

# FORTH CROSSING BRIDGE CONSTRUCTORS (FCBC)

FORTH REPLACEMENT CROSSING

**MARINE HEALTH & SAFETY PLAN** 



#### Introduction

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This is the Marine Health & Safety Plan for the project and sets out, in general terms, how health and safety matters are to be planned and managed in relation to marine operations. It supplements the main Construction Phase Health and Safety Plan - which focuses on the land based works and overarching project-wide arrangements - and is developed to provide clear instruction, and as appropriate guidance, in relation to how FCBC manages marine related liaison and work activities.

The Plan refers to Procedures, Forms and Guidance which form part of FCBC Health & Safety Management System (HSMS). Reference should be made to those elements of our management arrangements for a full understanding of how health and safety is managed across the range of our undertakings.

Supplementary documents are incorporated at the Appendices of this Plan to provide additional clarity with respect to key reference documents not contained within our HSMS.

The Plan is a reference document and it is not designed to contain all Forms, Registers, records, drawings or task related documentation – these will be held either on the Project Server (for those documents / Forms / Drawings etc. to be referenced or used) or in the project's electronic filing systems (for those documents / Forms / Drawings etc. which have been used and are being filed) and will be accessible via those systems.

Task specific hazards and risks will be managed in line with our HSMS requirements and implemented under the associated management arrangements.

This Plan and the HSMS requirements will be reviewed every three months and updated as appropriate.

Training in the use of the HSMS will be provided to all relevant personnel to ensure they are familiar with the relevant forms, procedures and arrangements.

In line with the guidance at paragraph 4 of the Introduction to the CDM ACoP, FCBC is conscious of the importance of ensuring that important health and safety information is easily identifiable within the task related paperwork and will seek to ensure this documentation is as succinct as possible.

Our processes for task briefings will then ensure the tasks are discussed with those undertaking the works and that the hazards, risks and control measures are effectively communicated to them.





### Initial Review & Approval

Initiator:

Name

**Position** 

Date

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Health and Safety Manager

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Date

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**Project Director** 

20/08/12

A paper copy of this Plan shall be maintained by the Health and Safety Manager and shall be available for reference purposes in the event of failure of the FCBC IT system. An electronic version of this Plan shall be available, and easily accessible, on the FCBC IT system for reference by all personnel. A paper copy will also be available at each main workplace office.

Instruction and training shall be provided to FCBC personnel in relation to:

- · Where this Marine Health & Safety Plan is electronically filed;
- · Where the main Construction Phase Health and Safety Plan is electronically filed;
- · Where the FCBC Health and Safety Management System is electronically filed;
- Where the Marine Safety Management System is electronically filed;
- Use of the relevant management systems and associated management arrangements.

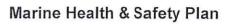
Relevant sections of this Plan shall be made available to contractors during the procurement process in line with FCBC procurement protocols.



# Record of Review

# **Amendments**

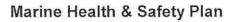
<u>No.</u>	<u>Section</u>	Brief Description	<u>Date</u>
1.	First Issue		
2.	All	Format & content revised	31.01.12
3.	All	Format and content completely reviewed	07.03.12





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#### Section 1

#### Description of Project

The Scottish Ministers Acting through Transport Scotland is seeking to provide a replacement crossing of the Firth of Forth to the west of the Forth Road Bridge to carry general road traffic in addition to new dual carriageway approach roads and general road network.

# 1.1. Location of the Project

- 1.1.1. There are three main locations for the project as follows:
  - Firth of Forth to the west of the Forth Road Bridge;
  - South Network South approaches;
  - North Network North approaches.

#### 1.2. Scope of the Works

- 1.2.1. The scope of works for the whole project is defined within the core Health and Safety Plan for the project. The main marine related works include:
  - A dual two lane carriageway Main Crossing, complete with hard shoulders, stretching approximately 2.7 kilometers across the Forth estuary, including a cable stayed bridge with three mono towers and two main spans, and an approach viaduct to the south;
  - Multi-span viaduct approaches connecting to the north and south of the new bridge over the Forth estuary.

#### 1.3. Timing of the Works

Contract Award Date:

18 April 2011

Contract Commencement Date:

28th June 2011

Contract Period:

2,426 days

Site Start Date:

Site Installation South

- 1st Sept 2011

(Access to S6)

Site Installation North

- 1<sup>st</sup> Oct 2011

(Ferrytoll Road)

Permanent Works

- 1st Nov 2011

(Beamer Rock)

Planned Contract Completion:

Section A (South Network)

- 15 Aug 2016

Section B (North Network)

- 19 Sept 2016

Section C (Main Crossing)

- 22 Dec 2016

Overall

- 08 Dec 2017

Form F10 (Rev) - Date Submitted:

9<sup>th</sup> May 2011

(copy of F10 inserted at Appendix 1)



# 1.4. Working Hours

- 1.4.1. Indicative normal working hours are as detailed in Table 1. The times indicated incorporate 30 minute start-up and close down periods as reflected within the contract.
- 1.4.2. The half hour start-up time permits staff to arrive at the site, prepare for the construction works and travel to their designated work area. A half-hour close-down period is included within the normal working hours to enable the contractor's staff to exit the site. This will include departing from the wider construction site to return to the main site offices.

Table 1 - Indicative normal working hours

Work	Monday – Friday			Saturday				
Section(s)	Start - Up	Start Work	Close Down	Close	Start - Up	Start Work	Close Down	Close
Main Crossing	07.00	07.30	18.30	19.00	07.00	07.30	18.30	19.00
All other works	07.30	08.00	18.30	19.00	08.00	08.30	17.30	18.00

- 1.4.3. Additional works will be permitted only with the prior approval of the Employer's Representative (Client's representative in terms of CDM terminology) and then only where the works will be undertaken in accordance with Section 5 of the Forth Replacement Crossing Code of Construction Practice.
- 1.4.4. Such additional works in terms of the 'marine works' may include:
  - Works associated with construction of the foundations for the main crossing and approach viaducts within the Firth of Forth;
  - Works required to construct the towers and piers within the Forth Estuary to a reasonable level above the highest astronomical tide to enable construction of the remainder of the towers under normal working hours;
  - Works reliant on the operation of major marine plant;
  - Other works required within the Forth Estuary, including construction of any platforms required to facilitate construction of the towers or piers above the surface water level of the Forth Estuary.
- 1.4.5. Certain 'exceptional works' may also require to be undertaken outwith normal working hours. Exceptional works are works which it would not be reasonably practicable to undertake during normal working hours and may include:
  - Construction works which are required in response to an emergency;
  - Construction works which are required as directed by the Police or other emergency services;
  - Construction works being undertaken as normal works which could give rise to any damage, be unsafe or be detrimental to the integrity of the works if they were not completed; and
  - Servicing of plant essential to maintain safe operation of the site.



1.4.6. FCBC will notify the Employer's Representative and the relevant local authority, together with the relevant navigation or harbour authority, Network Rail or Statutory Undertakers, as appropriate, of any exceptional works that are necessary as soon as possible.

#### Section 2

- 2 Management of the Work
- 2.1 Management structure, roles and responsibilities
- 2.1.1 Basic health and safety related roles and responsibilities are allocated in line with the organogram enclosed within the FCBC Health and Safety Policy, Organisation and Arrangements document. A copy of the relevant organogram is enclosed at Appendix 2.
- 2.1.2 A supplementary marine specific organogram is contained at Appendix 3. This should be viewed within the overall context of the management structure portrayed within the FCBC Health and Safety Policy, Organisation and Arrangements document.
- 2.1.3 FCBC has formally appointed Carlo Germani as the Project Director and Project Management Team Health and Safety Champion. Whilst he is ultimately responsible for all aspects of project delivery, relevant health and safety matters are delegated to members of the design and construction teams through the line management functions.
- 2.1.4 Whilst FCBC seeks to engage with our workforce and empower them to intervene wherever they see any unsafe act or unsafe condition the Health & Safety Manager is appointed as the Accident Prevention Officer for the project and has the authority to issue instructions and take protective measures to prevent accidents.
- 2.1.5 Notwithstanding this all personnel are empowered to refuse to start work / stop work where they believe the conditions or proposed work methods are unsafe. All personnel have the authority to stop work operations where they believe there is imminent danger. Where personnel believe working practices could be improved they are encouraged to raise this with the relevant supervisor or manager.
- 2.1.6 The project Health and Safety Advisors are responsible for providing, advice and guidance to the site management teams but are not responsible for health and safety management on site – this remains the responsibility of designated members of the site management team. The responsibilities of the Health and Safety Advisors are specified within the Policy, Organisation and Arrangements document.
- 2.1.7 FCBC shall engage the services of an external specialist as its Naval Architect. They shall liaise with the FCBC design and construction teams to ensure comprehensive consideration of the design, construction, maintenance and operation of marine vessels and structures.
- 2.2 Liaison with regard to the marine environment
- 2.2.1 This liaison takes place to ensure FCBC works closely with, and wherever practical takes account of, the wishes of the client, local communities, local interest groups and other stakeholders when developing policies and procedures associated with the marine works.



- 2.2.2 The Marine Liaison Group is the primary multi party liaison group and has members drawn from the following organizations:
  - · Transport Scotland;
  - · Forth Ports Limited:
  - Northern Lighthouse Board:
  - Maritime Coastguard Agency;
  - Forth Road Bridge;
  - Network Rail:
  - Babcock;
  - Fife Constabulary:
  - Lothian & Borders Police:
  - Port Edgar Yacht Club;
  - Edinburgh Leisure.
- 2.2.3 The Port Liaison Group comprises of representatives from Forth Ports, FCBC and port tenants as required.
- 2.2.4 Significant routine liaison takes place with Forth Ports Limited as detailed at 2.3 below. In addition there was significant liaison and consultation during the development of our marine related policies and procedures which take cognisance of their statutory responsibilities and requirements.
- 2.2.5 FCBC also initiates internal liaison groups related to marine work as appropriate.
- 2.3 Liaison with maritime and port authorities
- 2.3.1 One of the prime responsibilities of FCBC is to ensure the safety of navigation of its vessels and personnel.
- 2.3.2 All vessels operating in the Firth of Forth are under the jurisdiction of Forth Ports Limited and in particular are under the control of the Forth and Tay Navigation Service (FTNS) whilst underway and making way.
- 2.3.3 While operating in the Forth Ports Limited areas of jurisdiction this control is achieved by means of compliance with a comprehensive regulatory framework of Bye-laws and General Directions supported by a comprehensive Port Safety Plan. This is augmented by the provision of experienced pilots, accurate charts, navigational marks, and a 24-hour Traffic Organisation Service provided by FTNS.
- 2.3.4 FCBC is cognisant with these and has a dedicated single point of contact for all liaison with maritime and port authorities the Marine Liaison Officer.
- 2.3.5 Through the ongoing process of liaison, management and development of procedural controls FCBC operations are now recognised as a unique controlled working activity in the Firth of Forth and the FCBC management processes and Forms are embedded within Forth Ports' management arrangements for FCBC operations.



- 2.3.6 In relation to emergency situations FCBC recognises the primacy of the Forth Ports Limited Emergency Plan which has been produced in consultation with marine users, facility operators and emergency authorities in the area. Whilst FCBC operations are generally catered for in this plan, it shall nevertheless develop supplementary emergency procedures, plans and arrangements as appropriate which are congruent with the Forth Ports Limited Emergency Plan and the response procedures. FCBC arrangements are specified within 2.4 below.
- 2.3.7 Forth Ports health and safety document Co-operation and Co-ordination with the Port Estate is contained at Appendix 9 for information.
- 2.3.8 Any comments on FCBC's arrangements for managing marine emergencies should be addressed to both the Health and Safety Manager and Marine Liaison Officer.

### 2.4 Incident response and liaison

- 2.4.1 A formal Gold, Silver, Bronze incident management structure shall be adopted both the marine and land based elements of FCBC's operations. A procedure / process and associated guidance shall be introduced – and training delivered - by the end of February 2012.
- 2.4.2 A Gold, Silver, Bronze management structure is used by emergency services of the United Kingdom to establish a framework for the command and control of incidents and/or disasters. FCBC have adopted the same structure, thus enabling it to work alongside the emergency services, local authorities and other agencies.
- 2.4.3 The seriousness of an incident will determine the extent to which the FCBC Silver or Gold Manager will be required. For minor incidents a Bronze Manager will be adequate. For more serious incidents it will be necessary to involve the Silver Manager. For the most serious incidents the Gold Manager will be involved.
- 2.4.4 For the most serious of incidents, where the Police are involved, they will almost always be the organisation in ultimate charge of co-ordination of the major incident response. They will provide instruction to the other organisations that may attend. A limited exception to this occurs if the incident involves a fire or other dangerous hazard, in which case the fire service will have overall charge of the area inside the inner cordon where fire-fighting or rescue is taking place.
- 2.4.5 The outline of the management / command and control structure is as detailed below. For the most serious of incidents the emergency services will each have their own Gold Manager / Commander, Silver Manager / Commander and Bronze Manager / Commander.

#### Gold (Strategic)

The Gold Manager is in overall control of their organisation's resources at the incident. They will <u>not</u> be on site, but at a distant control room (e.g. Gold Command), where they will formulate the strategy for dealing with the incident. If the Gold Managers / Commanders for various organisations at an incident are not co-located, they will be in constant touch with each other.



#### Silver (Tactical)

The Silver Manager is the senior member of the organisation in charge of all their resources. They decide how to utilise these resources to achieve the strategic aims of the Gold Manager. They determine the tactics used.

At the scene of the incident they will work in proximity and harmony with other organisation's Silver Managers / Commanders - usually situated in purpose-built command vehicles or makeshift command room(s) known as the Emergency Control Centre. They will not, however, become directly involved in dealing with the incident itself.

#### Bronze (Operational)

A Bronze Manager directly controls the organisations' resources at the incident and will be found with their staff working on scene. If an incident is widespread geographically, different Bronze Managers may assume responsibility for different areas. If a complex situation arises - differing Bronze Managers can command differing tasks or responsibilities at an incident.

During the initial stages of an incident the first member of the organisation who arrives at the incident assumes, albeit temporarily, the role of Bronze Manager, until relieved by more senior personnel.

- 2.4.6 The Client's representatives will be notified of accidents and incidents as soon as practicable after they have occurred.
- 2.4.7 An FCBC Major Incident Response Plan shall also be produced to ensure that all major incidents, whether marine or land-base related, are promptly notified to the client and a coordinated approach to incident management and communications is achieved.
- 2.4.8 This Plan shall take cognisance of the requirements of, and supplement, the Forth Ports Emergency Plan which is enclosed at Appendix 8 for information.

#### Section 3

3 Arrangements for controlling significant marine related risk

# 3.1 Introduction

- 3.1.1 All works shall be carried out, as a minimum, in accordance with relevant health and safety legislation.
- 3.1.2 The core principles to be applied are those set out in the Health and Safety at Work Act in that we shall ensure, so far as reasonably practicable, the health, safety and welfare of our employees and that we shall conduct our undertakings in such a way as to ensure, so far as is reasonably practicable, that persons not in our employ are not exposed to risk to their health and safety.
- 3.1.3 Particular regard shall be given to providing safe places of work; safe plant and equipment; the provision of competent persons and provision of information, instruction and training.



- 3.1.4 Arrangements to control the above shall be supplemented by arrangements to address the specific requirements of the Management of Health and Safety at Work Regulations and supplementary regulations requiring the assessment of risk in specific work environments.
- 3.1.5 FCBC Standards specify the general approach which shall be adopted to identify hazards, assess the risk and ensure appropriate control measures are implemented.

#### 3.2 Pre-Construction Information

- 3.2.1 The Pre-Construction Information has identified various hazards which will be considered in the Construction Phase Method Statements and Risk Assessments. It is stated in the preconstruction information that the following health and safety restrictions may affect the works:
  - Erecting, maintaining and removing traffic management on existing motorways and side roads:
  - BP technical requirements for works in the vicinity of the oil pipeline;
  - Working in proximity to Edinburgh Airport;
  - · Working over or adjacent to railways;
  - Utility services diversions;
  - Roads & access routes;
  - Working on or adjacent to members of the public; public roads; footpaths and cycle ways;
  - Noise & vibration limitations;
  - Marine works;
  - Ship & sailing navigation routes (commercial & non-commercial) through the Forth Estuary;
  - Inclement weather:
  - · Public events leading to increase traffic volumes;
  - Works in the vicinity of contaminated grounds;
  - Use of explosives in the vicinity of public places.
- 3.2.2 The Information for Contractors document has identified the following significant design and construction hazards which shall be considered in the various construction phase method statements and risk assessments. Works have been divided into three major sections:
  - Connecting Roads
  - ITS Systems; Gantries & Lighting
  - Main Crossing
- 3.2.3 The Main Crossing section is reproduced below.



