within the safeguarding zone of licensed explosives sites require to be assessed by the HSE's Explosives Inspectorate in Bootle.
- 4.15 Aerodromes, Technical Sites and Military Explosives Storage Areas are safeguarded by **The Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2003**. The safeguarding of aerodromes ensures that their operation and development are not inhibited by developments that prejudice protected surfaces, obscure runway lights, interfere with navigation aids, radio aids or telecommunications systems, involve lighting with the potential to confuse pilots, or attract birds.
- 4.16 **Sumburgh Airport**

Sumburgh Airport is an official safeguarded civil aerodrome and has lodged a formal safeguarding plan with the Planning Authority. Civil aerodromes are



photo: courtesy of Balfour Beatty

selected on the basis of their importance to the national air transport system and are therefore officially safeguarded. Formal consultation prior to the issuing of any decision notice for development must be undertaken with the relevant authority, which in the case of Sumburgh Airport is Highlands & Islands Airports.

The requirement for consultation does not imply a decision to refuse the proposal; it is intended to enable the consultees to assess and advise on the consequences of permitting it. If a local authority wishes to grant permission for development contrary to the advice given by the operator of a civil aerodrome or technical site, then it is required to notify the consultee and the Civil Aviation Authority (CAA). The CAA may request Scottish Ministers to call in the application and determine it. All airport related technical sites are located within the areas of the respective aerodrome safeguarding maps and where necessary a planning authority may need to undertake separate consultations as required (e.g. NATS for the Fitful Head Technical Site.)

4.17 Scasta Airport

Scasta Airport is a licensed aerodrome and whilst safeguarded by the 2003 Direction has lodged an informal safeguarding plan with the Planning Authority and an established procedure of notifying developments to the Airport Management has been agreed.

4.18 Airstrips

The Council owned and operated airstrip at Tingwall and the airstrips in Skerries, Fetlar, Papa Stour, Fair Isle and Foula are not covered by any safeguarding maps, however, Case Officers will consider the implications of proposed development on the airstrips within these areas where appropriate.



4.19 Safeguarding Maps

It should be noted that the safeguarding maps for both Sumburgh and Scatsta Airports extend to an extensive area and different requirements for consultation (particularly in terms of height) apply depending on proximity to the Airport and in areas of approach for landing, take-off and circling.

Additional Safeguarding Requirements

4.20 13 kilometre Consultation Zone : Bird Strike Hazard

Beyond and including the consultation zones, there are 13km radius circles around civil aerodromes. Within these areas the local planning authority must consult the appropriate authorities on any proposal likely to attract flocks of birds (e.g. refuse tips, reservoirs, sewage disposal works, nature reserves, bird sanctuaries, etc). A planning authority requires to consider not only the individual potential bird attracting features of a proposed development, but also whether the development, when combined with existing land features, will make the safeguarded area, or parts of it, more attractive to birds or create a hazard such as bird flightlines across aircraft flightpaths.

4.21 13 kilometre Consultation Zone : Other Aviation Uses

In order to protect aerodromes against the hazards that would arise from other aviation uses, the 13 kilometre radius referred to above is also relevant to these uses. Examples of applications connected with an aviation use would include applications for development at an existing aerodrome and applications for the use of the site other than as an aerodrome (eg. a drop zone for parachuting).

4.22 30 kilometre Consultation Zone : Wind Turbine Development

The safeguarding requirements for both civil aerodromes and licensed aerodromes are completed by separate maps showing circles with a 30 kilometre radius centred on the aerodrome reference point to indicate the area within which a proposed wind turbine development requires consultation. The issue of these maps recognises the fact that the introduction of wind powered generator turbines within the United Kingdom as part of an alternative energy policy can create certain problems for aviation.



- 4.23 In addition to their potential for representing a physical obstacle to air navigation, wind generator turbines can affect signals radiated from and received by aeronautical systems. The rotating blades create electromagnetic disturbance which can degrade the performance of these systems and cause incorrect information to be received. The amount of interference depends on the number of wind turbines, on a wind turbine's size, construction materials and location and on the shape of the blades. Further advice can be obtained from *Wind Energy and Aviation Interests – Interim Guidelines*, published by the Department of Trade and industry in 2002 (www.dti.gov.uk/renewable/pdf/wind_energy.pdf)

Quarries

- 4.24 The HSE require to be consulted on all developments (housing and infrastructure type developments) within 1km of the boundary to which a quarry operator has been permitted to extract material. At present, the HSE role is to comment on the issues which may give rise to risk to quarry workers or the public. Major issues are land stability – and assurance that development at or near a quarry takes account of potential instability, the impact of fly rock from poorly managed blasting and the stability of tips.
- 4.25 A list of the relevant quarries are contained within Appendix 1. This list includes inactive quarries, but not those which have ceased operations and have been restored.



