

## [15.] HEALTH AND SAFETY [PM10]

### [15.1.] Safety, Health, Environment and Quality (SHE-Q)

Boskalis Westminster Limited operates a fully integrated SHE-Q system certified to ISO 9001, ISO 14001 and OHSAS 18001 standards ensuring well practiced, safe systems of work for all our sites.



**NINA NO INJURIES NO ACCIDENTS**

# SAFETY STATEMENT

Our people are our most valuable assets, making safety a core value. Our goal is: No Injuries No Accidents. This is embedded in our company's culture and supported through Values and Rules. All employees, including our sub-contractors, are expected to take these values and rules to heart.

VALUES	RULES
<b>I AM RESPONSIBLE FOR MY OWN SAFETY</b> <b>I APPROACH OTHERS ABOUT WORKING SAFELY</b> <b>I TAKE ACTION IN CASE OF UNSAFE OPERATIONS IF NECESSARY, I WILL STOP THE WORK</b> <b>I ACCEPT FEEDBACK ABOUT MY SAFETY BEHAVIOUR REGARDLESS OF RANK AND POSITION</b> <b>I REPORT ALL INCIDENTS, INCLUDING NEAR-MISSES, TO INFORM OTHERS AND BUILD ON LESSONS LEARNED</b>	<b>PREPARE A RISK ASSESSMENT FOR EACH PROJECT, VESSEL OR LOCATION</b> <b>OBTAIN A PERMIT TO WORK FOR DEFINED HIGH-RISK ACTIVITIES</b> <b>MAKE A JOB HAZARD ANALYSIS FOR HAZARDOUS NON-ROUTINE ACTIVITIES</b> <b>BE INFORMED ABOUT RISK &amp; CONTROL MEASURES</b> <b>BE FIT FOR DUTY AND WEAR THE PPE REQUIRED</b>

**MY ROLE ACCORDING TO NINA**

AS AN EMPLOYEE	AS A MANAGER/SUPERVISOR
<ul style="list-style-type: none"> <li>Always check the safety of Yourself, Equipment and Surroundings (YES)</li> <li>Ensure that you are informed about risks and control measures for the job and work environment</li> <li>Inform your supervisor of hazardous situations</li> <li>Always follow the values and rules</li> </ul>	<ul style="list-style-type: none"> <li>Lead by example by demonstrating safety leadership</li> <li>Create an atmosphere and conditions within the organization where employees are encouraged to work safely and to address safety issues</li> <li>Ensure compliance with the values and rules for the area of control</li> </ul>



Regarding Safety in particular, it is fully aligned with the Boskalis Group Safety Program NINA (No Injuries, No Accidents), which provides a clear Safety Statement supported by Values and Rules. For more information about NINA, visit the website at:

[www.boskalis-nina.com](http://www.boskalis-nina.com)

#### [15.1.1.] Values and Rules

The Our vision statement clearly expresses our commitment to safety:

“People are our most valuable assets, making safety a core value. Our goal is: No Injuries No Accidents. This is embedded in our company's culture and supported through Values and Rules. All employees, including our subcontractors, are expected to take these values and rules to heart”.

This vision statement underlies our Safety Program NINA (No Injuries No Accidents) which is being implemented from 2010 onwards ([www.boskalis-nina.com](http://www.boskalis-nina.com)).

NINA aims to embed the desired safety culture in our organisation and make safety a fully integrated part of working behaviour.

Our vision is supported by five Values and five Rules that have been specifically developed to provide guidance to all employees, including those of subcontractors, both with regard to expected behaviour and risk management.

#### **[15.1.1.1.] Safety Values**

BWL has adopted five Safety Values providing guidance to employees with regard to the safety behaviour we expect from them. These Values apply to all our employees and those of our subcontractors and suppliers. Our safety Values are:

- I am responsible for my own safety;
- I approach others about working safely;
- I take action in case of unsafe operations. If necessary, I will stop the work;
- I accept feedback about my safety behaviour, regardless of rank and position;
- I report all incidents, including near misses, to inform others and build on lessons learned.