MAIN CROSSING	Existing Hazards	<ul> <li>Firth of Forth navigation routes and the impact of construction on the Forth estuary shipping and sailing traffic.</li> <li>Tidal effect and the velocity of currents in particular during flood and ebb tides.</li> <li>Edinburgh Airport air corridor.</li> <li>Alluvium deposits.</li> <li>Access &amp; egress to Beamer Rock.</li> <li>Stability of working platforms when using jack-up barges.</li> <li>Long Sea outfall pumping treated effluent into the Firth of Forth.</li> <li>Uncharted sub-sea cable &amp; original outfall pipe present on sea bed may present a obstruction during construction.</li> </ul>
	Construction Hazards	<ul> <li>Dismantling and transportation of Beamer Rock Lighthouse.</li> <li>Demolition of hog horn building.</li> <li>Dredging operations for positioning of foundations (piles and pads).</li> <li>Blasting operations at Beamer Rock.</li> <li>Steelwork fabrication &amp; assembly yard.</li> <li>Pile cap and foundation works.</li> </ul>
Š	Potential	Inclement weather conditions.
	Hazards	Rosyth dockyard ship building works.
	Public Risk	Port Edgar sailing traffic.
	Hazards	Works overhead of shipping and sailing.
	Environmental Hazards	<ul> <li>Impact on air navigation in the vicinity of Edinburgh Airport.</li> <li>Removal and disposal of dredging materials.</li> <li>Gas pockets in alluvium.</li> <li>Areas of radiological hazards along shores of Firth of Forth.</li> <li>Contamination of waters due to oil or fuel spillage.</li> <li>Contamination of waters due to construction works.</li> <li>Underwater Concrete Works.</li> </ul>

3.2.4 A schedule of key tasks shall identify when risk assessments and method statements are required and who is required to generate them. The schedule of identified contractor method statements shall be incorporated at Appendix 4 of this document.

# 3.3 Instruction and training

- 3.3.1 All personnel wishing to work at the bridge foundations and bridge tower sites must be able to demonstrate they have passed a relevant, in scope, marine related Personal Survival Training (PST) course. This is a pre-requisite before the FCBC Marine Induction is provided and an individual FCBC Marine Pass is issued. Passing a relevant PST training course, attending an FCBC Marine Induction and being issued with an individual Marine Pass are therefore all pre-requisites to a worker's authorisation to board an FCBC vessel at the Marine Yard.
- 3.3.2 Visitors shall be treated in the same way except they shall not be required to have passed a PST course and shall be provided with a visitor induction prior to being issued with a Visitor Pass. Visitors must be accompanied at all times when by someone who is a holder of an FCBC Marine Pass gained in accordance with 3.2.1 above.



- 3.3.3 Upon boarding a vessel all personnel shall also be briefed by the Barge Master / Transfer Vessel Skipper or a member of their crew in relation to key health and safety matters related to the vessel and the journey including vessel safety rules, transfer procedures and emergency procedures / arrangements.
- 3.3.4 FCBC shall appoint a suitable training provider(s) to provide marine related Personal Survival Training (PST). This training shall involve a range of presentations and practical exercises related to:
  - Relevant UK health and safety legislation including the roles and responsibilities of the HSE & MCA;
  - Working safely & understanding offshore hazards;
  - Vessel transfer & sea safety skills;
  - Safety equipment & safe transit procedures;
  - Use & maintenance of life jackets;
  - Responding to emergency situations.
- 3.3.5 Whilst FCBC may accept alternative Marine PST certification any proposed alternative is required to be discussed and approved in advance of personnel being presented for FCBC Marine Induction.
- 3.3.6 An example of an acceptable alternative training course is a course delivering the Standards of Training Certification and Watch-keeping (STCW) '95 module in Personal Survival Techniques.

#### 3.4 Marine Induction

- 3.4.1 No personnel other than visitors shall be permitted to undertake the FCBC Marine Induction without first having:
  - Passed a suitable PST course;
  - Undergone the FCBC core Health and Safety Induction.
- 3.4.2 The FCBC Marine Induction takes place at the Exmouth Building, Rosyth, supplements the core FCBC Health and Safety Induction, and includes information specific to the FCBC Marine Yard and our marine related activities. These include requirements or guidance in relation to:
  - Issue and use of the FCBC Marine Pass;
  - Entry to the Marine Yard;
  - Vessel boarding;
  - PPE requirements issue and maintenance;
  - Thermal comfort in the marine environment;
  - Transfer and evacuation procedures;
  - Emergency arrangements including provision of first aid;
  - Working on or adjacent to water;
  - Working at height;
  - Lifting operations.



- 3.4.3 On completion of the FCBC Marine Induction workers will be issued with an FCBC Marine Pass as soon as practicable. This allows access to the Marine Yard and transfer to workplaces on marine vessels.
- 3.4.4 A briefing / induction shall also be carried out by the Barge Master / Transfer Vessel Skipper or a member of their crew in relation to key health and safety matters related to the vessel and the journey – including vessel safety rules, transfer procedures and emergency procedures / arrangements.
- 3.4.5 Where, after frequent transfers, personnel are familiar with general vessel rules or requirements the extent of the above briefing may be abbreviated to reflect specific items to be brought to the attention of those in transit.

# 3.5 Marine Safety Rules

- 3.5.1 The Marine Safety Rules are communicated during the Marine Induction and the full briefing paper is contained at Appendix 5.
- 3.5.2 These rules shall also be prominently posted on the Notice Board within the office and welfare facilities within the Marine Yard.
- 3.5.3 Where personnel are in doubt about the Marine Safety Rules they should seek advice via the FCBC Marine Office located within the Exmouth Building, Rosyth.

#### 3.6 Marine PPE

- 3.6.1 Core PPE requirements for the marine environment are:
  - Lifejackets to 275N CE Standard are required to be worn during vessel movements /
    transfer operations and when within 3 metres of the quayside or an edge of a barge or
    pontoon. These shall be of automatic operation. Equipment provided to the
    Employers Delivery Team shall be in accordance with the Employers Requirements.
    The provision of lights and other location devices shall be determined by risk
    assessment and provided as required;
  - Wet weather clothing to comply with EN 471 with waterproofness and breathing properties to comply with EN 343 - level 3;
  - Head protection to EN 397;
  - Foot protection to EN 345 incorporating toecap, mid-sole protection and ankle support;
  - Hand protection mandatory wearing of appropriate gloves from the specified range except where a:
    - o Specific task specifies a particular specification of glove to be worn; or
    - Risk assessment demonstrates that the wearing of gloves increases the risk associated with the task (e.g. during the use of a circular saw).
  - Eye protection to EN 166 except where a:
    - o Specific task requires a particular specification of eye protection to be worn; or
    - Risk assessment demonstrates that the wearing of eye protection increases the risk associated with the task.
  - High visibility clothing to EN 471 Orange in colour.



- 3.6.2 Lifejackets should not be worn in conjunction with flotation suits unless the two are compatible.
- 3.6.3 Lifejackets shall be worn during crew transfer at the direction of the Master of the vessel or their crew.
- 3.6.4 Additional items of PPE may be required on the basis of specific hazards and risks. Identification of these is the responsibility of the workers' employer who also has responsibility for ensuring that the specification of these is properly determined during the assessment process and that the equipment is provided, maintained and worn.
- 3.6.5 PPE shall be considered as a control measure of last resort and relevant control hierarchies and Action Limits shall be applied in line with statutory requirements.

#### 3.7 Work on or near water

- 3.7.1 All works over or adjacent to water shall be planned, managed and carried out in accordance with the requirements of Standard HS&E-STD-W04 Working Over/Adjacent to Water.
- 3.7.2 Cognisance will also be taken of the guidance published within the British Wind Energy Association document *Guidelines for the Selection and Operation of Jack-ups in the Marine Renewable Energy Industry*, the supplementary guidance referenced therein and the expertise of FCBC personnel familiar with undertaking safe working within a marine environment. Where appropriate the use of external expertise will be utilised.
- 3.7.3 The FCBC work areas on the Firth of Forth / River Forth are classified by the MCA as being Category C waters – being a tidal river or estuary where the significant wave height is not expected to exceed 1.2 meters at any time.
- 3.7.4 Vessels shall be able to provide the primary means of rescue of personnel should someone fall overboard.
- 3.7.5 Should rescue of personnel be required during vessel transfers or marine work activities a rescue vessel shall be available at all times. This shall be suitably positioned to provide swift support in the event of an emergency.
- 3.7.6 A rescue vessel shall be of suitable construction and be equipped with two diesel motors. These motors shall be tested prior to the vessel being used as a rescue vessel as part of the pre use checks.
- 3.7.7 Rescue of personnel will be accomplished within 3 miles of a safe haven or emergency services rendezvous point.
- 3.7.8 The relevant risk assessments and associated control measures arising from them add a further layer of control to the safety of personnel within the marine operational areas. Significant project risks are incorporated within the risk register which forms part of the documentation presented at the monthly progress meetings with the client.



- 3.7.9 Marine safety training, bespoke to FCBC requirements, has been externally sourced and delivered. The training covers the elements highlighted at 3.2 above and includes specific instruction in relation to:
  - Prevention of drowning;
  - Secondary drowning;
  - Effects of hypothermia;
  - Wearing, use and maintenance of life jackets including adjustment for comfort and fit for gender, individual height and stature.
  - An experiential phase of training in a test tank, demonstrating the use of the personal protective equipment, including life raft occupation from abandonment of a working vessel or barge.
- 3.7.10 Lifejackets are required to be worn during vessel movements / transfer operations and when within 3 metres of the quayside or an edge of a barge or pontoon. Where additional requirements are in effect these will be briefed to the personnel involved on a task by task basis.
- 3.8 Access & Security Arrangements
- 3.8.1 There are two main locations associated with the marine works the Marine Office and the Marine Yard.
- 3.8.2 The Marine Office occupies the first floor of the Exmouth Building which is a self-contained office block within the Forth Ports compound. Entry to the Marine Office is via either the intercom system or a proximity card. Entry for visitors and others not yet authorised to enter the Marine Office unaccompanied is via the intercom system. Authorised personnel may gain access using a proximity / swipe card system.
- 3.8.3 During the day, the intercom will be manned from FCBC reception within the building. Out of hours this will be manned by security personnel as appropriate.
- 3.8.4 The Marine Yard is within the Port of Rosyth. Pedestrian access will be controlled at the entry gate either by a security guard or an electronic turnstile gate system. This will be open during all hours of operations.
- 3.8.5 The electronic turnstile gate system, when operational, will operate using an FCBC Marine Pass as a swipe or proximity card. Criteria for obtaining an FCBC Marine Pass are detailed within Section 3.4 above *Marine Induction*.
- 3.8.6 A Marine Boundary ISPS fence has been erected around the FCBC yard to prevent unauthorised access from the waterline area. All access is controlled via the security points. In addition there will be CCTV within the area that will be controlled centrally within the command centre at Ferry Toll Road.



#### 3.9 Emergency Preparedness & Response

- 3.9.1 Details of FCBC's approach to incidence management, reporting and liaison is contained above at Section 2.4 above.
- 3.9.2 An Emergency Notice Form (HS&E-FRM-H04-01) shall be displayed on the main work area notice board and details communicated to all personnel during site induction.
- 3.9.3 Task or location specific emergency / rescue plans shall be produced as appropriate and incorporated within safe systems of work.
- 3.9.4 Each office and work location shall develop a Fire Safety Plan which shall be reviewed at intervals identified that Plan. The Plan shall be updated as necessary.
- 3.9.5 Weekly workplace fire inspections shall be carried out with records being maintained using Form HS&E-FRM-F01-05
- 3.9.6 Within the marine environment, the Barge Master / Vessel Skipper must be notified of any emergency as soon as possible and will take the appropriate action to notify those on board.
- 3.9.7 Each vessel will have means of raising the alarm either by a tannoy announcement system or on smaller vessels there will be a siren or klaxon. There will be trained personnel who will take control of the situation and each vessel will have firefighting equipment suitable to tackle a fire to allow evacuation.
- 3.9.8 Personnel on each vessel will have received induction training to advise of the arrangements and what to do in the event of an emergency. Evacuation drills will be carried out at a frequency appropriate to the vessel and its use to check that procedures are robust and effective. These shall be conducted no less frequently than bi-monthly.

#### 3.10 First Aid

3.10.1 All vessels will have crew that are trained in Emergency First Aid. In addition FCBC will have a number of first aiders available on site. Sub-contractor's first aiders will boost these numbers where applicable. As of December 2011 there are 16 Qualified First Aiders within the Marine Works:

Laura Polson	Gerard Cott	William McBrien	Drew Dellet
Martin McKinnon	<b>Graham Torrens</b>	lan Jones	Andrew Sinclair
Eddie Shanks	David Williamson	Jonathan Revels	Michael Zimmer
John McMullan	Hans Jurgen Plate	Sean McKinnety	Udo Jeck



#### 3.11 Welfare Facilities

- 3.11.1 Welfare facilities are provided both at the Marine Yard and individual work sections. The Marine Yard facilities are for use before transferring to work sections and when returning from them. These facilities are fully stocked and adequate for the numbers of rotating shifts. The facility will provide eating areas, drying rooms with lockers and showers. Separate facilities are provided for females.
- 3.11.2 At each work section there will be supplementary welfare facilities to allow personnel to use the toilet, wash, eat and rest. These will at least comply with statutory minimum requirements.

### 3.12 Drugs & Alcohol

- 3.12.1 FCBC has a Drugs and Alcohol Policy and operates a testing regime for drugs and alcohol which incorporates 'Pre-employment', 'For Cause', 'Post Accident' and 'Random' elements.
- 3.12.2 The policy applies to all persons working on, or visiting, the project and shall be displayed on the main work section notice boards. Contractors shall be advised prior to appointment and details are also communicated during induction. Details of the testing regime are contained at Appendix 6.
- 3.12.3 The FCBC drugs and alcohol testing procedure shall be administered by the on-site Occupational Health Practitioner.

#### 3.13 Occupational Health - Surveillance & Promotion

- 3.13.1 An occupational health service provider will be engaged for the duration of the project and shall be based at the main project compound. Full details of services provided and FCBC's approach are contained within the core Health and Safety Plan for the project. An outline is contained below.
- 3.13.2 The range of services provided will vary over the duration of the project but shall include undertakings associated with the following:
  - Lifestyle management;
  - Blood pressure;
  - · Height, Weight and Body Mass Index;
  - Vision Screening;
  - Urinalysis;
  - Musculoskeletal assessment:
  - · Dermatological screening;
  - HAV screening;
  - Audiometric testing;
  - Lung function testing;
  - Drug and alcohol testing.



- 3.13.3 The service provider shall also work closely with the project team to develop and deliver occupational health awareness programmes and initiatives.
- 3.13.4 All hazardous materials used or produced will be subject to a COSHH assessment the results of which will advise on any risks to health and how these will be managed.
- 3.14 Control of Substances Hazardous to Health (COSHH)
- 3.14.1 FCBC shall seek to minimise exposure to hazardous substances during the construction, maintenance, use and decommissioning/deconstructing of the project structures. Where possible this shall be by design where not this shall be in accordance with the other elements of the control hierarchy specified under the COSHH Regulations and detailed within FCBC Standard HS&E-STD-HO2. The management process incorporates use of the supplementary Forms detailed below

HS&E-STD-HO2-01 Hazardous Material / COSHH Assessment
 HS&E-STD-HO2-02 Hazardous Material & COSHH Register
 HS&E-STD-HO2-03 COSHH Checklist

FM-H&S-025 (07)
 COSHH Assessment Data Request

- 3.14.2 More comprehensive details of how COSHH is managed are contained within the core Health and Safety Plan for the project.
- 3.14.3 To assist the FCBC operations management team FCBC shall have access to the Sypol Limited database of COSHH Assessments and their telephone Helpline. Training will be provided, as appropriate, in the access and use of this database.
- 3.15 Marine Operations
- 3.15.1 Introduction
- 3.15.1.1 FCBC operations are conducted from the Port of Rosyth.
- 3.15.1.2 The Port of Rosyth is situated on the north side of the River Forth to the west of the Forth Bridges. Rosyth is an old Naval Dockyard now used, in the main, for commercial activity. The port has two distinct areas:
  - Port of Rosyth Tidal basin owned and run by Forth Ports Limited;
  - Port Babcock Non-tidal basin owned and run by Babcock International PLC.
- 3.15.1.3 In order to maintain safety of navigation and to delineate between routine traffic and construction activity, three off-shore construction exclusion zones will be established by FCBC in conjunction with Forth Ports Limited. These zones shall be marked with buoys and access closed to all but construction traffic. The three zones are:
  - Beamer Rock Central Tower;
  - North Tower and Viaduct;
  - South Tower and Viaduct.