Ministry of Defence

- 4.26 Safeguarding of the Ministry of Defence Sites at Scasta Ness and Mossy Hill were removed in April 1995. The following sites are still notified by the Ministry of Defence as notifiable sites:

Meteorological Site : Lerwick (Meteorological)
Saxa Vord (1) Saxa Vord, Sothers Field and Ward of Norwick (Explosive)
Saxa Vord (2) Vallafield (Technical)
Collafirth Hill (Technical)

Geological Surveys

- 4.27 The British Geological Survey (BGS) is a component of the UK Natural Environment Research Council and provides geoscientific information and services to a wide client community both in the UK and overseas. It operates a variety of geophysical monitoring equipment in Shetland, mainly at the Lerwick Observatory, with seismological outstations at Sandwick, Walls and on Yell. The instrumentation provides mainly geomagnetic and seismological data for the use of government and industry and data is particularly significant for the off shore oil industry; the geomagnetic data being used to direct drilling operations, while the seismic data is used to locate earthquakes both offshore and onshore. Artificial disturbances to the recordings can have a severely detrimental effect on the capability to make sufficiently accurate measurements.
- 4.28 Consequently, an agreement between the BGS and the Council ensures that they are notified of all planning applications for development within a 500m radius of the Lerwick Observatory which involve the passage or parking of vehicles and/or the construction of buildings and within a 1km radius any mining or quarrying operations.

Addresses and Contacts:

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APPENDIX 1

Major Hazard Sites in Shetland

Site Operator	Site Address	Site Type	CD	Inner	Middle	Outer
BP Exploration Operator Co.Ltd	Sullom Voe Shetland	Hazardous Substances Consent	1200m	variable	variable	1200
GB Fuels Ltd.	North Ness Lerwick Shetland	Hazardous Substances Consent & Large Scale Petrol Storage Site	400m	DPZ 150 Inner 250	300	400
Rearo Supplies Ltd.	Ladies Drive Lerwick Shetland	NIHHS (Notification of Installations Handling Hazardous Substances)	170m			170
BP Petroleum Development Ltd.	Brent Pipeline	Pipeline	100m	50	50	100
BP Petroleum Development Ltd.	Ninian Pipeline	Pipeline	100m	50	50	100
Exchem Explosives Ltd.	Staney Hill Quarry Lerwick	Explosives (Storage)	550m			550m
Schlumberger E&P Services	Gremista Industrial Estate, Lerwick	Explosives (Storage)	60m			60m
Lerwick Port Authority	Lerwick Harbour: <ul style="list-style-type: none"> • North • South • Holmsgarth 4 • Holmsgarth 5 • Shearers Quay • Bressay Ro-Ro • Dales Voe • North Anchorage • South Anchorage 	Explosives	225m 270m 225m 102m 41m 1384m 3120m 1410m	75 90 75 34 14 460 1030 470	113 135 113 51 20 692 1560 705	225 270 225 102 41 1384 3120 1410
Shetland Islands Council *	Ulsta Ro-Ro Terminal Yell	Explosives	164m	55	82	164
Shetland Islands Council *	West Burrafirth Ro-Ro Terminal	Explosives	113	38	57	113
Shetland Islands Council *	Bressay Ro-Ro Terminal	Explosives	162	54	81	162
Shetland Islands Council *	Toft Ro-Ro Terminal	Explosives	290	97	145	290
Shetland Islands Council *	Papa Stour Ro-Ro Terminal	Explosives	290	97	145	290
Shetland Islands Council *	Hamars Ness Ro-Ro Terminal	Explosives	290	97	145	290
Shetland Islands Council *	Gutcher Ro-Ro Terminal, Yell	Explosives	290	97	145	290
Shetland Islands Council *	Belmont Ro-Ro Terminal, Unst	Explosives	290	97	145	290
Shetland Islands Council *	Grutness Ferry Terminal	Explosives	290	97	145	290
Shetland Islands Council *	Walls Pier	Explosives	170	57	85	170

Shetland Islands Council *	Foula Pier	Explosives	160	54	80	160
Shetland Islands Council *	Fair Isle Pier	Explosives	290	97	145	290
Shetland Islands Council*	Out Skerries Ro-Ro Terminal	Explosives	95	32	48	95
Shetland Islands Council *	Vidlin Ro-Ro Terminal	Explosives	50	16	25	50
Shetland Islands Council *	Laxo Ferry Ro-Ro Terminal	Explosives	290	97	145	290
Shetland Islands Council *	Symbister Ro-Ro Terminal, Whalsay	Explosives	120	40	60	120
Lerwick Power Station	Gremista, Lerwick	Hazardous Substances Interim Alert Distance	1000			1000
Peterson SBS Base	Gremista, Lerwick	Hazardous Substances Interim Alert Distance	1000			1000