#### **[15.1.1.2.] Safety Rules**

The five safety Rules have been specifically developed to create focus on risk management and provide guidance in this regard. Our safety Rules are:

- Prepare a risk assessment for each project, vessel or location;
- Obtain a Permit to Work for defined high-risk activities;
- Make a Job Hazard Analysis for hazardous non-routine activities;
- Be informed about risk and control measures;
- Be Fit for Duty and wear the PPE required.

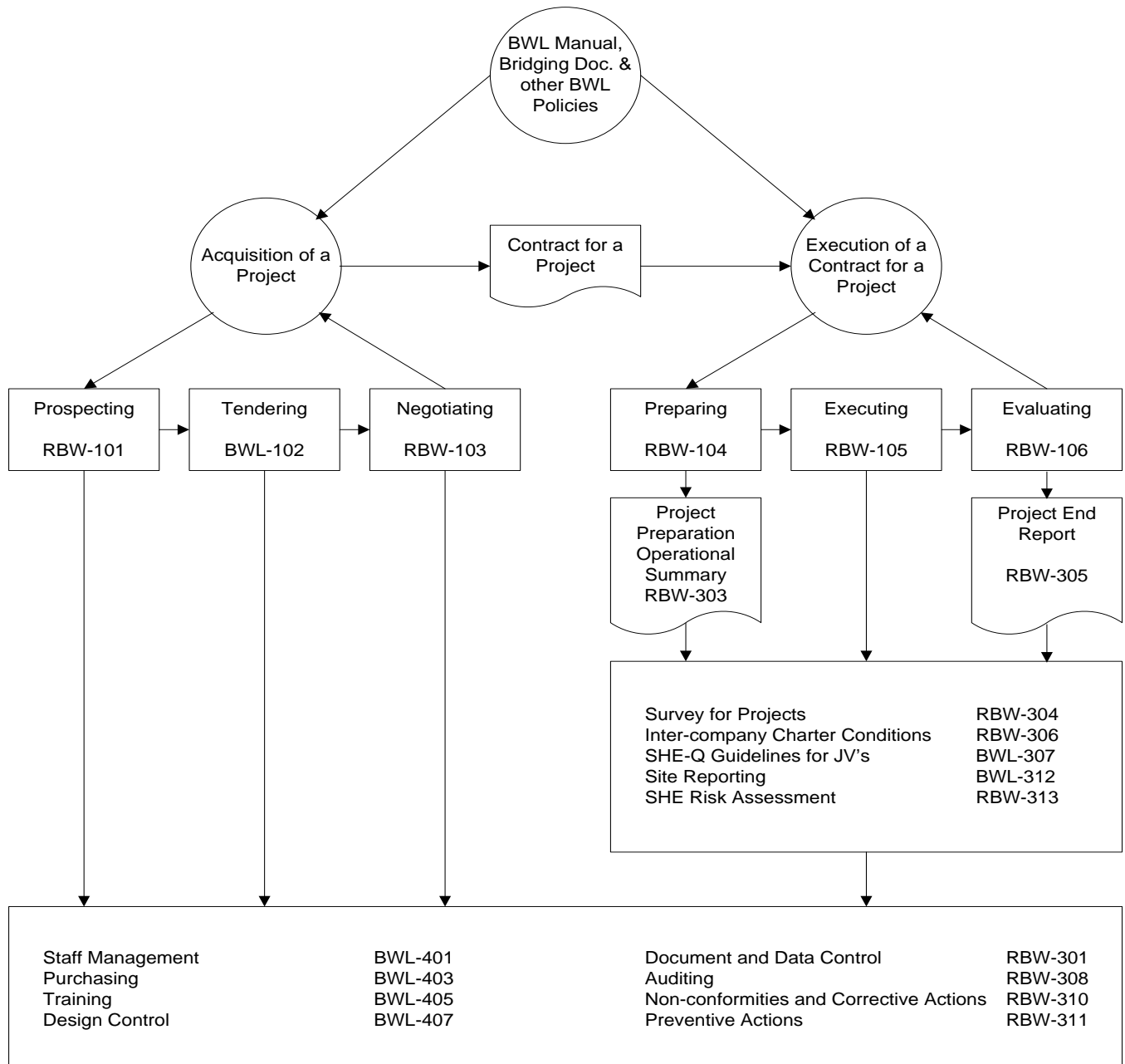
The Management Team of BWL has embedded the safety Values and Rules and the corresponding objectives into BWL-002 Policy Statement Safety, Health and Environment. BWL will strive to reduce the level of accidents, incidents and damages in each year of operation. The ultimate objective is:

- Zero personal accidents;
- Zero damages to equipment and property;
- Zero incidents with environmental impact.