# 3.15.2 Programming marine traffic movements

- 3.15.2.1 In order that Forth Ports Limited and FCBC discharge our respective duties with regard to safety of navigation and vessels, efficient programming and management of marine traffic is required:
  - In the vicinity of the Port of Rosyth;
  - · Between the Port of Rosyth and FCBC's off-shore sites; and
  - Between FCBC's off-shore sites.
- 3.15.2.2 Longer term planning commenced with an assessment of the capability requirements of vessels expected to be required to meet the construction needs. This process gave, and continues to give, rise to the composition of the FCBC vessel suite. The process is led by the Marine Superintendent and once the suite is determined it will only be adjusted in extreme circumstances.
- 3.15.2.3 The allocation by vessel capability to task will be initially generated by the Marine Office and will be reviewed 3 monthly, or at shorter intervals if required, as the project progresses.
- 3.15.2.4 The short term programme will be developed by the Marine Department and reviewed by the marine programme working group weekly. This meeting will finalise the vessel allocation and activity for the following week and will form the base-line for the daily programme.
- 3.15.2.5 The daily movements programme will be produced by the Marine Office and will indicate the tasking for all FCBC and client vessels and craft for the following 24 hours. This programme will issued at 14:00 hours (local) Monday Friday. The programme for Saturday and Sunday will be issued on the preceding Friday.
- 3.15.2.6 Any **information for this programme** (i.e. notification re the following days activity) is to be with the Marine Office by **12:00 hours** (local) on the day of publication.
- 3.15.2.7 The daily programme will be issued to the Forth and Tay Navigation Service (FTNS) the tasking authority for all FCBC vessels in line with the above deadlines.
- 3.15.2.8 Subject to FTNS's acceptance of the above programme vessel movements shall be in accordance with that programme.
- 3.15.2.9 Where vessel movements are required outwith the agreed programme these shall be requested from FTNS as required. As requests for such movements may not be granted these shall be kept to a minimum.

#### 3.15.3 Managing marine traffic movements

- 3.15.3.1 All vessels operating in the Firth of Forth are under the jurisdiction of Forth Ports Limited and in particular the control of the Forth and Tay Navigation Service (FTNS) whilst underway and making way.
- 3.15.3.2 All FCBC vessels activity will be programmed as described above and specified within a daily marine activity programme. A copy of this programme is issued to FTNS. This programme forms the basis of initial authority to move an FCBC vessel. Additional authority may also be required from FTNS.



- 3.15.3.3 All FCBC vessels must also seek clearance to navigate from FTNS unless all movements start, finish and are at all times restricted to movement within the boundary of an FCBC offshore construction exclusion zone. These movements shall be co-ordinated by the Marine Superintendent. (i.e. Clearance to navigate is not required if an FCBC vessel is moving solely within the boundary of an off-shore construction exclusion zone.) Clearance is required from FTNS in all other circumstances.
- 3.15.3.4 Where FTNS clearance is required this must be sought a minimum of 5 minutes prior to getting underway.
- 3.15.3.5 All FCBC vessels are to use the approved navigation channel when entering or leaving the Port of Rosyth.
- 3.15.3.6 All FCBC vessels are to navigate with caution in the Port of Rosyth turning basin and in the vicinity of berths at speeds of 6.5 knots or less.
- 3.15.3.7 Unless specific approval has given in writing by the Forth Ports Limited Harbour Master all FCBC vessels are to observe the specified speed limit for the River Forth west of the Rail Bridge. This is 12 knots.
- 3.15.3.8 Local Notices to Mariners are issued by Forth Ports Limited at appropriate times to inform mariners of (i) temporary or permanent alterations to procedures for navigation in the Forth; and (ii) hazards that might arise affecting safety to navigation. These Notices are held in the FCBC Marine Office.
- 3.15.3.9 VHF radio communications with FTNS are detailed in the Admiralty List of Radio Signals Volume 6. Vessels must:
  - Maintain a listening watch on Channel 71 and report to FTNS when passing the reporting points as laid down in the General Directions for navigation as may be amended from time to time;
  - Use Channel 16 for calling other vessels or the shore station in the normal manner.
- 3.15.3.10 FCBC shall also utilise, once one has been provided, a designated FCBC marine working channel for FCBC related business only. IMM VHF Channel 8 has been requested for this purpose.
- 3.15.3.11 Regardless of any on-board navigational systems in use by a vessel all vessels on FCBC related operations must use corrected up to date charts of the Forth and have them available on board for reference.
- 3.15.3.12 Marine incidents as specified in Forth Ports Byelaws 24 (i.e. vessel has sunk or grounded) and 25 (i.e. vessel in collision, on fire, sustained damage or caused damage to other vessels or properties) or any other dangerous incidents or occurrences should be reported as soon as possible to FTNS, the FCBC Marine Liaison Officer and the FCBC Health and Safety Manager.
- 3.15.3.13 A copy of the Forth Ports Byelaws is enclosed at Appendix 7.



# 3.15.4 Pilotage Directions

- 3.15.4.1 Pilotage Directions are issued by Forth Ports Limited. Pilotage Direction No 6 (latest edition dated 02 Jun 2011) is available on the Forth Ports website. A copy is held in the FCBC Marine Office.
- 3.15.4.2 The Pilotage Directions in relation to FCBC vessels requires that all power driven vessels engaged in construction operations which are greater than 45m in length and under 85m in length may not require a Pilotage Exemption Certificate. These vessels shall, however, be subject to assessment with a pilot on-board when they first arrive to commence work on the contract.

#### 3.15.5 Towage Directions

- 3.15.5.1 These towage directions are subject to amendment when necessary by the FCBC Marine Liaison Officer, as advised by the FCBC Tug User Group, to reflect adverse environmental or other conditions, or to account for vessel defects.
- 3.15.5.2 All FCBC owned or contracted tugs will be required to be in possession of a Forth Ports Towage Licence prior to undertaking any towage operations.

#### 3.15.6 'Escort' Towage

- 3.15.6.1 During certain stages of construction it will be necessary for vessels proceeding to / from facilities to the west of Rosyth to make passage to the North of Beamer Rock. This passage, for larger vessels, induces a greater navigational risk which will be mitigated, when directed by the Port Authority, with the provision of an Escort Tug.
- 3.15.6.2 Tugs will be allocated to 'Escort' duties on the FCBC daily movements programme. Where shown as "Passive", tugs will generally not be secured but deployed as agreed by the Pilot and Master. All tug masters are to ensure they fully understand the requirements of the Pilot and Master before commencing any 'Escort' duty.

# 3.15.7 Harbour (Berthing / Unberthing) Towage

- 3.15.7.1 FCBC tugs and other approved vessels will routinely move barges and pontoons within the port area and to the off-shore construction sites. These operations will be directed by the Marine Liaison Officer and detailed within the FCBC daily movements programme.
- 3.15.7.2 Standard towing guidance and methods have been worked up and approved by the Towage User Group. These are the basis for safe towing operations and are to be used at all times. Where a deviation from these guidelines is being considered any proposed deviation must be agreed with the Marine Liaison Office prior to the deviation being implemented.



#### 3.15.8 Towing in restricted visibility

- 3.15.8.1 Towing in restricted visibility (e.g. when visibility is 400m or less) presents hazards to the tugs over and above those encountered in normal conditions but can nevertheless be achieved safely if proper precautions are taken.
- 3.15.8.2 In normal course the Forth Port regulations are such that movements are likely to be postponed due to restricted visibility before it becomes a particular issue for towage. Other circumstances (e.g. tow has commenced or an emergency occurs) may however drive consideration of such movements in poor visibility.
- 3.15.8.3 For a situation to arise where towing is to be undertaken in severely restricted visibility then the variability of parameters makes it unlikely that anything other than a dynamic risk assessment and management process is likely to be adequate. In such circumstances the FCBC Marine Liaison Officer, FTNS and Tug Masters shall be involved in the risk assessment process and shall determine the appropriate course of action.
- 3.15.8.4 A Tug Master retains the right not to secure for towing if he is not content that risks have been appropriately mitigated. Should this be case, the Tug Master concerned must make this clear to the FCBC Marine Liaison Officer, Pilot /Master if on 'Escort' duties, or Barge Master before the move is commenced. The risk assessment shall consider:
  - Whether the movement is essential:
  - Tidal and other environmental conditions;
  - The capabilities of the vessel and tugs involved and experience of their crews;
  - The berth location and adjacent vessels;
  - Contingency plans including in case of a tug disengaging due to the Tug Master considering the tug or crew to be in danger.

#### 3.15.9 Ro-Ro operations

- 3.15.9.1 FCBC Ro-Ro vessel guidance shall be produced in consultation with the Work Boat Working Group and is designed to ensure the safe conduct of Ro-Ro operations.
- 3.15.9.2 Specific Risk assessments shall be carried out for these operations and cover in detail berthing and vehicle loading/off-loading operations.
- 3.15.9.3 Due to the changing conditions and the requirement to continue to deliver construction material to off-shore sites - the dynamic risk assessment process by the master of each Ro-Ro vessel will be an essential part of the safety of operations. This risk assessment must consider:
  - · Weather conditions (sea-state primarily) at the intended berth;
  - Vessel manoeuvring characteristics;
  - Suitability of conditions to load/off-load vehicles;
  - · Stability of vehicles on the vessels;
  - Safety of the vessel, safety of the crew and that of the receiving platform.



3.15.9.4 The Ro-Ro vessels are to be operated in accordance with the owners shipboard operating procedures and FCBC Ro-Ro Guidelines.

#### 3.15.10 Work-boat operations

- 3.15.10.1 Work-boat guidance is produced in consultation with the Work Boat Working Group and is designed to ensure the safe conduct of work-boat operations. Work-boats - and in particularly Multi-cats - add a flexible capability within the marine construction environment.
- 3.15.10.2 The work-boats will be engaged in operations ranging from anchor handling, through lifting to the delivery of logistic services. Anchor plans shall be determined by the Marine Architect.
- 3.15.10.3 Each routine operation will be covered by a standard vessel risk assessment and procedures. Any unique or complex task will require an individual assessment and procedures. Notwithstanding the aforementioned, the completion of crew briefings and 'toolbox talks' are an essential safety vehicle and are to be conducted by Masters prior to the commencement of each task.

#### 3.15.11 Construction crew transfers

- 3.15.11.1 Crew transfers shall be required from the quayside to vessels and from vessels to other vessels, pontoons, barges and structures. Wherever reasonably practicable these will be conducted without use of fixed ladders which shall only be used as a means of access and egress of last resort. Where use of a fixed ladder is being considered this shall be the subject of a specific risk assessment.
- 3.15.11.2 During normal marine operations access and egress shall be by means of gangways or other means of personnel transfer which minimise the risk of injury to personnel being transferred.

#### 3.15.12 Diving

- 3.15.12.1 Diving operations may be undertaken in both open waters and enclosed areas including caissons and cofferdams as part of the marine works.
- 3.15.12.2 Diving operations shall be conducted in line with an appropriate Diving Plan.
- 3.15.12.3 The Diving Plan shall be submitted to FCBC for review and comment in advance of the diving operation and no diving shall be permitted without prior authorisation from both FCBC and Forth Ports.
- 3.15.12.4 A Forth Ports *Diving Permit to Work* shall be required to be in place, and authorisation granted both by FCBC and Forth Ports, before any commercial diving operation may be commenced. A copy of this Permit, the Dive Plan and supporting documentation shall be available for inspection at the dive site.



#### 3.15.13 Explosives

- 3.15.13.1 Explosives shall be used during elements of rock blasting on both the marine based and land based works.
- 3.15.13.2 No explosives shall be stored either at an FCBC workplace or premise during the term of the project. Explosives shall be obtained and managed through procurement of a licenced user and carrier of explosives. The amount of explosive brought to site will be for the bespoke element of work for which it is required and shall be transported, placed and detonated.
- 3.15.13.3 A clear and defined transportation plan will be invoked for the journey of the explosives through the project site, to the harbour and to the place of use.
- 3.15.13.4 All protocols for the safe use and delivery of the explosive material shall be under the direct control of the contractor. No FCBC staff shall interfere or delay the contractor in the purpose of works, unless a clear risk to life is witnessed.
- 3.15.13.5 FTNS will be made aware of the following via the Marine Liaison Officer:
  - Special Movement Request.
  - The amount and type of explosive in kilogrammes and type of detonator.
  - The estimated time of arrival in the port area.
  - The time expected to load the vessel and secure the material for transit.
  - Request a safe working distance from other vessels and invoke protocols as necessary from FTNS.
- 3.15.13.6 In the event of a 'Misfire' or any significant non planned event associated with the blast then the contractor shall inform the Master of the vessel they are working from and the Marine Liaison Officer shall notify FTNS, the Maritime Coastguard Agency and the FCBC Health and Safety Manager.
- 3.15.13.7 The FCBC Health and Safety Manager shall inform the Health and Safety Executive of the 'Misfire'.
- 3.15.13.8 The cascade of a misfire will activate the Gold, Silver and Bronze Incident Management arrangements via the Marine Liaison Officer. Unless otherwise directed by Forth Ports, management of FCBC marine emergencies shall be directed from the FCBC offices within the Exmouth Building.
- 3.15.13.9 Incident protocols and arrangements will then be invoked to deal with the incident in the most expedient way to return the project to new normality.



# Appendix 1

Form F10 (Rev)



**JACOBS** 

ARUP

# **Notification of Construction Project**

Jacobs CDM Co-ordinator Project No:

Forth Replacement Crossing Principal Contract

B090000

The Data Protection Act 1998 required the Health and Safety Executive (HSE) to inform you that this form may include information about you (this is called 'personal data' in the Act) and that we are a 'data controller' for the purposes of this Act. HSE will process these data for health, safety and environmental purposes. HSE may disclose these data to any person or organisation for the purpose for which it was collected or where the Act allows disclosure. As data subject, you have the right to ask for a copy of the data and to ask for any inaccurate data to be corrected.

#### 1. Guidance notes for completion - Please complete in block capitals using black ink

What should this form be used for

- To notify the enforcing authority for the Construction (Design and Management) Regulations 2007 of any project that is likely to last longer than 30 days or involve more than 500 person days of construction work.
- Any day on which construction work is carried out (including holidays and weekends) should be counted, even if the work on that
  day is of short duration.
- . A person day is one individual, including supervisors and specialists, carrying out construction work for one normal working shift.
- · Construction work for a domestic client is not notifiable.

Who should use this form

. The CDM co-ordinator for the project.

Where to send the completed form

- F10 Scanning Centre, Health and Safety Executive, c/o Central Despatch, Redgrave Court, Merton Road, Bootle, Merseyside L20 7HS.
- If the notifiable work is on an operation railway, the notification should be sent to the Office of Rail Regulation. You can get the address by contacting HSE's Infoline, Tel: 0845 345 0055.

When to send this form

As soon as practicable after the CDM co-ordinator for the project is appointed by the client.

A Name of the Local Authority where the site is located

2. Notification	type		
Is this the initial no	tification of the project or are you pro-	roviding additional info	ormation not previously available
	Initial Notification	$\boxtimes$	Additional Information
3. Date of forw	arding this notification or p	rovision of additi	ional information?

23<sup>rd</sup> June 2011

4. Name of the Local Authority where the Site is located					
Edinburgh, Fife and West Lothian Councils					

5. Address of the construction site (Mandatory fields are marked with an asterisk(\*))

Town\* North and South Queensferry

County Edinburgh and Fife

Country\* England Wales Scotland Postcode\*



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6 a.	6 a. Project type - IMPORTANT: Please select ONE checkbox only from this page						
For mixed projects please tick the box that reflects the primary element of the work. Additional information may be provided on the following page in section 6 b.							
	Not Required		Asbestos		<b>Building Services</b>		Utilities Work
	Painting&Decorating		Road & Path		Site Investigation		Telecom. Towers
	Tunnel		Water Project		Other		
Den	nolition/Dismantlir	ng					
	House		Factory		Chimney		Railways
	Other						
Med	hanical & Electric	al (M	& E)				
	Installation		Repair				
Roc	fwork Repair						
	Residential		Commercial		Other		
Gro	undworks						
	Piling		Tunnelling		Underpinning		Other
New	Build - Civil Engi	neer	ing				
$\boxtimes$	Bridge		Road		Waterway		Docks
	New Build - Railways				New Build - Other		
New	/ Build - Commerc	ial P	remises				
	Shop		Warehouse		Factory		Other
Nev	/ Build - Residenti	al Pr	emises				
	Houses 0 - 5		Houses 5 - 10		Houses 10 - 20		Houses > 20
	Flats 0 – 5 Storey		Flats 5 – 10 Storey		Flats 10 – 20 Storey		Flats > 20 Storey
	Other						
Refurbishment (including Repair & Redecoration)							
	Commercial		Residential		Railway		Other
Ref	urbishment (inclu	ding	Repair & Redeco	ratio	n) - Civil Enginee	ring	
	Bridge		Road		Waterway		Docks
	Other						



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# 6 b. Please provide a brief description of the project and the construction work it includes $^\star$

The Contract has been procured as a design and build contract

The proposed scheme comprises a new cable stayed bridge, approximately 2.7 km in length; approximately 3.6km of new mainline carriageway and 1.8 km of upgrades to existing mainline carriageway.

