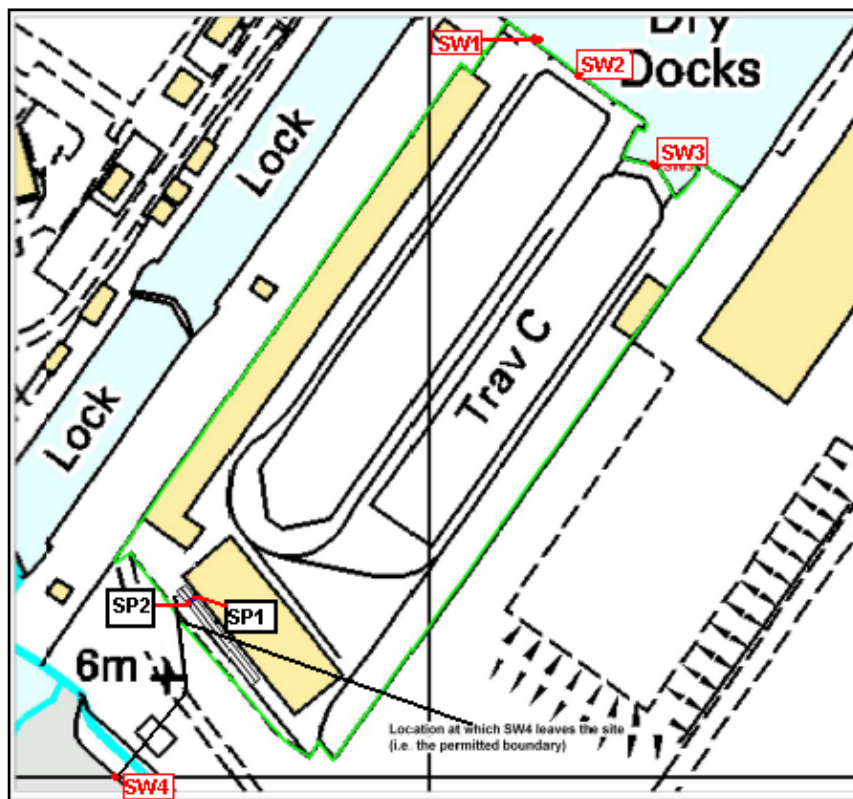


SDL SHIP RECYCLING	
TITLE	ASBESTOS MANAGEMENT PLAN
DOCUMENT NO	SDL-DOC-007



SHIP RECYCLING CONTRACTOR

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	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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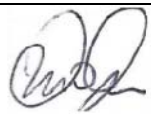
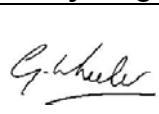
CONTENTS

CONTENTS.....	2
BASIS AND REVISIONS.....	3
1. INTRODUCTION	4
2. ROLES; "PLAN OF WORK" TO CAR 2006 AND CERTIFICATION CONTROL	5
3. ASBESTOS LICENSE REQUIREMENTS AND REGULATORY NOTIFICATION	8
4. TRAINING AND COMPETENCE OF ASBESTOS REMOVAL RESOURCES	9
5. ACCIDENTS AND EMERGENCY PROCEDURES.....	11
6. CONTROL MEASURES TO PROTECT SITE PERSONNEL AND PUBLIC	16
7. AMBIENT AIR MONITORING AND HEALTH SURVEILLANCE	18

 swansea drydocks Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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BASIS AND REVISIONS

Swansea Drydocks Limited Asbestos Management Plan

Project:	SDL Ship Recycling				
Site:	Swansea Dry Docks, Swansea, SA1 1LY				
For:	SWANSEA DRYDOCKS LIMITED				
Status:	FINAL				
Date:	November 2011				
Reviewed:	Glyn Wheeler, Director Ship Recycling				
Status Revision	Date	H&S Engineer	Director Operations	TCM Manager	Director Ship Recycling
FINAL	15-11-2011				
COPIES:	MD Copy 1	Office copy 3	Copy 2	Office copy 3	Master copy

	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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1. INTRODUCTION

SDL is in the business of ship recycling in the best environmental conditions, i.e. a dry dock facility at its site in Swansea.

The Health & Safety Management Plan (SDL-DOC-001) defines the processes and requirements to protect the workforce. The Environmental Compliance Plan (SDL-DOC002) is established to ensure compliance of the ship recycling activities. The Waste Management Control Plan (SDL-DOC-003) defines the waste control measures and establishes how wastes are tracked.

This Asbestos Management Plan defines the performance and control measures to assure safe Asbestos Containing Materials (ACM) removal and disposal and will be issued to the Environment Agency with the notification of ship arrival.

The overarching regulatory requirements for performance and control when undertaking work with and removal of ACM materials are defined in the HSE Control of Asbestos Regulation (CAR 2006).