The management of BWL is responsible for ensuring that the Values and Rules as well as the SHE Policy are understood, implemented and maintained by all. Awareness of SHE risks and human behaviour is a key element of our Safety Program, and in this respect, BWL is directing its efforts towards an increase of this awareness through all levels in the organisation, to continually improve SHE standards.

#### **[15.1.2.] SHE-Q System**

The SHE-Q system of Boskalis Westminister Ltd (BWL) has been developed to assure a high level of control of safety, health, environmental and quality aspects during the preparation and execution of this project. The BWL SHE-Q system and its components are described in BWL-001 (Manual Boskalis Westminister), and are summarised in the following schematic:



The master document in the BWL SHE-Q system regarding safety, health and environment (SHE) is the policy statement (BWL-002, see Appendix 10.1). This Project SHE Plan is one of an extensive suite of procedures and supporting documents that together form the BWL SHE-Q system.

### [15.1.3.] Company Experience

Boskalis Westminster Limited has extensive experience in both dredging and marine construction activities. As a dredging and marine contractor, our planning and mitigation measures are tailored directly to the relatively high risk marine environment. With over 80 years' experience working around the UK and throughout the world as part of Royal Boskalis Westminster nv, one of the world's largest dredging and marine contractors, our site methods and procedures are well established and practiced.

We have an in-house company Health, Safety and Environment (HS&E) Manager, who is responsible for the production of site specific Health and Safety Plans in consultation with the Project Manager.

Our aim also, as Principal Contractor on any scheme, is to eliminate or minimise any risk associated with the construction, maintenance and decommissioning of the Works.

#### **[15.1.4.] Notices [PM10]**

There have been no Prohibition or Improvement Notices issued on any contract that has been managed by BWL as Principal Contractor; nor have there been any Prohibition or Improvement Notices issued on any other contract that has been managed by BWL.

#### **[15.1.5.] Accident Statistics [PM10]**

Up to date accident statistics for BWL are contained in Appendix 10.3.

#### **[15.1.6.] Site Staff**

All Boskalis Westminister Limited site staff undertake site specific training prior to starting work which will include all requirements for public safety ensuring that all staff will be aware and can aid monitoring of safety measures around the site.

It is company policy that staff should show due consideration and politeness to the public, particularly as many of our schemes are based in areas of high amenity and leisure value, with public interfaces an everyday occurrence.

### **[15.2.] Safety, Health and Environment**

Concerning Welfare, the following arrangements will be implemented:

#### **[15.2.1.] Lighting, Ventilation and Heating**

Offices and all places where employees must pass will be adequately lit and electrical fittings properly maintained and installed. Rooms in which persons work will be adequately ventilated by natural or artificial means. Adequate heating will be provided. Heating arrangements will be such as not to allow harmful fumes or gases to enter any room.

#### **[15.2.2.] Fire Precautions**

A fire risk assessment will be undertaken, and suitable firefighting equipment will be readily available and properly maintained.

The number of fire extinguishers to be provided shall be enough to cover hazards from the risk assessment. Escape routes will be kept free from obstructions. Fire exit doors will be easily opened and properly marked. Extinguishers will be of a suitable type for fires encountered.

#### **[15.2.3.] Washing and Toilet Facilities**

Washing facilities will be provided with a sufficient supply of hot and cold water, soap and towels or driers. Where more than five office workers are employed, separate facilities will be provided for men and women, unless the door can be locked.

Facilities will be conveniently accessible, have adequate lighting and ventilation, and be properly maintained in a clean and orderly condition. They may be shared with other occupants of the site office, where applicable, in which case an entry should be made in the Register of Shared Facilities.

#### **[15.2.4.] Facilities for First Aid, Changing Clothing, Resting and Eating**

First Aid facilities will be provided and clearly marked. All employees will be made aware of the arrangements made in connection with First Aid.