The key elements are:

- . Mainly online upgrade of the A90 south of the Admiralty Junction to Ferry Toll Junction;
- · Reconfigured Ferrytoll Junction and associate side road realignments and improvements
- . A new bridge to the west of the existing Forth Road Bridge
- New mainline carriageway from the southern abutment running west of South Queensferry to a new junction with the A904 ( Queensferry Junction)
- A new mainline carriageway from Queensferry Junction running to the south of South Queensferry before rejoining the existing A90 west of Scotstoun

IMPORTANT: You MUST complete the CDM Co-ordinator details.

Mandatory fields, marked with an asterisk (\*), must be completed for every contact provided.

#### 7. CDM co-ordinator contact details

Name*	David Petrie						
Address Name	Jacobs Arup JV						
Street*	160 Dundee Street						
District							
Town*	Edinburgh						
County	Midlothian						
Country*	England Wales Scotland Postcode* EH11 1DQ						
Telephone	0131 659 1598						
Email Address*	David.petrie@jacobs.com						

# 8. Principal contractor contact details

Name*	Carlo Germani						
	Forth Crossing Bridge Constructors (Construction Joint Venture: Dragados – Hochtief - American Bridge International - Morrison Construction)						
Address Name	FCBC Project						
Street*	Arrol House						
	Viking Way						
Town*	Rosyth, Dunfermline						
County	Fife						
Country*	England Wales Scotland Postcode* KY11 2UT						
Telephone	0044 132 449 6000						
Email Address*	carlo.germani@hochtief.co.za						



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9. Client contact details						
Name*	The Scottish Ministers acting through David Climie, Transport Scotland					
Address Name	Buchannan House					
Street*	58 Port Dundas Road					
District						
Town*	Glasgow					
County	ÿ.					
Country*	England Wales Scotland Postcode* G4 0HF					
Telephone	0141 272 7100					
Email Address*	David.climie@transportscotland.gsi.gov.uk					
10. Name and	address of any designers already engaged					
Name*	FCBC Design Joint Venture (Ramboll – Grontmij – Gifford – Leonhardt, Andra and Partners)					
Address Name	DJV Project Director Peter Curran					
Street*	Arrol House					
District	Viking Way					
Town*	Rosyth, Dunfermline					
County	Fife					
Country*	England Wales Scotland Postcode* KY11 2UT					
Telephone	+44 (0)131 550 6300					
Email Address*	Peter.Curran@Gifford.UK.com					
11. Name and	address of any contractors already appointed					
Name*	TBA					
Address Name						
Street*						
District						
Town*						
County						
Country*	England Wales Scotland Postcode*					
Telephone						
Email Address*						



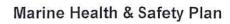
**JACOBS** 

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12. Time allo	wea						
Time allowed by	the client to the principal contractor (co	ntractor referred to	in regulation 15(l	b)) for the			
planning and preparation for construction work:		30	Days	Days			
	8/		ų.				
13. Please gi	ve your estimates of the follow	ing:					
Planned date for the start of the construction phase*		Advanced works and investigations July 2011					
		Network connections South July 2011					
		Main crossing: October 2011					
Planned duration of the construction phase*		276	Weeks				
Maximum number of people at work on site at any one time		750	Y.				
Planned number of contractors on the site		40					
14. Please fill in the following sections if you have additional addresses that you need to let us know about							
Specify the type	of contact*: Client	Designer		Contractor			
Name*	Ramboll	•					
Address Name	DJV Project Director Peter Curran						
Street*	Arrol House						
District	Viking Way						
Town*	Rosyth, Dunfermline						
County	Fife						
Country*	England Wales	Scotland	Postcode*	KY11 2UT			
Telephone	+44 (0)131 550 6300						
Email Address*	Peter.Curran@Gifford.UK.com						
Specify the type of contact*:  Client  Designer  Contractor							
Name*	Grontmij						
Address Name	DJV Project Director Peter Curran						
Street*	Arrol House						
District	Viking Way						
Town*	Rosyth, Dunfermline						
County	Fife						
Country*	England Wales	Scotland	Postcode*	KY11 2UT			
Telephone	+44 (0)131 550 6300		54.				
Email Address*	Peter.Curran@Gifford.UK.com						



JACOB	55			ARUP			
Specify the type of	of contact*: Client	□ Designer     □ Designer	gner	Contractor			
Name*	Gifford						
Address Name	DJV Project Director Peter Curran						
Street*	Arrol House						
District	Viking Way						
Town*	Rosyth, Dunfermline						
County	Fife						
Country*	England Wales	Scotland	Postcode*	KY11 2UT			
Telephone	+44 (0)131 550 6300		*				
Email Address*	Peter.Curran@Gifford.UK.com		***				
Specify the type of contact*: Client Designer Contractor							
Name*	Leonhardt, Andra und Partner		11				
Address Name	DJV Project Director Peter Curran						
Street*	Arrol House						
District	Viking Way						
Town*	Rosyth, Dunfermline						
County	Fife						
Country*	England Wales	Scotland	Postcode*	KY11 2UT			
Telephone	+44 (0)131 550 6300						
Email Address*	Peter.Curran@Gifford.UK.com						
<ul> <li>15. Declaration (*delete as appropriate)</li> <li>On behalf of the client, I hereby declare that the client is aware of / I have made the client aware of their duties under the Construction (Design and Management) Regulations 2007 (S.I. 2007/320).</li> </ul>							
	ehalf of the Client	Role	CDM Coordinator	•			
	Petre.	Date	23 <sup>rd</sup> June 2011				
Name	David Petrie	1:					





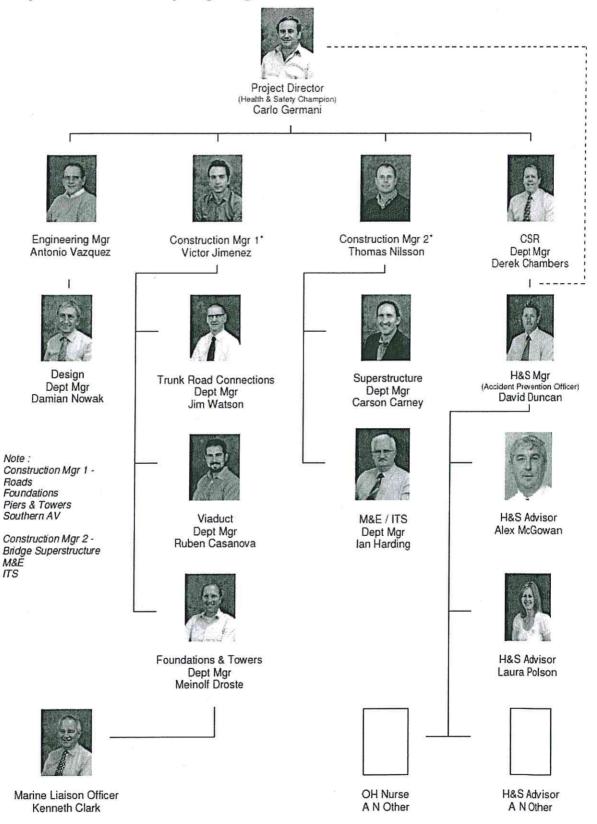


# Appendix 2

# Project Health & Safety Organogram



# Project Health & Safety Organogram





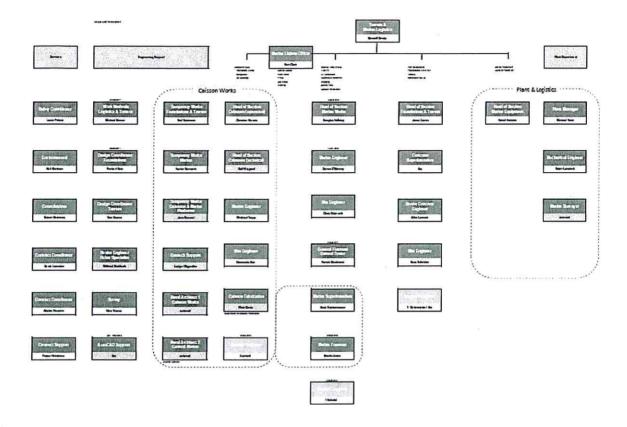
# Appendix 3

# Marine Operations Organogram



FORTH REPLACEMENT CROSSING ORGANISATION CHART-Towers & Marine Logistics (Jan 2012- Apr 2012)







# Appendix 4

# Construction Programme & Schedule of Method Statements

(Initial documentation)

Relevant updates will be stored on the EPLASS document control system or the 'T' Drive of the Project server



# The schedule of key tasks as outlined in Contractor Method Statements as per the Employer's Requirements

Whilst every effort will be made to ensure the schedule within this Plan is kept up to date the most up to date schedule is maintained on Form FM-CON-102 within the Project Management Plan.

#### Volume 2 ITPD Instructions

# 3.6.7 Contractor's Method Statements

The month represents each Method Statement's commencement as shown in the programme

ROADWORKS		<u>MONTH</u>
	Note: Will include, but not limited to, surfacing and waterproofing)	
NOF		
	INECTION  Construction of Foundall Violatust (FTO)	0.4
1.	Construction of Ferrytoll Viaduct (FT01)	21
2.	Construction of Earth Embankment Ch 71+00 to 72+50	17
3.	Construction of New B981/Rosyth Railway Bridge (FT05)	11
4.	Demolition of Existing South Ferrytoll Underbridge (FT06E)	46
5.	Demolition of Existing North Ferrytoll Underbridge (FT07E)	46
6.	Construction of Ferrytoll Tunnel Extension (FT08E)	34
7.	Construction of A90 central Reserve Retaining Wall (FT16)	46
8.	Construction of Southbound Merge Retaining Wall (FT11)	53
9.	Construction of Southbound Diverge Retaining Wall (FT12)	49
10.	Upgrade of Existing Jamestown Viaduct (FT13E)	43
11.	Construction of A90 Northbound Bus Lane Retaining Wall (FT15)	28
12.	Construction of Ferrytoll Gyratory North Bridge (FT03)	36
13.	Construction of Ferrytoll Gyratory South Bridge (FT04)	37
14.	Works to Existing B980 (Castlandhill Road) Railway Bridges	35
15.	Construction of Ferrytoll Gyratory Railway Bridges (FT9E & FT10E)	37
16.	North Tie-in (ch 80+00 to 92+00)	62
sou	· TH	
	NECTION	
17.	Existing Dunfermline Wynd Overbridge (FT14E)	41
18.	Demolition of Existing B800 Bridge	48
19.	Construction of New B800 Bridge (ESQ04 & ESQ11)	16
20.	Construction of South Queensferry Gyratory North Bridge (ESQ02)	41
21.	Construction of South Queensfery Gyratory South Bridge (ESQ03)	41
22.	BP Gas Pipeline – Protection Measures	10
23.	Upgrade of existing Dalmeny Railway Bridge (ESQ09E)	39
24.	Upgrade of existing Standingstane Underpass (ESQ10E)	39
25.	South Tie-in	63
20.		-
ABU'	TMENTS	
26.	Construction of North Abutment (North Viaduct)	26
27.	Construction of South Abutment (South Viaduct)	19



GENE	RAL	MONTH
28.	Fencing – General	Ongoing
29.	Site Clearance – General	5
30.	Earthworks – General	4
	∘ Cut	
	• Fill	
	<ul> <li>Piled Embankment</li> </ul>	
31.	Drainage – General	5
	<ul> <li>Pre-earthworks drainage</li> </ul>	
	<ul> <li>Carriageway drainage</li> </ul>	
	∘ Gullies	
	∘ Ponds	
	° Culverts	
32.	Kerbing - General	51
33.	Pavement Construction – General	37
00.	• Main carriageway	
	Side roads & associated works	
34.	Safety Fencing - General	Ongoing
35.	Intelligent Transport Systems (ITS) – Installation, Testing and	31
	Commissioning and Interface with Others	
	Electrical/cabling works	
	•	
	Signage	
	Gantries	
	<sup>a</sup> Hardstandings	
36.	Traffic Signs and Road markings – General	47
37.	Street Lighting – General	44
38.	Accommodation works (complex)	Ongoing
39.	On-site painting	25
40.	Construction Traffic Control	Ongoing
	<ul> <li>Principle material supply routing</li> </ul>	
41.	Access installation and commissioning	49
	∘ Elevators	
	Maintenance Gantries	
42.	Port Edgar Barracks	10
	<ul> <li>Construction and removal of access</li> </ul>	
43.	MEP systems	49
	<ul> <li>Installation</li> </ul>	
	<ul> <li>Commissioning</li> </ul>	
44.	SHMS	51
	Diversions - General	
45.	Scottish Water	2
46	Scottish Power	2



		MONTH
47.	Scotland Gas Networks (high pressure)	2
48.	Scotland Gas Networks (low/medium pressure)	2
49.	British Telecom	2
50.	Cable & Wireless Worldwide	17
51.	Trafficmaster	Ongoing
52.	BP	10
SITE	PREPARATION AND TEMPORARY MEASURES	
53.	Demolition and relocation of existing Lighthouse on Beamer Rock	8
MAF	RINE WORKS	
54.	Marine Management Plan	Ongoing
	Operational Schedule	
	∘ Pilotage	
	∘ Navigational Safety	
55.	Excavation and Backfill (Temporary works)	12
	<ul> <li>Dredging works</li> </ul>	
56.	Temporary access trestle North	21
57.	Temporary access trestle South	4
FOU	NDATIONS	
CEN	TRAL TOWER FOUNDATION ON BEAMER ROCK	
58.	Excavation of hardrock	8
59.	Temporary sheet pile supported cofferdam	13
60.	Structural concrete including Concrete Curing	13
61.	Remodelling foundation of the Central Tower by natural stone paving	15
FOU	NDATIONS OF NORTH TOWER, SOUTH TOWER AND S1	
62.	Seabed preparation / Pre-dredging	12
63.	Piling works - construction of dolphins	14
64.	Lowering of caissons including excavation	14
65.	Jet grouting works below periphery of the caisson	16
66.	Depressurization wells into existing ground below base level	18
67.	Cleaning the rock surface prior to placement of concrete	18
68.	Placement of underwater concrete	19
69.	Roller Compacted Concrete	19
70.	Structural concrete including Concrete Curing	19
71.	Removal of upper part of caisson prior to completion	52



FOU	NDATIONS OF MARINE PIERS N1 AND S2 TO S5 BY SPREAD FOOTING	MONTH
72.	Temporary sheet pile wall	17
73.	Structural concrete	19
74.	Removal of upper part of sheet pile wall prior to completion	51
75.	Excavation and preparation of founding strata	18
FOUI	NDATIONS OF LAND-BASED PIERS N2, S6 TO S8	
76.	Structural concrete including Concrete Curing	15
STEE	EL FABRICATIONS-CAISSONS	
77.	Permanent structure	8
78.	Temporary structure	8
PIER	S	
79.	Land piers	19
80.	Marine piers	26
TOW	ERS	
CEN.	TRAL TOWER	
81.	Marine access provision	10
82.	Principal temporary works	- 10
	<ul> <li>Platform at base</li> </ul>	
	∘ Tower crane	
	<ul> <li>Deck support structure</li> </ul>	
83.	Concrete construction	19
84.	Stay anchorage box erection	33
FLAN	NKING TOWERS	
85.	Marine access provision	13
86.	Principal temporary works	13
	<ul> <li>Platform at base</li> </ul>	
	∘ Tower crane	
	<ul> <li>Deck support structure</li> </ul>	
87.	Concrete construction	24
88.	Stay anchorage box erection	38
89.	ITS gantries at tower locations	60
APP	ROACH VIADUCT DECK	
90.	Deck steelwork fabrication	2
91.	Deck assembly	26
92.	Deck launching	29
93.	Approach viaduct slab and bottom flange concrete construction	28
94.	Expansion joint and bearing installation	28



CAB	LE STAY BRIDGE SUPERSTRUCTURE	MONTH
95.	Handling of segments	31
96.	Lifting of segments	31
97.	Alignment of segments prior to welding	31
98.	Welding procedure and test	32
99.	Noise	Ongoing
100.	Air Pollution	Ongoing
101.	In-Situ Composite deck placement in the Yard and in place once erected	31
102.	In-Situ transverse deck closure joints	31
103.	Safe working environment	Ongoing
	<ul> <li>Working at heights</li> </ul>	
	<ul> <li>Working in, over, or adjacent to water</li> </ul>	
	<ul> <li>Working around electrical equipment (welding)</li> </ul>	
104.	Instructing workers of safety working procedures	Ongoing
105.	Regarding evacuation of injured workers	Ongoing
106.	Site preparation, construction activities, and reinstatement of lands	5
	following completion of construction work	
107.	Survey and geometric control	Ongoing
108.	QC and QA with regards to structural steel fabricated for the project by	Ongoing
	different suppliers (fabricators)	
109.	Site QC and QA	Ongoing
110.	Crane and safety operations	Ongoing
111.	Erection of segments at the pylons, Piers S1, S2, N1, N2 and NA	18
112.	Deck steelwork fabrication, assembly, and transportation	6
	<ul> <li>Corrosion protection</li> </ul>	
113.	Stay cables	37
	<ul> <li>Production</li> </ul>	
	<ul> <li>Installation</li> </ul>	
	<ul> <li>Stressing</li> </ul>	
	<ul> <li>Adjustment</li> </ul>	
114.	Main span deck erection sequence	31
	<ul> <li>Construction loading control</li> </ul>	
	<ul> <li>Geometry control</li> </ul>	
	<ul> <li>Permissible environmental loading during operations</li> </ul>	
	<ul> <li>Temporary support measures</li> </ul>	
115.	Wind/noise barriers	46
116.	VRS	15
117.	Span closure at midspan	49



# Appendix 5

# Marine Safety Rules

The 'Marine Safety Rules' will be updated as appropriate and may be supplemented by rules governing requirements at specific work locations or sections of work.