* Ports and Harbours Operations

Other Safeguarded Areas Within Shetland

Operator	Site Address:	Site Type:	Consultation
Highlands & Islands Airports Ltd.	Sumburgh Airport	Airport	Statutory HIAL Ltd. Inverness
CAA on behalf of Highlands & Islands Airports Ltd.	Sumburgh Airport	Wind Turbines	Statutory HIAL Ltd. Inverness
NATS	Fitful Head Sumburgh	All Development	Statutory NATS Fareham
Serco Ltd.	Scatsta Airport	Airport	Non-Statutory
Ministry of Defence	Observatory Lerwick	Meteorological	Statutory
Ministry of Defence	Saxa Vord Unst	Explosives Site	Statutory
Ministry of Defence	Saxa Vord North of Westing	Technical Site	Statutory
Ministry of Defence	Collafirth Hill	Technical Site	Statutory
British Geological Survey	Observatory Lerwick	Geological Surveys	Non-Statutory

Large Scale Quarry Sites Within Shetland 1000m Safeguarding

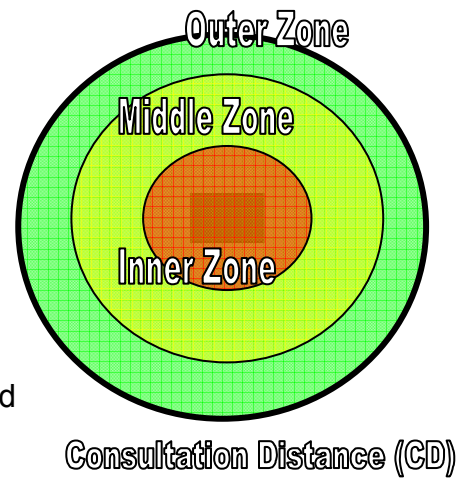
Site Address	Operator	Active/Inactive
Brindister Quarry, Gulberwick	Hanson Aggregates	Active
Gutcher Quarry, Yell	H & C Dickie Ltd.	Active
Haggrister Quarry, Northmavine	Nicolson Plant	Active
Scord Quarry, Scalloway	Shetland Islands Council	Active
Setter Quarry, Bressay	John H. Scott	Active
Setter Quarry, Haroldswick, Unst	Sandisons (Unst) Ltd.	Active
Staneyhill Quarry, Lerwick	M K Leslie Ltd.	Active
Sullom Mine Quarry, Northmavine	Nicolson Plant	Active
Vatster Quarry	Hanson Aggregates	Inactive

APPENDIX 2

HSE Design Matrix Inner, Middle and Outer Zones

The HSE's advice is based on the type of development proposed and is very dependent within which zone it lies in relation to the hazard site.

The HSE has defined a three-part consultation zone around Hazard Sites which comprise an inner, middle and outer zone. The furthest extent of the outermost zone is also referred to as the *consultation distance*. The inner zone is the most sensitive of the zones.



The HSE employs defined procedures to give land use planning advice on proposed developments using these zones and a system of categorising developments into four *Sensitivity Levels*. These are then put into a decision matrix that generates either an Advice Against (AA) or Do Not Advise Against (DAA). This is then the advice that the HSE gives to the Council. Further information on the HSE methodology is available on their web site at www.hse.gov.uk.

Sensitivity Level	Type of Development
1	Workplaces Parking Areas Housing – 1-2 dwelling units Small Guesthouses/ hostels/holiday homes Access Roads Indoor Use by Public with less than 250 sq.m. total floor space
2	Larger Workplaces Housing – 3-30 dwelling units and density no more than 40 per hectare Hotels, guest houses/ hostels/holiday homes Indoor Use by Public with total floor area from 250 sq.m. to 5000 sq.m. Outdoor use by Public where not more than 100 people will gather
3	Sheltered Workplaces Housing – 30+ dwelling units and any development with density more than 40 per hectare Large Hotels, hostels, camping sites Indoor Use by Public with more than 5000 sq.m. total floor space Outdoor Use by Public where numbers greater than 100 people but only up to 1000 at any one time Hospitals, nursing homes, sheltered housing, nurseries, creche and schools
4	Outdoor Use by Public where numbers greater than 1000 people at any one time Hospitals, nursing homes, sheltered housing (24 hour care) where development is larger than 0.25 hectares Schools, nurseries and creche where development is larger than 1.4 hectares

HSE Decision Table Matrix

Sensitivity Level	Development in Inner Zone	Development in Middle Zone	Development in Outer Zone
1	DAA	DAA	DAA
2	AA	DAA	DAA
3	AA	AA	DAA
4	AA	AA	AA

Key: DDA – Do Not Advise Against AA – Advise Against





GUIDANCE ON SAFEGUARDING SHETLAND ISLANDS COUNCIL

Development Plans
Shetland Islands Council
Infrastructure Services Department
Grantfield
Lerwick
Shetland
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