Insulated and separate changing facilities shall be provided for working clothes where possible, with secure storage and lockers if available, but as a minimum, a separate hook for each person and means to lock the door. If separate to other premises (in the same building it must be separate to the eating area!) then heating, lighting, seating and if possible drying facilities shall be provided.

Suitable arrangements will be made to enable workers to rest and eat meals i.e. seating, table(s) with a suitable surface, adequate cooking facilities (if provided for) and the ability to obtain hot drinks.

#### **[15.2.5.] Display Screen Equipment (DSE)**

DSE Assessments will be conducted upon the setting up of the project office. These will be recorded using BWL-505-A1a, and include considerations such as seating, posture, lighting, etc., and will provide for employees to obtain eyesight testing.

#### **[15.2.6.] Manual Handling**

Where manual handling operations cannot be avoided, the project team will make a suitable and sufficient assessment of the risks involved with the specific handling operations. Such assessments will be supported by the SHE-Q Officer, and will be recorded using BWL-505-A1b.

### **[15.3.] SHE Induction**

#### **[15.3.1.] Site Induction [PM10]**

Upon arrival at the project, all employees must attend a SHE Induction, site personnel will receive site safety and environmental induction, which will as a minimum cover the following information.

1. Company Health, Safety and Environmental Policy.
2. Known local and specific project hazards.
3. Environmental aspects and main objectives of the Environmental Action Plan.
4. Site access and egress, limits of access to site, site security.
5. Restricted areas and permit to work systems.
6. Mandatory PPE
7. Parking and unloading arrangements where parking is restricted.
8. Welfare facilities.
9. Site Rules, Personal Protective Equipment, Alcohol & Drugs policy.
10. Who to communicate with on safety and environmental matters and in emergencies.

11. Emergency procedures.
12. Location of First Aid Post, fire and emergency “Muster Points”.
13. The reporting of accidents, injuries and incidents including “near miss” incidents.
14. Good housekeeping - fire prevention - waste management.
15. The rights and duty to communicate concerns.
16. Project specific Waste Management requirements.
17. Advice on “Open door policy” with respect to Health & Safety.

Site visitors will be recorded on and off the site and receive sufficient information to ensure their own and others safety.

The RBW-519 series documents may be used / modified to develop, deliver and record SHE Inductions. If a locally developed SHE Induction is used, it must include a means of registration / recording.

#### **[15.3.2.] Visitors**

The Project Manager shall ensure that all visitors receive a site safety induction, including specific instructions for the site. Visitors shall be provided with PPE if required. A ‘Notice to Visitors’ will be posted at appropriate locations.

#### **[15.3.3.] Plant and Equipment**

Where necessary, Project Management shall ensure that pre-mobilisation inspections are performed on plant and equipment which is planned for the project. Upon arrival, the Project Manager is responsible for ensuring that every vessel is introduced to the project SHE requirements. A pre-start inspection shall be performed where relevant.

As a minimum, the following topics shall be discussed upon vessel arrival:

Project Preparation Operational Summary (PPOS) and Project SHE Plan;  
Local licences;  
Site and vessel security arrangements / issues.

Captains, Dredge Masters and Skippers are ultimately responsible to fulfil project SHE requirements on their vessel or production units. They will communicate relevant SHE requirements and project particulars to their crew and visitors.

#### **[15.3.4.] Principal Contractor / Subcontractors**

The Principal Contractor is required to develop and maintain an up to date SHE Plan for the execution stage of the works, and co-ordinate co-operation between all contractors on the site to ensure relevant SHE site rules are observed.

The Project Manager must ensure that any subcontractors engaged by the company are appropriately appraised with regard to their competence, to carry out the work safely and with due regard to the environment. Each subcontractor shall appoint a designated employee from their organisation to act on their behalf regarding SHE matters.

Throughout the duration of the project, the subcontractor shall:

- Comply with the SHE requirements of the Principal Contractor, and of the subcontract;
- Ensure that subcontractor personnel have attended a SHE Induction;
- Ensure that subcontractor personnel adhere to agreed safety instructions / control measures;
- Report any accident, damage, environmental loss or near miss to the Project Manager.

#### **[15.3.5.] PPE**

Prior to commencement of the works, the appropriate PPE shall be defined and made available to project employees and visitors. (Refer to Safety Booklet, BWL-502). The distribution of PPE to project employees is recorded using RBW-519e.