Any such rules will be communicated during induction or supplementary briefings.



# Marine Safety Rules

The marine safety rules supplement the general site safety rules and apply specifically to work within the marine environment.

Vesse	Vessel Mast	Vessel Master's 8

- 1.1 All vessels shall operate under the command of a suitably trained Master and crew.
- 1.2 Vessel Master's shall have the competency and authority to be Master of any vessel under their command in line with UK MCA requirements.
- 1.3 This shall include a valid:
  - Standards of Training Certification & Watch-keeping STCW 95 training course;
  - Medical certificate;
  - Master's Licence being either a:
    - Boatmaster's Licence or MCA accepted alternatives;
    - Full MCA Master's Licence for the type of vessel.
- 1.4 Crew members shall be trained to STCW 95 and hold a valid medical certificate.

# 2 Pre-requisite to attending a Marine Induction - Workers

- 2.1 Successfully complete a Marine Survival Training Course acceptable to FCBC.
- 2.2 Attend the core Health and Safety Induction for the project.

# 3 Requirements for working in the marine environment

- 3.1 Attend the Marine Induction and be issued with an FCBC Marine Pass.
- 3.2 Have the appropriate PPE.
- 3.3 Have been trained in its fitting and use.

# 4 Where to go and what to do afloat

- 4.1 Access to Marine Yard
- 4.1.1 Only via authorised access security cabin / electronically operated turnstiles.

### 4.2 Access to the Marine Workplaces

- 4.2.1 Via FCBC berths only.
- 4.2.2 FCBC berths accessed via authorised routes only.

### 4.3 Boarding the Crew Boat

- 4.3.1 Permission to Board any vessel is at the sole discretion of the captain of that vessel.
- 4.3.2 FCBC authorisation to board a vessel is granted only on presentation of the FCBC Marine Pass and the Pass holder wearing the appropriate PPE, suitably adjusted.
- 4.3.3 Boarding may only be undertaken under the direction of the vessel's crew.
- 4.3.4 Maintain good hand holds with 'one hand for you and one hand for the boat'.
- 4.3.5 Listen to the safety briefing provided by the vessel's crew.

### 4.4 Underway

- 4.4.1 Remain seated.
- 4.4.2 Follow directions of the vessel's crew.



# 4.5 Disembarking

- 4.5.1 The captain of the crew transfer vessel and the barge master have discretion over whether a crew transfer can take place. Both must provide authorisation before a transfer can take place.
- 4.5.2 Follow directions of the vessel's crew
- 4.5.3 Personnel are responsible for remaining aware and alert to the environment and activities ongoing around them.

### 4.6 Work on or Near Water

4.6.1 Wear Lifejackets when within 3 metres of the quayside or an edge of a barge or pontoon.

# 4.7 Personal Protective Equipment

- 4.7.1 Core PPE requirements for the marine environment are:
  - Lifejackets to 275N CE Standard are required to be worn during vessel movements / transfer operations and when within 3 metres of the quayside or an edge of a barge or pontoon. These shall be of automatic operation. No automatic light is required;
  - Wet weather clothing to comply with EN 471 with waterproofness and breathing properties to comply with EN 343 - level 3;
  - Head protection to EN 397;
  - Foot protection to EN 345 incorporating toecap, mid-sole protection and ankle support;
  - Hand protection mandatory wearing of appropriate gloves from the specified range except where a:
    - o Specific task specifies a particular specification of glove to be worn; or
    - Risk assessment demonstrates that the wearing of gloves increases the risk associated with the task (e.g. during the use of a circular saw).
  - Eye protection to EN 166 except where a:
    - Specific task requires a particular specification of eye protection to be worn; or
    - Risk assessment demonstrates that the wearing of eye protection increases the risk associated with the task.
  - High visibility clothing to EN 471 Orange in colour.
- 4.7.2 Lifejackets should not be worn in conjunction with flotation suits. If flotation suits are to be worn then they should not be worn for transfer but can be donned once at the marine place of work outwith the 3 metre mandatory lifejacket zone.

#### 4.8 Accidents and Incidents

- 4.8.1 Any accident, near miss, dangerous occurrence or significant unsafe act or condition must be reported immediately to a relevant FCBC supervisor or manager.
- 4.8.2 Marine incidents as specified in Forth Ports Byelaws 24 (i.e. vessel has sunk or grounded) and 25 (i.e. vessel in collision, on fire, sustained damage or caused damage to other vessels or properties) or any other dangerous incidents or occurrences involving vessels should be reported as soon as possible to FTNS, the FCBC Marine Liaison Officer and the FCBC Health and Safety Manager.

# 4.9 Emergency Preparedness

# 4.9.1 Safety Boats

4.9.1.1 A sufficient number of safety boats shall be in attendance at appropriate positions / locations during work within the marine environment.



#### 4.9.2 Personnel in the Water

4.9.3 Should a worker either find themselves in the water or require to enter the water in an emergency situation they are required to consider their Marine Survival Training and act as a team to minimise the risk to life.

### 4.10 Inspection of Vessels

- 4.10.1 Vessels shall be inspected by the Marine Department to ensure they are fit for purpose before they are brought into use.
- 4.10.2 A record of these inspections shall be maintained.

#### 4.11 Vessel Movements

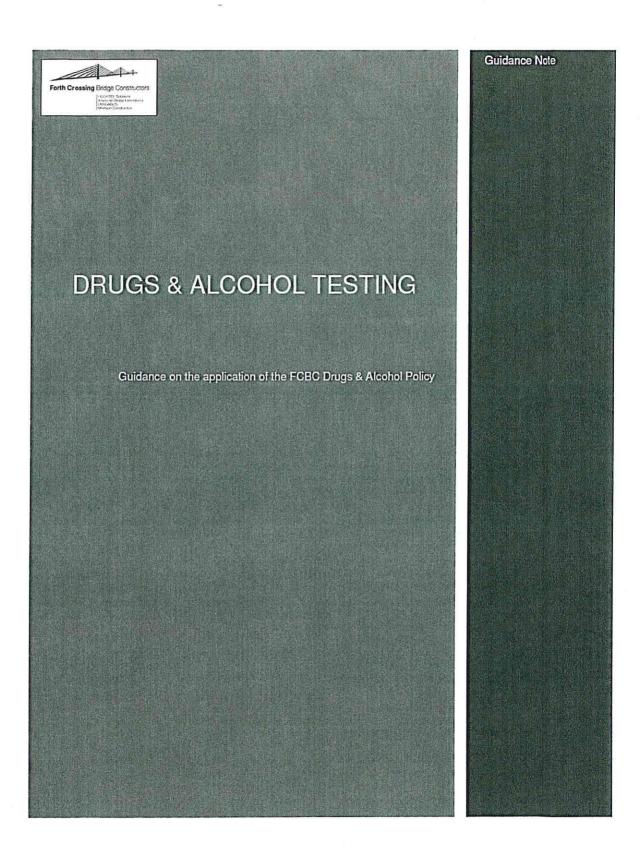
- 4.11.1 Vessel movements shall be in accordance with the FCBC daily movements programme.
- 4.11.2 This programme shall be issued at **14:00 hours (local) Monday Friday**. The programme for Saturday and Sunday will be issued on the preceding Friday.
- 4.11.3 Any **information for this programme** (i.e. notification re the following days activity) is to be with the Marine Office by **12:00 hours** (local) on the day of publication.
- 4.11.4 All vessels operating in the Firth of Forth are under the jurisdiction of Forth Ports Limited and in particular the control of the Forth and Tay Navigation Service (FTNS) whilst underway and making way.
- 4.11.5 All FCBC vessels must seek clearance to navigate from FTNS unless the vessel's movements start, finish and are at all times restricted to movement within the boundary of an FCBC off-shore construction exclusion zone. (i.e. Clearance to navigate is not required if an FCBC vessel is moving solely within the boundary of an off-shore construction exclusion zone.) Clearance is required from FTNS in all other circumstances.
- 4.11.6 Where FTNS clearance is required this must be sought a minimum of **5 minutes prior to getting underway**.
- 4.11.7 All FCBC vessels are to use the **approved navigation channel** when entering or leaving the Port of Rosyth.
- 4.11.8 All FCBC vessels shall navigate with caution in the Port of Rosyth turning basin and in the vicinity of berths at speeds of **6.5 knots** or less.
- 4.11.9 Unless specific approval has given in writing by the Forth Ports Limited Harbour Master all FCBC vessels are to observe the specified speed limit for the River Forth west of the Rail Bridge of 12 knots.
- 4.11.10 VHF radio communications with FTNS are detailed in the Admiralty List of Radio Signals Volume 6. Vessels must:
  - Maintain a listening watch on Channel 71 and report to FTNS when passing the reporting points as laid down in the General Directions for navigation as may be amended from time to time;
  - Use Channel 16 for calling other vessels or the shore station in the normal manner.
- 4.11.11 All vessels on FCBC related operations must use corrected up to date **charts** of the Forth and have them available on board for reference.



# Appendix 6

# Drugs & Alcohol Testing - Guidance









#### Purpose

This Guidance Note outlines the steps to be taken in Drugs and Alcohol Testing to implement the FCBC Drugs and Alcohol Policy.

- 1. Scope
- 1.1. Applies to the FCBC.
- 1.2. This enables all personnel employed by FCBC, its subcontractors, or third parties engaged in activity on site, to be subject to testing for drugs and alcohol. Testing will be undertaken in the following situations:
  - As part of an investigation to determine the cause of a safety related incident;
  - In the event of site management having reasonable suspicion that an individual has consumed alcohol, or has taken illegal substances;
  - As part of a structured programme of unannounced testing.

Note: For the purpose of this guidance note, the term "drugs" means all substances covered by the Misuse of Drugs Act 1971, and any subsequent legislation. (i.e.Health and Safety at Work etc Act 1974; Management of Health and Safety at Work Regulations 1999: Transport and Works Act 1992; Road Traffic Act 1988)

#### 2. Education

- Applicants for employment with FCBC sign that they have received a copy of the Alcohol and Drugs Policy with their Letter of Acceptance of Employment.
- 2.2. Parent company employees seconded to FCBC sign to acknowledge that they have received a copy of, and are subject to the Alcohol and Drugs Policy of FCBC.
- Subcontractors are provided with a copy of the Alcohol and Drugs Policy prior to commencing work on site. Subcontractors will sign as proof of receipt.
- 2.4. Employers and subcontractors sign for the briefing they receive on FCBC Alcohol and Drugs Policy as part of induction.
- 2.5. Education and information programmes on the misuse of alcohol and drugs are conducted on induction and regularly throughout the life of a project.
- 2.6. Employees will be encouraged to confidentially discuss with the occupational health provider, any new medication, or concerns they may have about their misuse of alcohol or drugs. Any such disclosure, prior to alcohol and drug screening, will be dealt with as a health problem.
- Selection For Testing
   Selection for testing will be made on the following basis:
- 3.1. For Cause Determination
- 3.1.1. Following specific safety related incidents, individuals directly involved or associated with circumstances leading to the incident will be identified for testing. The purpose of this testing is to assist in the establishment of the cause of the incident.





- 3.1.2. Specific safety related incidents are those resulting in, or having the potential for fatality, or major injury to our workforce, subcontractors, or the general public; those resulting in, or having the potential for major damage.
- 3.1.3. Persons so tested shall be suspended from work on full pay until a negative result has been confirmed. In the event of a positive result then the process detailed in paragraph 5.4 shall apply.
- 3.2. Suspicion of Influence
- 3.2.1. Any individual whose appearance or behaviour makes site management suspect that they are at their place of work having taken drugs, illegal substances, or alcohol, will be identified for testing.
- 3.2.2. Persons so tested shall be suspended from work on full pay until a negative result has been confirmed.
- 3.3. Unannounced Testing
- 3.3.1. The programme of unannounced testing will be implemented to achieve a target to test a minimum of between 5 and 10 % of the workforce per annum. Testing may be increased above this level subject to customer specific requirements and as deemed necessary on site.
- 3.3.2. Personnel for testing shall be identified using computer software to select individuals at random, on the basis of their site security pass number or employee number as appropriate.
- 3.3.3. At the beginning of each period, the computer will provide the random list of security pass or employee numbers identified for testing.
- 3.3.4. The days for testing in each period will be varied.
- 3.3.5. Individuals identified will not be advised until the start of their shift on the scheduled day for testing; they will be advised by the nominated manager.
- 3.3.6. Each individual will be asked to report to a nominated facility for the testing to take place (e.g. medical centre, first aid room, etc.). Each individual selected for testing shall be entitled to be accompanied by a representative of his / her choice from the workforce present on site that day.
- 4. Testing
- 4.1. Alcohol Testing
- 4.1.1. A proprietary electronic test meter will be used. The test will be carried out in accordance with the manufacturer's specific instructions.
- 4.2. Drugs Testing
- 4.2.1. All testing will be in accordance with company policies and UKASS standards.
- 4.2.2. On arrival at the nominated facility the employee selected for testing shall be required to complete the "Chain of Custody" form with informed consent and provide a urine sample.





- 4.2.3. The "Chain of Custody" Procedure is to ensure that the urine sample is secure in that it is untampered with from point of voiding to receipt at the laboratory. The "Chain of Custody" Procedure is implemented by trained collection officers who will:
  - Identify the donor;
  - · Obtain written informed consent;
  - Collect urine samples;
  - · Transfer urine sample to containers;
  - Label and seal containers and obtain employee's signature;
  - Dispatch container in a sealed package to an off-site laboratory for analysis.
- 4.2.4. The collection of the urine sample will be carried out using a proprietary collection kit in accordance with the manufacturer's specific instruction.
- 4.2.5. All samples shall be tested in an approved laboratory and laboratory test results shall be sent in the first instance to the JV Occupational Health Adviser.

#### 4.3. Results - Alcohol

- 4.3.1. The alcohol concentration relevant to this guidance is set out in the Road Traffic Act 1988 and is 35 microgrammes of alcohol in 100 millilitres of breath. This standard is adopted for the Forth Crossing project.
- 4.3.2. In the case of 'Unannounced Testing' if the level of alcohol measured is at or below the determined limit, the individual will be permitted to return to their place of work. In the case of Testing for Cause or Suspicion of Influence the individual will not be permitted to return to work until negative results have been confirmed for both alcohol and drugs.
- 4.3.3. All instances providing positive results shall result in disciplinary action.

#### 4.4. Results - Drugs

- 4.4.1. The laboratory report will be sent confidentially to the Occupational Health Adviser who will inform the respective Supervisor of the test results.
- 4.4.2. In the event of a positive result which will be deemed to be a trace of any illegal or undisclosed prescribed or "over the counter" drug, the employee will be suspended immediately and offered the opportunity to discuss the case with the FCBC nominated Occupational Health Physician/Adviser. A person who has been tested, who is an existing employee and who is then subject to disciplinary action will be permitted to appeal through the normal disciplinary process.

# 4.5. Challenging the Results

- 4.5.1. Persons tested have the right to challenge a positive test result and, at their own option and expense, have a separate confirmation test made on the specimens sent.
- 4.5.2. The Testing Laboratory will keep all positive drug test samples for one year.
- 4.5.3. An employee will not be allowed to submit another urine sample for test and analysis.



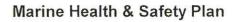


### 4.6. Refused Test

4.6.1. Compliance with the FCBC Policy is a condition of employment for all persons engaged on the Project and is also a condition of contract for all subcontract employees. Individuals who refuse to comply with the test requirements, will be considered as having failed the test. In such circumstances, the individual will be removed from the workplace and become subject to disciplinary action

#### 4.7. Records

4.7.1. Records of all individuals selected for testing and subsequent test results will be maintained in a secure manner by Occupational Health for the duration of the contract.







# Appendix 7

# Forth Ports Byelaws



# FORTH PORTS AUTHORITY FORTH BYELAWS

Forth Ports PLC, in exercise of the powers conferred by Part VI of the Forth Ports Authority Order 1969 and of all other powers them enabling, has made the following Byelaws for the Forth.

#### **PRELIMINARY**

1. These Byelaws may be cited as the Forth Byelaws

Litte

2. These Byelaws are divided into Parts as follows:-

Division into

Part I Interpretation.

Part II Lights, Daymarks, and Signals.

Part III Navigation.

Part IV Anchoring and Mooring.

Part V Miscellaneous.

Schedule Exemptions for Certain Pleasure Craft.

Appendix I Description of the limits of the Forth.

Appendix II Map of the Forth.

 Except in so far as is inconsistent with The Dockyard Port of Rosyth Order 1975 or such subsequent Order these Byelaws shall apply in the Forth including the Dockyard Port of Rosyth but excluding:

Application of

- (a) the area of Her Majesty's Dockyard, Rosyth, and the approach channel thence to a line joining Beamer Rock Light and the northern pier of the Forth Road Bridge, and.
- (b) those ports, harbours (including the precincts of such ports and harbours), piers and jetties, which, although within the Forth, do not belong to the Authority.

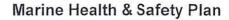
Nothing in these Byelaws shall be deemed to apply to vessels and servants of Her Majesty or of Her allies engaged in operations for defence purposes (as to which the Queen's Harbour Master, Rosyth, shall be the sole judge).

4. The exemptions appearing in the Schedule to these Byelaws shall apply to pleasure craft (other than pleasure craft used wholly or mainly for the carriage of passengers for reward) having an overall length of less than 12 metres.

certain pleasure craft

 The Collision Regulations apply in the docks and harbours of the Authority and in the Forth; provided that where there is conflict

Collision Regulations to be observed





between the said regulations and these Byelaws, the latter shall

Any person who offends against these Byelaws is guilty of an offence and liable to a fine not exceeding £400 (Four Hundred Byelaws 6.



#### Part I - Interpretation

7. **Definitions** The definitions contained in the Collision Regulations (except in so far as inconsistent herewith) shall apply for the interpretation of these Byelaws.

In these Byelaws the following words and expressions shall have the following meanings:-

"at anchor" when used in relation to a vessel means that she is attached to the ground by one or more anchors.

"The Authority" means Forth Ports PLC as Statutory Harbour Authority, Pilotage Authority and Local Lighthouse Authority.

"Bracfoot Marine Terminal" means the marine terminal and associated works situated between Bracfoot Point and Vault Point, Dunfermline District. Fife Region, in Mortimer's Deep at position – 56° 02'.10 North and 03° 18'.65 West

"berthed" when used in relation to a vessel means secured to land, premises or a wharf, pier, pontoon, stage, jetty, dolphin or river wall or bank, or secured to any other vessel so berthed.

"boat" means any open boat, skiff, dinghy, punt, racing shell or canoe, whether propelled by mechanical power, sail, oars or other means.

"by day" means between the hours of sunrise and sunset.

"by night" means between the hours of sunset and sunrise.

"Collision Regulations" means regulations for the prevention of collisions made under Section 85 of the Merchant Shipping Act 1995.

"commercial craft" means any vessel whether self-propelled or not which is engaged in trade, carrying passengers or goods, or attending on vessels, craft, floating plant or works for remuneration.

"daymark" means any flag, burgee, pennant, ball, shape, cone, cylinder, drum or any other object whatsoever of such colour, form, dimensions or character as are prescribed by these Byelaws to be exhibited by day whether singly or in combination by any vessel as a visual signal.

"docks and harbours of the Authority" means the docks and harbours of Burntisland, Grangemouth, Granton, Kirkcaldy, Leith, Methil and Newhaven, the Hound Point Marine Terminal and any other works which may from time to time belong to the Authority and includes the jetties, piers, quays, slipways and wharves of the said docks and harbours, marine terminal and other works and the recognised water approaches thereto.



"dredger" means any vessel, whether self-propelled or not, engaged in dredging, excavating, raking, breaking, drilling, boring, screwing or eroding or dispersing sand or other material in the Forth.

"fairway" means a navigable channel which is a regular course or track of shipping and, in particular, includes the recommended channel for deep draught vessels, as shown illustrated in Appendix II, between the Fairway Buoy and Grangemouth where such recommended channel is marked, dredged and maintained.

(Note: The Fairway Buoy is positioned at 56° 03'.50 North, 03° 00'.00West and is shown in Appendix II.)

"floating structure" means any non-propelled float, raft, pontoon, caisson, floating elevator, floating dock, floating crane, floating derrick, salvage lighter, pipelaying barge, oil rig, pumping platform or house-boat.

"the Forth" means so much of the river and the Firth of Forth, the estuary thereof and the sea as is within the limits described in Schedule I of the Forth Ports Authority Order Confirmation Act 1969 an extract of which is contained in Appendix I and as shown in Appendix II. (Map of the Forth).

"Forth Navigation Service" means the vessel traffic service operated by the Authority from the Harbourmaster's Office lying to the North of the lock entrance, Leith Docks, Edinburgh.

"Forth Railway Bridge" means the bridge used by rail traffic across the Forth linking the Regions of Lothian and Fife.

"Forth Road Bridge" means the road bridge across the Forth linking the Regions of Lothian and Fife.

"harbour craft" means any vessel which is normally employed within the partially smooth water limits of the Forth or within the port area of Methil for the carriage of goods or passengers or for towing, attending on ships, floating plant, construction works, wharves, jetties or for patrolling or inspection duties.

"harbourmaster" means the Harbourmaster appointed by the Authority and includes his authorised deputies and assistants.

"Hound Point Marine Terminal" means the marine terminal and associated works situated off Hound Point, West Lothian District, Lothian Region in position – 56° 00'.35 North and 03° 21'.68 West.

"hovercraft" means a vehicle which is designed to be supported when in motion wholly or partly by air expelled from the vehicle to form a cushion of which the boundaries include the ground, water or other surface beneath the vehicle.

"International Code of Signals" means the code adopted by the Fourth Assembly of the Inter-Governmental Maritime Consultative Organisation (IMO) in 1965 and any subsequent Amendments adopted thereafter.



"Kincardine-on-Forth Road Bridge" means the road bridge between Higginsneuck on the south shore of the Forth and Kincardine-on-Forth on the north side of the Forth.

"lighter" means any dumb barge or other like craft, without motive power, which is used for the carriage of goods.

"master" in relation to a vessel means any person having or taking the command, charge or management of the vessel for the time being.

"moored" when used in relation to a vessel means:-

- (a) made fast either ahead or astern or both at a mooring chain or buoy, or,
- (b) made fast both ahead and astern by anchors, or,
- (c) secured alongside another vessel so made fast.

"partially smooth waters" means the water area extending to the westmost limit of the Forth and lying to the west of an imaginary line drawn between Kirkcaldy on the north side of the Forth and Portobello on the south side.

"pleasure craft" means any vessel not used solely as a tug, dredger, pontoon or craft engaged in maintaining waterways or docks or wholly or mainly for the carriage of goods and includes any vessel of not more than 100 tonnes gross used wholly or mainly for the carriage of passengers for reward.

"prolonged blast" means a blast of from four to six seconds.

"Queen's Harbour Master" means the person for the time being appointed under the Dockyard Port Regulation Act 1865 to be Queen's Harbour Master for Rosyth and any person having authority to act as Queen's Harbour Master.

"speed boat" means any vessel less than 12 metres in length capable of exceeding a speed of 15 knots in still water.

"underway" when used in relation to a vessel means a vessel that is not at anchor or moored or made fast or aground and includes a vessel drifting up or down the Forth with her anchor on the ground.

"vessel" means every description of water craft, however propelled or moved, and includes a hovercraft, a hydrofoil vessel and any thing (whether in or under water) constructed or used to carry persons or goods by water and a seaplane on or in the water.

(Notes to Byelaws: The Notes appearing in Byelaws 11, 23 and 58 are for information only and do not form part of these Byelaws.)



### Part II - Lights, Daymarks and Signals

8. The master of any harbour craft which on account of her special departure or construction is unable to position lights or daymarks in the manner laid down in these Byelaws shall comply therewith as closely as the construction of the said craft permits.

Harbour Craft

9.:

Vessels moored

- (a) A vessel moored either singly or alongside any other vessel shall display the appropriate lights or daymarks required by the Collision Regulations to indicate a vessel at anchor. Provided that this Byelaw shall not apply to:-
  - lighters and floating structures lying at moorings which have been approved by the Harbourmaster;
  - (2) yachts moored or berthed in yacht-mooring areas which have been approved by the Harbourmaster;
  - (3) vessels used as hulks and moored fore and aft.
- (b) Any vessel used as a hulk shall exhibit such light or lights as the Harbourmaster shall from time to time order or direct.
- 10. Sound signals made by whistle mentioned in these Byelaws shall not be used on any other occasion or for any other purpose except those hereinmentioned or those from time to time authorised by the Harbourmaster.

Sound signals when to be used

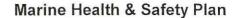
11. When a power-driven vessel, including a tug with a tow, is underway by night or by day and is about to turn around, she shall signify the same by four blasts of the whistle in rapid succession followed, if turning with her head to starboard, by one further short blast and, if with her head turning to port, by two further short blasts. Whilst turning the vessel shall repeat such signals at intervals of not more than two minutes.

Powerdriven vessel turning.

(Note: These sound signals are to be used only by vessels in sight of one another.)

12. A power-driven vessel underway which runs aground shall immediately signify the same by six short blasts in rapid succession on her whistle and shall repeat such signal at short intervals until she shall have exhibited the lights and daymarks or commenced to make the sound signals prescribed in the Collision Regulations to indicate that she is aground.

Powerdriven vessel aground gives six short blasts.





13. When a power-driven vessel under way by day or by night is for any reason unable to manoeuvre as required by these Byelaws, she shall signify the same to any approaching vessel within sight by sounding at intervals of not more than two minutes, three blast in succession, namely one prolonged followed by two short blasts.

Powerdriven vessel unable to manocuvry gives three blasts in succession.

14. It shall be the duty of the person in control of the diving operations to comply with the requirements of the Collision Regulations and the International Code of Signals in so far as they relate to diving operations.

Vessels employed in diving.

15. A vessel, having a draught in excess of 10 metres and navigating in the fairway west of the Fairway Buoy, may exhibit the lights or signals prescribed for vessels constrained by their draught in Rule 28 of the International Regulations for the Prevention of Collisions at Sea, 1972 as amended by Resolution A 464 (xii) of the International Maritime Organisation.

Deepdraughted vessels.

 A power-driven vessel about to enter a fairway from a dock, lock, basin, wharf, jetty or anchorage shall sound one prolonged blast.

Vessels entering a fairway,

 When the North Queensferry Signal Station Traffic Light is in operation no vessel shall pass under the North or South Arch of the Forth Railway Bridge.

Forth Railway Bridge

 A vessel intending to pass under the Bridge shall give one prolonged blast of the whistle.

Kincardineon-Forth Road Bridge.



### Part III - Navigation

19. Without prejudice to any directions issued by the Forth Navigation Service, the master of every vessel which trades to sea shall, whenever practicable, give prior notice to the Harbourmaster of that vessel's arrival, departure or movement.

Notice of arrival, departure or movement.

20. Vessels (other than vessels or boats engaged in rescue work) must keep clear and reduce speed when passing close to vessels and barges at the following anchorages and mooring buoys lying to the south of Burntisland.

Working anchorages and mooring buoys.

Anchorage B (2) 56° 02'.70 North, 03° 12'.85 West. Anchorage B (5) 56° 02'.88 North, 03° 13'.65 West. Anchorage B (2) 56° 02'.73 North, 03° 14'.17 West.

21. The master of every power-driven vessel underway shall either be on the bridge or control position of the vessel himself or ensure that there is on the bridge or control position a member of the crew who is capable of taking command of the vessel and, when a pilot is on board, is capable of understanding the pilot's directions.

Master or competent person to remain or bridge.

22. The master of every vessel shall navigate his vessel:-

Vessels to be navigated with care and caution.

- (a) with due care and caution;
- (b) at a speed and in a manner which shall not endanger the safety of any other vessel:
- (c) so as not to cause damage to any buoy, mooring or any other property, and;
- (d) so as not to endanger the safety of or cause any injury to any person.

In addition, the master shall ease the engines of the vessel when passing any other vessel employed in dredging, diving, underwater work, removing a sunken vessel, wreck or other obstruction, or working at any buoy or mooring.

23. The master of every vessel when navigating the Forth shall ensure that a careful lookout is maintained in order to avoid damage to fishing vessels, gear or nets. Signals for fishing vessels are specified in the Collision Regulations and should be observed by all vessels at all times.

Avoidance of damage to fishing vessels, gear or

(Note: Attention is drawn to the fact that fishing nets may extend up to a mile from the fishing vessel and that gear may cover a wide area.)



24. The master of a vessel which has sunk or has grounded shall forthwith give to the Harbourmaster notice thereof and of the position of such vessel and such particulars as may be required by the Harbourmaster for the safety of navigation and the prevention of pollution.

Notice to b given of position of sunken vessels.

25. The master of a vessel which has been in a collision or on fire, or has sustained damage or which has caused damage to other vessels or property shall give immediate notice of the incident to the Harbourmaster and where the damage to a vessel is such that it affects or is likely to affect her seaworthiness the master thereof shall not move the vessel, other than to clear the fairway or moor or anchor in safety, except with the permission of the Harbourmaster and in accordance with his directions.

Notice to be given of incidents.

#### 26. The master of a vessel :-

Notice to be given of damaged vessels.

- (a) which has sustained damage outside the area of the Authority which affects or is likely to affect her seaworthiness, or,
- (b) from which oil or some dangerous or flammable substance is escaping or likely to escape;

shall give notice thereof to the Harbourmaster and the vessel shall not proceed west of the Fairway Buoy 56° 03'.50 North, 03° 00'.00 West except with the permission of the Harbourmaster and in accordance with his directions.

27. A vessel whether under power or sail which is not confined to a fairway shall not make use of a fairway so as to cause obstruction to other vessels which can navigate only within such fairway and shall give such vessels a clear course and as wide a berth as safe navigation requires.

Vessels not to obstruct fairways.

28. Notwithstanding the Collision Regulations, no vessel shall enter or cross a fairway except when the fairway in the vicinity of the vessel is clear and only in such a manner as not to impede or endanger other vessels navigating in the fairway.

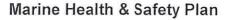
Vessels entering or crossing a fairway.

29. A vessel crossing, turning or manoeuvring in a fairway and for which the North Queensferry Signal Station Traffic Light is not in operation shall be navigated so as not to hamper, impede or cause damage to any other vessel.

Vessels manoeuvring not to hamper other vessels.

30. No person of less than 16 years of age shall be in charge of a power-driven vessel having a power unit installation in excess of ten horse power as rated by the manufacturer or having a potential speed in excess of 8 knots in still water.

Person in charge of vessel.





31. The master of a speed-boat shall be in a position where he can exercise proper control of the vessel and ensure that all persons in the vessel shall be safely seated and shall not ride or sit on the gunwales or decking of such vessel when under way.

Speed-boats

Water skiing and aqua-

planing.

#### 32.:

(a) No person or persons shall engage in water skiing or aqua-planing except with the permission of the Harbourmaster and only in such areas as he may designate after consultation with local authorities and in accordance with such reasonable conditions as he may impose.

(b) A vessel towing a person water ski-ing shall have on board a lifebuoy or other sufficient form of life preserver and two persons able to take charge of the vessel and to give such assistance as may be reasonable required during towing.

- (c) An internal combustion engine in a vessel used in connection with water ski-ing and aqua-planing shall be fitted with a silencer expansion chamber or other contrivance suitable and sufficient for reducing so far as may be reasonable the noise caused by the escape of exhaust gases from the engine.
- 33. Except in the case of rescue craft or in an emergency the master of a power-driven vessel shall not cause or permit his vessel to:-

Restrictions on towing and pushing.