At all times, all employees are to wear the applicable PPE during the execution of works, as prescribed in the Project SHE Risk Assessment.

#### **[15.3.6.] Communication**

Communication of Safety, Health and Environment requirements will be done both visually, through notices posted in offices and communal areas, and verbally through Site Inductions and Toolbox Talks. All staff will be encouraged to report accidents and Near Miss incidents directly to their line managers and to communicate other comments or improvements through the use of BWL's Safety Hazard Observation Card (SHOC) system which is used worldwide within the Boskalis Westminster Group.

#### **[15.3.7.] Incident Reporting**

All accidents, dangerous occurrences, damages, environmental losses and near misses including those involving subcontractors and/or members of the public, are to be reported to the BWL Head Office using BWL-510-01: Incident Report Form (or the software program SIRE). Such reporting is further described in BWL-510: Incident Reporting and Follow-up.

A Safety Hazard Observation Card (SHOC) system (ref. RBW-510a) will be implemented on the project, under the control of the Project Manager.

#### **[15.4.] Health, Safety and Welfare**

We propose that, if required, prior to the commencement of our works a meeting is arranged with the local stakeholders in order to ensure that they are informed of our intentions and to discuss any impacts our works have on their operations.

#### **[15.5.] Method Statements [PM10]**

Given that the working area is within a busy commercial and leisure waterway Method Statements will be drawn up for specific works which are not covered by existing work Method Statements.

These along with work specific Risk Assessments will be used in the pre work Toolbox Talks.



## **[15.6.] SHE Risk Management**

### **[15.6.1.] General**

Risks are the probability that hazards lead to negative impacts i.e. personal injuries, equipment damages or environmental losses. By successful application of the available SHE Risk Management tools, risks are identified and categorized in a systematic manner.

SHE Risk Management within BWL consists of:

- An overall Project or Vessel SHE Risk Assessment (RBW-313/BWL-513);
- A specific Job Hazard Analysis (JHA) for non-routine tasks (BWL-514);
- A “Yourself, Equipment, Surroundings” (YES) moment just before starting the job.
- The SHE Risk Management process contains the identification of hazards, assessment of hazards and the implementation of control measures. The assessment shall include:
  - All routine and non-routine activities (single, as well as combinations thereof);
  - Activities of all personnel having access to the workplace (including subcontractors, suppliers and visitors);
  - All facilities at the workplace, provided by BWL or other parties.

### **[15.6.2.] Risk Assessments [PM10]**

Our project team will develop detailed risk assessments during their preparations for the works, an example of which is provided in Appendix 10.8, which will include COSHH Evaluations from any relevant COSHH Data Sheets (Appendix 10.13). Where relevant these Risk Assessments will be done in conjunction with DIO / QHM.

The SHE Risk Assessment procedure (RBW-313) provides a detailed explanation of the method to be used for conducting risk assessments. The execution of this first level assessment is obligatory for every project, and on every vessel.

Where available, any SHE Risk Assessment resulting from the design stage (prepared by the Client or Engineer) will be taken into account.

The SHE Risk Assessment Matrix (BWL-513) identifies the known hazards that may occur within this project. For each hazard in the matrix, standard minimum control and mitigation measures are identified to reduce the risk to an acceptable level. Specific hazards and additional control measures (e.g. Permit to Work) are to be evaluated by the Project Manager.

### **[15.6.3.] Job Hazard Analysis [PM10]**

If necessary, a second level of risk management connected to a specific job is achieved by implementing a Job Hazard Analysis (JHA), which is conducted by the work party during the preparation for that specific job (ref. BWL-514).

The outcome of the SHE Risk Assessment, the JHA and any applied Permit to Work system shall be communicated to all employees involved, e.g. through Toolbox meetings (BWL-516).

### **[15.6.4.] Yourself, Equipment, Surroundings (YES) [PM10]**

An additional level of risk management is performed by the work party just before starting a job. This consists of a final check regarding the safety of “Yourself, Equipment and



Surroundings” (YES). It is a best practice / common sense measure, that does not need to be documented – and is sometimes referred to as a “Dynamic Risk Assessment.”