- (a) push ahead one or more vessels where the total length of such vessels exceeds 60 metres unless the vessel is constructed for pushing operations and is approved by the Harbourmaster;
- (b) tow alongside more than one vessel at a time;
- (c) tow a vessel when pushing one or more vessels ahead;
- (d) push one or more vessels when towing another vessel alongside;
- (e) tow more than two vessels astern unless they are placed at least two but not more than three abreast in the tow;
- (f) proceed for more than 1,000 metres in a fairway when his vessel has in tow;-
  - (1) more than six other vessels;
  - (2) six or fewer other vessels and the distance between the stern of the towing vessel and the stern of the aftermost vessel in the tow exceeds 120 metres;
  - (3) three vessels abreast of each other and the total width of such vessels exceeds 20 metres.



#### 34.:

Hound Point Marine Lerminal,

- (a) Vessels must reduce speed if necessary and must not approach within 100 metres when passing vessels berthed at the Hound Point Marine Terminal.
- (b) No person other than a person authorised by the Authority shall approach within 100 metres of the terminal.

#### 35. :

Kincardineon-Forth Reidon

- (a) Only one vessel at a time shall approach the Bridge with the intention of passing under the Bridge.
- (b) In the event of vessels approaching the Bridge from opposite directions, the vessel or vessels from seaward shall have precedence. A vessel outbound from Alloa shall not pass a line 1,000 metres from the Bridge until it is evident that no vessel is attempting inward passage.
- (c) In the event of two or more vessels abreast or nearly abreast approaching the Bridge from the same direction the vessel to starboard shall have precedence and this precedence is to be given in sequence from starboard to port.
- (d) There is to be a distance of at least 600 metres between vessels when about to pass under the Bridge.
- (e) Vessels are to approach the Bridge at reduced speed which must not exceed 10 knots over the ground.
- (f) No vessel is to anchor in the fairway within 1,000 metres of the Bridge.
- (g) All other vessels are to keep out of the way of any vessel approaching the Bridge and intending to pass under the Bridge.
- Vessels must not approach within 100 metres of the main piers of the Forth Road Bridge.

Forth Road Bridge.

37. :

Bracfoot Marine Terminal,

- (a) No vessel shall enter Mortimer's Deep without the express permission of the Harbourmaster unless the vessel is destined for Braefoot Marine Terminal.
- (b) No vessel shall enter Mortimer's Deep when a vessel is berthed at the Braefoot Marine Terminal or when any vessel is bound for such Terminal or is manoeuvring in or in the vicinity of Mortimer's Deep. This byelaw shall not apply to a second vessel or harbour craft bound for such terminal except that the second vessel or harbour craft shall not enter Mortimer's Deep until the first vessel is securely berthed at such Terminal.



# Part IV - Anchoring and Mooring

38. :

(a) On the arrival of a vessel within the Forth, the master shall forthwith apply to the Harbourmaster for an anchorage, mooring or berth and shall not change such without his approval.

(b) Except with the permission of the Harbourmaster no vessel (other than a vessel or boat engaged in rescue work) shall use moorings in the control or possession of the Authority and not more than one vessel shall be placed at any one mooring.

 No vessel shall anchor in the Forth for the purpose of discharging or loading cargo, bunkering or taking water without the permission of the Harbourmaster.

Permission of harbourmaster required for discharge or loading of cargo, etc.

Master to apply for an

anchorage.

40. :

Vessels not to moor to piers.

- (a) Except with the permission of the Harbourmaster no vessel (other than a vessel or boat engaged in rescue work) shall be moored to, berthed at or remain at any pier or premises owned by the Authority.
- (b) A vessel shall move away from any pier or premises owned by the Authority when directed so to do by the Harbourmaster.
- 41. The master of every vessel which is berthed or moored shall ensure that such vessel is securely made fast and that her moorings are adjusted as and when necessary to allow for the rise and fall of the tide and for the loading and unloading of cargo or ballast.

Moorings to be tended.

42. The master of every vessel which is berthed shall ensure that the vessel is laid as close as possible alongside the land or premises at which she is berthed and that neither the vessel nor her moorings obstruct other vessels, nor hamper the use of the dock entrance, pier, where or jetty

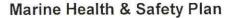
Vessels berthed to be layed close alongside.

43. Vessels shall not lie more than two abreast alongside the docks and harbours of the Authority without the permission of the Harbourmaster.

Vessels not to lie more than two abreast.

44. The master of every vessel which is berthed shall ensure that means are provided for safe access to and from the vessel.

Master of vessel at berth to ensure access to and from vessel.





45. The master of every vessel which is berthed or moored shall ensure that her engines are not worked in such a manner as to cause damage to moorings or other property.

Use of engines when berthed

**46.** Except in an emergency, no vessel shall anchor in a fairway or in any other area which has been designated a prohibited anchorage as shown on the largest scale Admiralty Chart published for the area.

Vessels not to anchor in a fairway.

 No vessel shall be immobilised for any purpose except with the permission of the Harbourmaster and subject to any conditions he may reasonably impose.

Immobilisation of vessels.

48. No private chain or chains shall be affixed to moorings in the control or possession of the Authority.

Private chain not to be fixed to moorings.

 No person shall set a vessel adrift or interfere with her moorings or fastenings.

Setting vessels adrift, interference with moorings.

 No person shall trespass on, make a vessel fast to, damage or interfere with any navigational buoy, light, beacon, seamark or tide board. Interference with buoys and marks.

51.:

Moorings.

- (a) No person shall lay down a mooring without the permission of the Harbourmaster and all such moorings shall be to such specification and in such a position as the Harbourmaster shall deem fit and shall be removed forthwith if the Harbourmaster so directs.
- (b) If the owner of any mooring shall fail to comply with any direction of the Harbourmaster to move or remove the said mooring, the Harbourmaster may on giving, where reasonably practicable, seven day's notice to the last known address of the owner, take such reasonable steps as he may think fit for the purpose of moving or removing said mooring.



#### Part V - Miscellaneous

52. The master of a vessel shall whenever so required by the Harbourmaster afford him access to any part of the vessel and all reasonable facilities for the inspection and examination of the vessel in order that the Harbourmaster may ascertain whether these Byelaws are being duly observed. The master shall provide the Harbourmaster with all relevant information concerning his

Harbourmaster's vessels.

53. A vessel which is nuclear-powered or a vessel with a cargo containing nuclear fuel or other radioactive matter shall not enter or leave the Forth unless the master or owner shall previously have obtained the permission of the Harbourmaster.

Notification of nuclear-powered vessel or radioactive carpoes.

#### 54. :

Notifying lost anchor, cable or propeller.

- (a) The master of a vessel which has slipped, parted from or lost any anchor, chain, cable, propeller or object over one tonne in weight shall forthwith give to the Harbourmaster notice thereof and, if possible, of the position of such anchor, chain, cable, propeller or object and if the Harbourmaster so directs shall cause such anchor, chain, cable, propeller or object to be recovered as soon as practicable.
- (b) A vessel slipping or parting from her anchor shall leave a buoy to mark the position of such anchor.
- 55. Every vessel when navigating the Forth shall have her name or identification numbers clearly painted or otherwise marked thereon.

Vessel to have

The master of a vessel which normally trades to sea shall not Competent 56. absent himself from such vessel unless he leaves in charge thereof some person who shall continue in charge of the vessel and shall be capable of moving or positioning the vessel and carrying out the instructions of the Harbourmaster when required so to do.

in charge.



57.:

Launches

- (a) No shipbuilder or other person (which persons are collectively hereinafter referred to as "the shipbuilder") shall launch or allow to be launched any vessel within the Forth unless the shipbuilder
  - (1) given the Harbourmaster at least twenty eight days' notice in writing of:-
    - (i) the size and tonnage of the vessel;
    - (ii) the date and hour at which it is proposed to launch the vessel; and,
    - (iii) the place at which it is proposed to launch the vessel;
  - (2) obtained the prior consent in writing of the Harbourmaster to such launch.
- (b) In launching or allowing to be launched any vessel the shipbuilder shall comply with the terms and conditions attached to any consent given by the Harbourmaster.
- 58. No person shall lay down any buoy or marker for, or organise, boat or yacht races in the docks and harbours of the Authority or in a fairway or in an anchorage or mooring area used by commercial craft without the prior approval of the Harbourmaster.

Boat or vacht

(Note: The approval of the Queen's Harbourmaster should be obtained for boat or yacht races within the Dockyard Port of Rosyth.)

59. No person shall cast, deposit or throw or cause or procure to be cast Rubbish not to deposited or thrown any dirt, rubbish, soil, ashes, plastic or other m Forth or on shore. or put or cause or procure or allow to fall or flow any offensive or injurious matter or thing whether solid or liquid into the Forth or up the shores of any part thereof. The provisions in this Byelaw shall n apply to the discharge or escape of any substance the discharge or escape of which is subject to the provisions of or exempted in terms an Act of Parliament.

60. No houseboat shall be berthed or moored within the Forth without the permission of the Harbourmaster.

Berthing or mooring of housebo

61. No person shall bathe in the docks and harbours of the Authority, where a notice is displayed by the Authority prohibiting such bathing.

Bathing.



62. No person shall without the written consent of the Harbourmaster exhibit an advertisement except:-

Advertisements.

- (a) an advertisement exhibited on a vessel by the owner of the vessel and in relation to his trade or business; or.
- (b) an advertisement exhibited on a vessel and not visible from the shore.
- 63. No unauthorised person shall move, deface or damage any notice, notice-board, lifebuoy, work or thing set up by the Authority or with its consent.

Damage to property.

64. No person shall place or leave unsecured on the shore anything that is likely to become an obstruction to navigation. Obstruction to navigation.

65. No person navigating the Forth or using the docks and harbours of the Authority shall:-

Disorderly behaviour.

- (a) use any obscene or offensive language to the annoyance of any person; or,
- (b) behave in a riotous, disorderly, indecent or offensive manner.

GIVEN under the Common Seal of the Forth Ports Authority.

W.A.C. THOMSON (CHAIRMAN)

G. RENWICK (SECRETARY)

These Byelaws were confirmed by the Secretary of State for Transport on the 24th November 1978 and amended by Byelaws confirmed by the Secretary of State for Transport on the 24th February 1981 and the 9th October 1987.



# Schedule

Exemptions for Pleasure Craft (other than pleasure craft used wholly or mainly for carriage of passengers for reward) having an overall length of less than 12 metres.

# BYELAW

# EXEMPTIONS

Byelaw 24 Notice to be given of position of sunken vessels. Byelaw 24 shall not apply to such pleasure craft unless such a pleasure craft is likely to constitute a danger to any other vessel.

Byelaw 25 Notice to be given of incidents.

Byelaw 26 Notice to be given of damage to vessels Byelaws 25, 26 and 38 shall not apply to such pleasure craft except at the docks and harbours of the Authority and in a fairway, or an anchorage or mooring area used by commercial craft.

Byelaw 38 Master to apply for an anchorage etc.

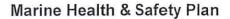
Byelaw 34 Hound Point Marine Terminal.

Byelaw 34 shall not apply to such pleasure craft provided such pleasure craft do not approach within 30 metres of the Hound Point Marine Terminal.

Byelaw 35 Kincardine-on-Forth Road Bridge. Paragraphs (a), (b), (c) and (d) of Byelaw 35 shall not apply to such pleasure craft except when a commercial craft is making passage under the bridge.

Byelaw 36 Forth Road Bridge. Byelaw 36 shall not apply to such pleasure craft.

Byelaw 37. Braefoot Marine Terminal. Byelaw 37 shall not apply to such pleasure craft provided such pleasure craft, whether propelled by power, sail or other means, reduce speed to as low as is practicable in the circumstances and they do not approach within 100 metres of vessels berthed at such Terminal.





Byelaw 44 Master of vessel at Berth to ensure access to and from vessel. Byelaw 44 shall not apply to such pleasure craft.

Byelaw 47 Immobilisation of vessels. Byelaw 47 shall not apply to such pleasure craft except at the docks and harbours of the Authority and in a fairway or an anchorage or mooring area used by commercial craft.

Byelaw 57 Launches. Byelaw 57 shall not apply to such pleasure craft except where such pleasure craft are to be launched within the docks and harbours of the Authority.

Byelaw 59 Rubbish not to be thrown into the Forth or on the shore. Byelaw 59 shall not apply to the toilets or sinks of such pleasure



# Appendix I

# Description of the limits of the Forth

Forth Ports Authority Order Confirmation Act 1969 - Schedule 1

The limits shall commence at a line drawn transversely to the River and Firth of Forth from a point on its west bank south of the West Pier at the Abbey Ferry at Stirling and shall extend down both banks of the River and Firth of Forth at a level of high water to a line drawn from the North Carr Beacon in the county of Fife to the South Carr Beacon in the county of East Lothian but excluding works constructed or owned by the Secretary of State for Defence on the bed of the Forth.

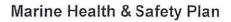
# NOTE: FORTH BYELAWS

On the 1st of April 2003 the Dockyard Port of Rosyth Order 1975 was revoked. Any reference to the area of Her Majesty's Dockyard Rosyth or Queens Harbour Master is no longer valid, responsibility and control of these areas, outside of the enclosed Dock at Rosyth, being devolved to Forth Ports Authority.

The North Queensferry Traffic Light referred to in Part I – Interpretation is no longer operational.

Part II - Lights, Daymarks and Signals, Byelaw No.17 is no longer valid.

Mariners should note that Forth Navigation Service is no longer located at Leith Docks but is now situated adjacent to the lock entrance at Grangemouth Docks. Forth Navigation Service has also been renamed Forth and Tay Navigation Service (FTNS).







# Appendix 8

# Forth Ports Emergency Plan



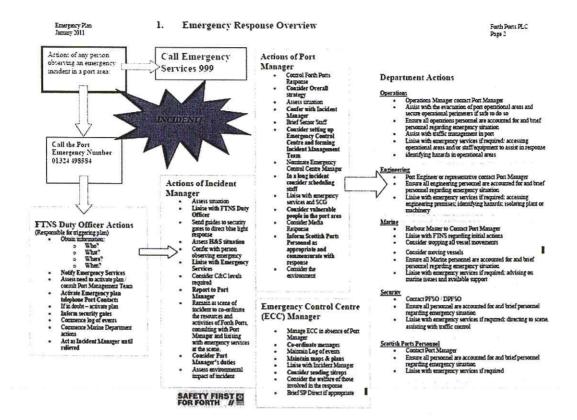
Emergency Plan Forth Ports PLC Scottish Operations & Marine January 2011



# Contents

- 1. Emergency Response Overview
- 2. Introduction
- 3. Scope
- 4. Plan Activation Phases and Trigger Points
- 5. Plan Activation Procedures
- 6. Response Strategies
- 7. Emergency Action Cards
- 8. Port Telephone Contacts
- 9. Escalation Procedure

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Forth Ports PLC Page 3

# 2. Introduction

- This plan is an operational document that is constantly being monitored and updated. Further
  information is contained in the Resilience Manual a copy of which is available in each port.
- Every incident will be different and the response will need to be flexible according to the circumstances of each case.
- The actions to be taken in an emergency include but are not restricted to those listed in this plan.
- This plan is based on risk assessment the detail of which is contained in the Resilience Manual.
- The training schedule to support this plan is in the Resilience Manual.
- · It is the responsibility of the Director of Scottish Ports to ensure that this plan is kept up to date.

# 3. Aim of Plan

The aim of this plan is to provide a framework for the response of Forth Ports Scottish Operations to an emergency incident affecting the Scottish Ports including vessels inside enclosed docks or alongside river berths.

# 4. Plan Activation Phases and Trigger Points

Phase	Trigger Point
Standby	Report that a 3st party has activated their emergency plan.  Notification of a minor incident that could escalate and require implementation of the plan.  Other circumstances where this response may be deemed appropriate including a warning from the emergency services that a response has been initiated to a hazard identified in the Community Risk Register.
Implementation	Notification by a Forth Ports employee, visitor, contractor, ship or tenant company of an emergency incident.  An incident taking place that requires implementation of the plan such as:  Fire  Explosion  Release of hazardous substances  Medical (serious injury or loss of life)  Marine road or rail incident  Confined space incident (entrapment)  Other circumstances where this response may be deemed appropriate.
Stand Down	An incident has been dealt with and a return to normality has been agreed by the responders

SAFETY FIRST



# 5. Plan Activation Procedures

Forth Ports PLC Page 4

On receiving notification of an incident the FTNS Duty Officer will take the following actions:

- Obtain as much information as possible from the persons reporting the incident:
  - o Who?

Name

o What?

Details of incident and any casualties

o Where?

Location

o When?

Time of incident

0 999

Confirm emergency services have been called

- Notify the emergency services
- Assess the need to activate the emergency plan (consulting with a member of the appropriate Port Management Team if practicable).
- If the decision is made to activate the plan inform the personnel listed in the Port Telephone Contacts (page 11) that "Emergency Plan Has Been Activated".
- · If in any doubt the FTNS Duty Officer will activate the plan.
- · Action following plan activation:
  - o Inform Security Gates
  - o Commence a log of events
  - o Commence Marine Department actions
  - o Act as Incident Manager until relieved

SAFETY FIRST FOR FORTH /



# 6. Response Strategies

Forth Ports PLC Page 5

# · Initial Actions

- o Call the Emergency Services.
- o Activate the emergency plan.
- Support and advise the emergency services to enable them to function effectively in the Port Area.
- Commence logging and recording events.

# · Further Actions

- o Maintain co-operation and co-ordination with emergency services.
- Mobilise resources.
- Establish effective decision-making.
- o Log and record events.

# · Return to Normality

- Assess situation.
- Confer with other agencies.
- o Stand down responders.
- o Consult BCM Recovery Plan in Resilience Manual

# Review

- o Gather Information.
- Debrief.
- o Update plans.





7. Emergency Action Cards

Forth Ports PLC Page 6

# Any Person Observing an Emergency Incident In a Port Area

# Call the Emergency Services

Dial 999 (fire, police or ambulance) Internal line (9) 999

# Call the Port Emergency Number

01324 498584: Internal line 8584

# Ships Contact `FTNS`

Telephone 44 (1324) 498584 VHF Channel 71 (Forth) Channel 12 (Tay)

# Give this information:

Who? Your name

What? Details of incident and any casualties

Where? Location of incident

When? Time of incident

SAFETY FIRST



# 7. Emergency Action Cards

Forth Ports PLC Page 7

# Incident Manager

(First staff member to attend or is already at scene)

- o Assess the situation
- o Liaise with FTNS Duty Officer / take over role of Incident Manager
- o Send staff to the security gates to act as guides for emergency services
- o Assess response via dynamic risk assessment
- Confer with the person at incident (usually the person who made the emergency call)
- Liaise with the emergency services at the scene.
- Consider the command and control levels required.
- o Report to Port Manager or in their absence with the Scottish Ports Director
- Remain at the scene of the incident to co-ordinate the resources and activities of Forth Ports consulting with Port Manager and liaising with emergency services at the scene
- o Consider Port Manager's duties.
- o Assess environmental impact of incident.





# 7. Emergency Action Cards

Forth Ports PLC Page 8

# Port Manager

Assess the situation

- Confer with the Incident Manager and review incident support
   Control Forth Ports` Response
- Consider overall strategy
- o Brief Port Team
- Brief senior staff in the form of Scottish Ports Director or in his absence Group CEO
- Consider setting up Emergency Control Centre in an appropriate location such as the Port or Harbour Office and forming an Incident Management Team.
- o Nominate Emergency Control Centre Manager
- o In a long incident consider scheduling staff to ensure sustainable response
- Liaise with emergency services at all levels
- o Consider vulnerable people in port area
- o Consider the media response
- Consider support from other Scottish Ports Personnel, eg Chief Harbourmaster, Resource Ops Manager, H&S Manager
- o Consider the environment

SAFETY FIRST E



# 7. Emergency Action Cards

Forth Ports PLC Page 9

# **Emergency Control Centre Manager**

(if Port Manager sets up Emergency Control Centre)

- o Manage Emergency Control Centre (ECC) in absence of Port Manager
- o Co-ordinate messages
- o Maintain log of events
- o Maintain maps & plans
- o Liaise with incident Manager
- o Consider sending situation reports to:
  - a) Port Team
  - b) Blue Light Services
  - c) Senior Officers of the Company
- o Consider the welfare of those involved in the response

SAFETY FIRST



### 7. **Emergency Action Cards**

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# Forth Ports Departments

Operations
Operations
Operations manager contact Port Manager
Assist with the evacuation of port operational areas and secure operational perimeters if safe to do so
Ensure all operations personnel are accounted for and brief personnel regarding emergency situation
Assist with raffic management in port
Liaise with emergency services if required:
Accessing operational areas
Identifying hazards in operational areas

Engineering
Port Engineer or representative contact Port Manager
Ensure all engineering personnel are accounted for and brief personnel regarding emergency situation
Liaise with emergency services if required:
Accessing engineering premises
Identifying hazards
Isolating plant and machinery

Health & Safety
Contact Port Manager
Ensure all H&S personnel are accounted for and brief personnel regarding emergency situation

Liaise with emergency services if required

Marine
Harbour Master to Contact Port Manager
Liaise with FTNS regarding initial actions taken
Consider stopping all vessel movements
Ensure all Marine personnel are accounted for and brief personnel regarding emergency situation
Taken with consequency sarvices if required:

Liaise with emergency services if required: Advising on marine related maners

Security
Contact PFSO / DPFSO
Ensure all personnel are accounted for and brief personnel regarding emergency situation
Liaise with emergency services if required
Direct to scene
Assist with traffic control

Scottish Ports Personnel
Contact Port Manager or in their absence Scottish Ports Director
Ensure all personnel are accounted for and brief personnel regarding emergency situation
Liaise with emergency services if required



### Port Telephone Contacts 8. First call - names in bold

Forth Ports PLC Page 11

Leith	Short codes in bold			
	Office	Mobile Short Code	Mobile	
Port Manager	0131 555 8760	5239	07730 541531	
Operations Manager	0131 555 8725	5221	07739 089463	
Port Engineer	0131 555 8794	5051	07801 619754	
Harbour Master	0131 555 8901	5037	07711 152655	
Dep Harbour Master	0131 555 8922	5005	07747 108271	
Console Controller	0131 555 8900	5283	07793 595433	
Security Gate Bath Road	0131 555 1930			
Security Gate Seafield	0131 555 1572			

Grangemouth

	Office	Mobile Short Code	Mobile
Port Manager	01324 49 8501	5215	07764 471515
Operations Manager	01324 49 8504	5287	07738 887864
Port Engineer	01324 49 8570	5052	07801 619755
Harbour Master	01324 49 8583	5059	07714 712264
Security Gate 1	01324 66 8436		
Security Gate 2	01324 66 8466		

Rosyth and Burntisland

	Office	Mobile Short Code	Mobile
Port Manager	01383 42 1802	5239	07730 541531
Operations Manager	01383 42 1801	5023	07714 825446
Engineering Manager	01383 42 1818	5184	07764472253
Harbour Master	0131 555 8901	5037	07711 152655
Dep Harbour Master	0131 555 8922	5005	07747 108271
Security Gate	01383 42 1809		07703 131436

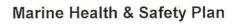
Dundee, Kirkaldy and Methil

	Office	Mobile Short Code	Mobile
Port Manager	01382 87 8130	5216	07739 655309
Operations Manager	01382 87 8149	5209	07793 594999
Port Engineer	01382 87 8150	5312	07894 259412
Grain Manager	01382 87 8154	5003	07860 420042
Harbour Master	01382 87 8141	5290	0789 4885250
Security Gate	01382 87 8132		

Scottish Ports Personnel

	Office	Mobile Short Code	Mobile
Scottish Ports Director	01324 668405	5032	07711 684313
H&S	01324 49 8470	5182	07764 472274
Occupational Health	01324 49 8550	5219	07739 924360
Personnel	01324 49 8422	5222	07734 785305
Environment	01324 49 8555	5246	07793 269282
Estates & Security Manager	01324 49 8498	5007	07867 526310
Security (Contract Manager)	01383 42 1877		07766 247224
MIS	01324 66 8449	5194	07736 477251

NB: Home numbers held by FTNS







# Appendix 9

# Forth Ports - Co-ordination and Co-operation within the Port Estate



Co-Ordination and Co-Operation within the Port Estate

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# FORTH PORTS PLC SCOTTISH OPERATION



# **HEALTH AND SAFETY**

# DRAFT 07:22

# Co-Ordination and Co-Operation within the Port Estate

Approved

lan McCallum

Date:

Authorised

Alan Burns

**Director Scottish Ports** 

**H&S Manager Scottish Operations** 

Date:



Co-Ordination and Co-Operation within the Port Estate



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# Contents 1. SCOPE 3 2. PURPOSE 3 3. DEFINITIONS 3 4. ROLES AND RESPONSIBILITIES 3 5. PROCEDURE 3 6. TRAINING, INSTRUCTION, INFORMATION ERRORI BOOKMARK NOT DEFINED. 7. RECORDS 4 8. REVIEW 4 9. AUDIT 4 10. FORM 4 11. REFERENCES 4 12. APPENDIX 4

Record of Change

Issue No	Details of Change	Author	Date
Draft 1 Issue 1 Draft 1 Issue 2	Initial Issue Updated Issue	I. McCallum I. McCallum	January 2010 July 2011
	a	-	



Co-Ordination and Co-Operation within the Port Estate

SAFETY FIRST FOR //// FORTH

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# SCOPE

This procedure applies where Forth Ports Scottish Operations will require to co-ordinate work activities and/or co-operate with other employers/ organisations within the port estate.

# 2. PURPOSE

This process has been developed to assist establishing co-ordination and co-operation between different organisations where there are complex activities being undertaken by two or more organisations, within the Port Estates.

The aim is

To take action to control risks created by activities within the port estate, on shore and on board ship.

Create a safe environment and safe method of working to protect those undertaking the activity and other port users.

# 3. DEFINITIONS

**Co-Ordinations** - A set of documented and agreed arrangements/ plans put in place to ensure a safe system of work between parties.

Co-Operations - A joint operation or action to assist the implementation and maintenance of a safe system of work.

# 4. ROLES AND RESPONSIBILITIES

It is the responsibility of the Port Management Team to use the Form FPS053 Port Activity Planning Co Ordination and Co-Operation contained in appendix 1 as part of the planning process to co-ordinate and co-operate with other port users.

# PROCEDURE

# 5.1 Co-Ordination and Co-Operation

If there is Co-Ordination and Co-Operation between all parties sharing a workplace then a safer working environment is created.

Key to this approach is that everyone knows what is going on. An exchange of information must take place so all understand the risks and control measures.



Co-Ordination and Co-Operation within the Port Estate



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# 5.2 Planning

All port operations requires to be planned and where this involves more than one organisation, then everyone involved must agree to an overall plan of work.

The Form FPS053 Port Activity Planning Co-Ordination and Co-Operation in the Port Estate contained in appendix 1 sets out the process to establish roles, responsibilities, key actions and references to key documents.

Using this form will assist in providing a framework to allow port operations to be planned and organised in a co-ordinated way where two or more organisations are employed to execute the same task and co operate to minimise any impact on the Port Estate or other organisations from these activities.

### RECORDS

Records of the use of form FPS053 shall be kept on file for a minimum period of 3 years prior to archive.

# 7. REVIEW

This procedure will be reviewed every 3 years or in the event of organisational change.

# 8. AUDIT

This procedure will be subject to audit.

# 9. FORM

1. Form FPS053, Planning Co-Ordination and Co-Operation

# 10. REFERENCES

- Management of Health and Safety at Work Regulations 1999
- Tenants Handbook

# 11. APPENDIX 1

Form FPS053, Planning Co Ordination and Co-Operation



Co-Ordination and Co-Operation within the Port Estate



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# **Scottish Operations**

# PORT ACTIVITY PLANNING, CO-ORDINATION AND CO-OPERATIONS

Date	Vessel	Cargo	
Agent	Berth	Equipment	
Tenant	Contractor	Others	

ORGANISATIONS INVOLVED	TASK TO BE CONDUCTED	PERSON IN CHARGE
1	0	
2		
3		
4		
5		
6		

	RESPONSIBILITY OF EACH ORGANISATION; e.g. Supervision, tasks, preparation retem of work, communication, review dates; etc
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2	
3	
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	ort Emergency Line
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	our Name
_	etails of the incident
_	etails of any Casualties



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Co-Ordination and Co-Operation within the Port Estate



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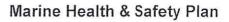
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# Appendix 10

# Forth Ports - Diving Permit to Work

FPS 007 vl





# FORTH PORTS LIMITED

# Diving Permit to Work

To	<u>t 1</u>						
1.0	Diving Supervisor:						
En	ployed by:			***************************************			
Th	e Port of :	····· ·		hereby grant to dive at the location:	E-1000		
	e dive exclusion zone uts are between:				and		
Fro	om	(time)	То		(time)	On	(date)
a)	Is additional isolation certification is a second in the second second				The state of the s	I	
b)	Communication between I	Iarbourmaster a	nd Di	ving Supervisor	will be effected	l as follows:-	
	Leith Harbourmaster Grangemouth Harbourmas FTNS Dundee Harbourmaster Coastguard	ter	VH VH VH	F Ch 12 F Ch 14 F Ch 71 F Ch 12 F Ch 16	Tel: Tel: Tel:	0131 555 8871 01324 498584 01324 498584 01382 878141 01333 450666	Delete any if no applicable
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	FORTH PORTS LIMITED	
	<b>Diving Permit to Work</b>	
Part 3(a) (Temporary Suspension	n)	
	ve ceased, and that the Diving Team is clear of the water.	7: 6
Signed Name		Diving Supervisor (Print)
Date / Time		(FIMIL)
	-1:1-1 P.	
Signed	ork is hereby suspended from : Date	Duty Harbourmaster
Name		(Print)
Date / Time	1	
declare that this Diving Permit to W	ork is hereby resumed from : Date	
Signed		Duty Harbourmaster
Name		(Print)
Date / Time		
Part 3(b) (Temporary Suspensio	on) we ceased, and that the Diving Team is clear of the water.	estron il justi en l'holi di
Signed	ve ceased, and that the Diving Team is clear of the water.	Diving Supervisor
Name (Print):		
Date / Time	7	
declare that this Diving Permit to W	ork is hereby suspended from : Date	
Signed		Duty Harbourmaster
Name (Print):		
Date / Time		
declare that this Diving Permit to W	ork is hereby resumed from : Date	
Signed		Duty Harbourmaster
Name (Print):		
Date / Time		
	en 🕶 De grans edification en transples ett. – som transfelde fra skille stren fransk fra fra – i i v	and the fire and of street about a remain
Part 3(c) (Temporary Suspensio	on)	
	ve ceased, and that the Diving Team is clear of the water.	
Signed		Diving Supervisor
Name (Print): Date / Time		
C-1/111111		
,	ork is hereby suspended from : Date	
Signed Name (Print):		Duty Harbourmaster
Date / Time	——————————————————————————————————————	
I declare that this Diving Permit to W	ork is hereby resumed from : Date	
Signed		Duty Harbourmaster
Name (Print): Date / Time	<del></del>	
Date/Time		
Part 4 (Permanent Withdrawal)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	we ceased, and that the Diving Team is clear of the water.	
Signed	ive ceased, and that the Diving Team is clear of the water.	Diving Supervisor
Name (Print):		JATAN SUPERVISOR
Date / Time	/	
I declare that this Diving Permit to W	Vode in horatus middenses	*
Signed	VOIR IS LICITORY WITHOUT WITH	Duty Harbourmaster
Name (Print):		Low James Commission
Date / Time	<i>" </i>	

Original to Diving Supervisor, Copy to be retained in relevant Harbour Office / FTNS



# Forth Ports Diving Permit Audit Checklist

This checklist is to be used by Forth Ports to monitor the compliance of the diving contractor.

The Por	t of :											
The dive exclusion zone limits are between:		and										
From		(time)	(time) To (time)					On (date)				
				·		Yes	No	N/A	Comments			
1	HSE Registration	n certificate / lett	er produced									
2	Contractor's En	Contractor's Employer's Liability Insurance certificate produced										
3	Four divers, mir	Four divers, minimum, per team										
4	Diving Supervis	or's letter of appo	ointment									
5	Divers' logbook	s produced (mini	mum 2)									
6	Divers' Medical	Certificates prod	uced (minimu	m 2)			)					
7	55.91	nce certificates p	5000	5.50								
8	Diving Contract	or's log produced										
9	First Aid qualifie	cations produced	for at least 2 d	ivers								
10	All vessels in im	mediate area noti	fied									
11	Method of comn	unication agreed										
12	Risk Assessment	produced										
13	Diving procedure	es, including eme	rgencies, prod	uced	2 0000							
14	Project Plan sigh	ted										
15	Status board showing diving operations displayed at Harbour Office FTNS											
16	Confirm equipme	ent isolated		12								
17	Compliance with	Diving Operation	ns at Work reg	gulations (19	97)							
18	Diving Contracto	or's name:			*							
19	Diving Contracto	or's Address:										
20	Diving Supervisor's Signature:											