#### **[15.6.5.] Review and Management of Change [PM12]**

Once prepared, the SHE Risk Assessment shall be reviewed by the Project Manager periodically at least every 3 months or whenever new activities start, operations are modified, design changes are implemented, legal requirements change or where Lessons Learned can be incorporated. The description of this Management of Change process is included in the SHE Risk Assessment procedure, RBW-313.

#### **[15.7.] Significant Risks Identified at Pre-construction and Tender Preparation [PM12]**

The project management will take account of the following risks, as outlined in the pre-construction information, and develop SHE Risk Assessment control measures accordingly and to incorporate where possible Lessons Learned from other similar projects:

##### **[15.7.1.] Unexploded ordnance**

Portsmouth was bombed heavily during the Second World War and on occasion UXO can still be found, consisting of small bombs or shells which have not previously been detonated. There is still potential for further items to be exposed during dredging. Bomb grids and bomb shields will be installed on TSHD and Backhoe Dredgers accordingly – and Boskalis EOD advisors can provide support during dredging operations.

##### **[15.7.2.] Harbour Traffic**

Portsmouth Harbour and the Solent are classed as a very high density shipping area, with up to 100,000 shipping movements in Portsmouth Harbour per year. Included are Royal Navy vessel movements, commercial vessels and ferries – and a high number of small recreational craft. Effective communications with QHM Portsmouth (Harbour Control Officer) and Southampton VTS will be essential.

##### **[15.7.3.] Diving operations within the harbour**

Vessels shall take due care and observe formal procedures upon passing by or undertaking diving operations. All diving operations within the harbour are strictly controlled, as outlined within the project tender documents, Port Operations Guide dated 25/08/13 and HSE527 Portsmouth Diving Instructions.

##### **[15.7.4.] Fog**

Low visibility due to fog will necessitate QHM Portsmouth to order their Fog Routine. Details are contained within the above-mentioned Port Operations Guide.

##### **[15.7.5.] Oil spillage**

While on board systems are designed to prevent the risk of oil pollution, the risk cannot be completely eliminated.

Vessels will ensure their Shipboard Oil Pollution Emergency Plans (SOPEP) are in good order – and in the unlikely event of a spillage, will make an immediate report to Harbour Control (followed by a POLREP signal as described in the Port Operations Guide).

#### **[15.7.6.] Crew changes between launch and vessel**

Weather conditions and the suitability of crew launches must be taken into consideration for the safe transfer of crew. The SHE Risk Assessment will be supplemented by JHA's where necessary. The suitability of conditions in relation to the transfer of personnel or equipment to or from larger vessels, particularly in the Approach Channel, will be determined by the skipper of the transfer vessel and not the master of the larger vessel. If in any doubt as to the suitability of the conditions for transfer the skipper of the transfer vessel has the sole discretion and authority to abort any transfer.

#### **[15.7.7.] Sedimentation / turbidity**

Levels of sedimentation / turbidity could have an adverse effect on the native oyster that is known to be present in the Hamilton Bank area, and on commercial fish and shellfish resources in general. Mitigation measures are outlined in the Turbidity and Water Quality Monitoring sections (16.11 and 16.12) of this PEP.

#### **[15.7.8.] Archaeological finds**

The potential exists for an impact to occur on any buried archaeological finds present within Portsmouth Harbour and in the outer approach channel. Refer to section 14, Archaeological Supervision.

#### **[15.7.9.] Subsea cables**

To avoid unsafe situations, damage and disruption through the detection of subsea cables, consultation will be undertaken with the cable owners prior to any capital dredging works commencing.

#### **[15.7.10.] Noise [PM10]**

It is anticipated that operations will be in compliance with noise limits as defined within the Consent Conditions. Details are provided in sections 16.7 and 16.8 of this PEP. Furthermore, BWL will register the site under the Considerate Constructors Scheme.

#### **[15.8.] Toolbox Talks [PM10] [PM12]**

Toolbox Talks will be carried out prior to the commencement of any specific works where the personnel involved in the proposed work will be briefed on and discuss the work to be carried out along with any associated risks. The briefing will also include any subcontractors and Client representatives that will be involved in the work.

In addition to work specific Toolbox Talks, Subject Specific talks will be held periodically to keep the workforce up to date on developments and lessons learned from other projects both from within and outside of the company.

#### **[15.9.] SHE Plan**

This Project SHE Plan addresses, amongst others, the following project specific SHE items:

- SHE Risk Assessment;
- Responsibilities;
- Emergency preparedness and response;
- Induction;
- Communication;

Training / Instructions;  
Contractual & legal requirements.

The Project SHE Plan will be made available to all relevant parties. The plan will be revised whenever necessary.

Where applicable, relevant information for the Health and Safety File will be made available on completion of the works, including as-built drawings and other information regarding key health and safety risks relevant to any subsequent maintenance work. BWL shall co-operate with the CDM Co-ordinator in developing the Health and Safety File.

The following matrix shows the correlation between “Appendix 3: Managing health and safety in construction, Health and Safety Executive” and the BWL Project SHE Plan:

Managing health and safety in construction		BWL Project SHE Plan	
<i>Brief description</i>	<i>Section</i>	<i>Section</i>	<i>Brief description</i>
Project description, programme, dates	1 (a)	1	Project information
Client, CDM co-ord., designers etc	1 (b)	1.3	Identification of parties
Records, health and safety on site	1 (c)	App 04	Preconstruction information
Management structure, responsibilities	2 (a)	2.2 / 4	SHE-Q system / Responsibilities
Health and safety goals, performance	2 (b)	2.1 / 9	Values and Rules / Insp. and Audits
Arrangements: Regular liaison between...	2 (c) i	7	Communication
Workforce consultation	2 (c) ii		
Information exchange	2 (c) iii	4.2 / 7	Responsibilities / Communication
Design changes	2 (c) iv	3.5 / 7	Review... / Communication
Contractors, control	2 (c) v	6.4	Principal Contractor, subcontractors
Contractors, information	2 (c) vi	6.4 / 7	...subcontractors / Communication
Site security	2 (c) vii	6	SHE Induction
Site induction	2 (c) viii		
On-site training	2 (c) ix	2.4	Training and Instruction
Welfare, first aid	2 (c) x	6	SHE Induction
Accidents and incidents	2 (c) xi	4 / 7.1	Responsibilities / Incident reporting
Risk assessments	2 (c) xii	3	SHE Risk Management
Site rules, alcohol and drugs policy	2 (d)	6	SHE Induction
Fire and emergency procedures	2 (e)	5	Emergency response
Safety risks	3 (a)	App 05	SHE Risk Assessment Matrix
Health risks	3 (b)		
Health and Safety file: Layout, format	4 (a)	2.7	Project SHE Plan
Gathering info.	4 (b)	4	Responsibilities
Storage of info.	4 (c)		

## **[15.10.] Emergency Response**

### **[15.10.1.] General**

An emergency situation occurs whenever one of the following questions is answered with “yes”:

1. Are there any fatalities?
2. Is the situation (potentially) life-threatening?
3. Has serious environmental damage occurred or is it likely to occur?
4. Is the situation (potentially) sensitive to the press and/or public opinion?
5. Has serious damage to plant occurred or is it likely to occur?

The following response measures have been implemented to prevent or mitigate escalation in case of an emergency.

### **[15.10.2.] Project Emergency Plan**

The Project Emergency Plan (BWL-506) will be formulated to show the initial internal communication lines between parties concerned in case an emergency occurs involving employees, plant, assets and/or the environment – and is supported by the BWL Emergency Plan (Appendix 10.4). Where necessary, BWL Head Office will liaise with Boskalis Head Office in Papendrecht, The Netherlands.

### **[15.10.3.] Emergency Contact List**

The following telephone numbers, as a minimum, must be displayed for project employees and visitors to efficiently address emergency situations:

Hospital / A&E: Queen Alexandra	023 9228 6000
QHM Portsmouth (Harbour Control Officer)	023 9272 3694 VHF 11 (working) and 13 (operations)
Vessel Traffic Service	023 8060 8208 VHF 12
Police / Fire / Ambulance / Coastguard	999 VHF 16
BWL Crisis Team	[Ref. BWL-004]
Client's Representative, DIO PM	To be confirmed

The emergency contact list is distributed over the various project locations (office, workshop, vessels, etc) and placed with appropriate visibility at strategic locations. The Project Manager will ensure that employees are familiar with the emergency contact list and that the document is updated when necessary.

The Project Manager is to ensure that local authorities are aware of the project's existence as appropriate. Furthermore, the Project Manager will arrange communication lines with emergency services and make preparatory arrangements for emergency situations.

#### **[15.10.4.] SOLFIRE**

The Solent and Southampton Water Marine Emergency Plan (short title SOLFIRE) is a plan to set up the control of a major maritime incident and co-ordinate available resources. It is sponsored by QHM Portsmouth, Associated British Port Southampton and HM Coastguard. Copies of the plan are held ashore by the appropriate authorities. In the event of a major incident within the Solent area, response will be coordinated by one of the three participating agencies.

#### **[15.11.] Weekly Reporting**

The Weekly Narrative Report (RBW-540a) contains a section for reporting SHE issues. After such reports have been sent to the Head Office, the SHE-Q Manager will be responsible for monitoring follow-up of any SHE-related issues to satisfactory conclusion.

Additional reporting is described in section 8.3.

#### **[15.12.] Contractual and Legal Requirements**

##### **[15.12.1.] Contractual**

In addition to BWL SHE requirements, the following contractual requirements apply to the project:

- Port Operations Guide for Capital Dredge Tender (25 Aug 13);
- HSE527 Portsmouth Diving Instructions;

Health, Safety and Welfare requirements are identified in Schedule 2 of the Conditions of Contract. BWL is bound to comply with all relevant legislation.

Where operations are confined to marine works, the Contractor shall, as a minimum, comply with the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 and The Merchant Shipping and Fishing Vessels (Health and Safety at Work)(Amendment) Regulations 2001.

Where operations include onshore works, e.g. landing of materials for beneficial re-use, other legislation may apply, including The Construction (Design and Management) Regulations 2007.

##### **[15.12.2.] Legal**

This Project SHE Plan has been developed in accordance with the requirements of the:

- Health and Safety at Work Act 1974;
- Management of Health & Safety at Work Regulations 1999;
- Health & Safety (Miscellaneous Amendments) Regulations 2002;
- Construction (Design and Management) Regulations 2007 (Where applicable);
- Environmental Protection Act 1990;
- Environment Act 1995;

And all other legislation derived from the above, including codes of practice, which relate to the activities on site.

Project management shall take account of particular legislation applicable to this project:

- Diving at Work Regulations 1997

Sea-going vessels are provided for by separate international regulations, and operate under the ISM code / ISPS code and relevant maritime laws and directives.

### **[15.13.] Checklist SHE Inspections and Audits**

#### **[15.13.1.] Inspections**

During preparation and execution, regular inspections shall be organised to verify conformance with the project's Safety, Health and Environmental requirements:

For this specific project, the following inspections and audits are foreseen:

- Pre-mobilisation Inspections for own and chartered equipment, where relevant;
- Initial SHE-Q Inspection upon site set up by the SHE-Q Department;
- Site inspection by the SHE-Q department during initial set up;
- Monthly site inspections by the Project Manager (not to be delegated);
- Weekly site inspections by site supervision;
- Inspections of floating equipment before/on arrival by site supervision;
- Management inspection(s) by BWL Management Team and/or Boskalis Business Unit Management;

### **[15.14.] Audits**

Within the SHE-Q system of BWL, the procedure RBW-308 describes how internal, corporate and external audits are conducted. An annual audit planning is prepared by the BWL and corporate SHE-Q departments, detailing the intended internal and external audits concerning BWL projects and staff departments.

For projects, the scope of each individual SHE-Q audit depends on the actual activities within the project under review, and the management / control systems employed. For this specific project, the following internal and/or external auditing is foreseen:

- Internal audit by the SHE-Q department and/or corporate SHE-Q department.

Other possible audits might include:

Third party (Bureau Veritas) 9001/14001/18001 audit of Boskalis Westminister, site visit part; Third Party ISO/OHSAS surveillance audit during project execution.

Assessment schemes such as Achilles Building Confidence.

Corrective and preventive actions required as a result of inspections and audits will be monitored to close out by the SHE-Q Department.

Several checklists are available to facilitate and register the above-mentioned SHE Inspections.