This Asbestos Management Plan defines the management and control of ACM removal from ships during their recycling at SDL Swansea. This plan sets out:-

- The commitment to a ship specific Plan of Work in accordance Control of Asbestos Regulations 2006 and certification of asbestos removal works;
- Asbestos license requirements and regulatory notification;
- Details relating to the competence of resources and training to those undertaking the works;
- Arrangements to deal with accidents, incidents and emergencies;
- Details relating to the control measures to be used to protect personnel, the general public and environment; and
- Ambient air monitoring and health surveillance strategies;

	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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2. **ROLES; “PLAN OF WORK” TO CAR 2006 AND CERTIFICATION CONTROL**

2.1. **ROLES AND RESPONSIBILITIES**

The roles and responsibilities for implementing and executing this Asbestos Management Plan (SDL-DOC-007) are as follows:

<u>ROLE/POSITION</u>	<u>NAME</u>	<u>RESPONSIBILITY</u>
SDL Managing Director	Karl Dunn	Overall responsibility for Health, Safety, Environment and Quality.
SDL Director Ship Recycling	Glyn Wheeler	Responsible for establishing this Asbestos Management Plan and interfacing with Environment Agency and ACM Removal Sub-contractor.
SDL Director Operations/Operations Manager	David Dunn	Responsible for all site activities including planning and integrating these defined activities with other operations.
SDL H&S & Security Manager	Robert Bradshaw	Health, Safety and Security monitoring and control tasks as identified in this plan.
SDL TCM Manager	Stacey Norman	Monitoring and control of waste materials tracking and tasks as identified in this plan.
ACM Removal Sub-contractor	TBC	Management of ACM works, producing and working fully to the safe “Plan of Work” as defined in this plan and CAR 2006.
ACM Removal Managers, Supervisors and Operatives	TBC	Performance to all defined safe procedures and tasks as identified in this plan and Plan of Work.

 Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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2.2. SPECIFIC SHIP "PLAN OF WORK" TO CAR 2006

- 2.2.1. The Plan of Work (in full compliance with CAR 2006) for each specific ship will be prepared by the accredited, licensed and approved ACM Removal Sub-contractor once the ship for recycling has arrived at SDL dry dock. This will ensure they have sufficient time to study the Asbestos Survey Reports and corroborate those reports to the actual physical ship to ensure the ACM removal works are correctly planned and safely executed to protect personnel and the environment.
- 2.2.2. The Generic Plan of Work is shown in the Operating Techniques document which is referenced by the Environmental Permit EPR/UP3298VL Operating Procedures Appendix C.
- 2.2.3. The specific Plan of Work will be endorsed by SDL prior to any ACM removal works being undertaken on any ship for recycling. The Plan of Work will be available on site before any ACM removal works commences for viewing by the HSE and EA.

2.3. ACM WASTE REMOVAL WORK CERTIFICATION

- 2.3.1. All ACM waste will be disposed off site to a suitably licensed hazardous waste ACM landfill facility in accordance with the Waste Management Control Plan (SDL-DOC-003). The ACM waste from the vessel will be tracked specifically and consigned as record with a Hazardous Waste Consignment Note (HWCN). All PPE and enclosure plastic/foam etc materials used for the removal of ACM from the vessel will be consigned as ACM waste and disposed off site to a suitably licensed hazardous waste ACM landfill facility – this operating waste stream will be accounted for as a separate entry to the waste tracker to distinguish it from the actual vessel ACM waste tonnes.
- 2.3.2. There are an established industry norms set of safe methods for ACM removal, depending on the ACM type and form.
- 2.3.3. In the formulation of the Plan of Work an environmental and health & safety risk assessment will be undertaken by the ACM removal sub-contractor to determine the specific method and task for each type and form of ACM.
- 2.3.4. If the asbestos Survey identifies gaskets in pipe flanges containing ACM, then all gaskets will be presumed to contain ACM. All such flanges presumed to contain ACM will be painted red prior to dismantling the ship so they can be readily accounted for in the dismantling, removal and disposal process.

 Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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- 2.3.5. Once the pipe work is confirmed to be free of liquids, small ferrous flanges containing ACM gaskets will be cut out close to their pipe connection point and disposed of complete as ACM waste. Large flanges or non-ferrous flanges with gaskets containing ACM will be similarly cut from the ship but transferred to a controlled environment negative air pressure enclosure on site for splitting and removal of the ACM gasket so as to render the metals available for safe recovery and recycling.
- 2.3.6. Electric cables proven to contain ACM will be similarly transferred to a controlled environment for the ACM and plastic to removed by cable stripping methods. The ACM and plastic will be disposed as ACM waste but the metals will be recovered and safely recycled. The cable stripping methods may be on site or at a suitably licensed facility off site.
- 2.3.7. The ACM removal works will be certified complete by an independent asbestos analyst for each work location based on the standard requirements in the table below:

<u>ACM REMOVAL WORK TYPE/TECHNIQUE</u>	<u>CERTIFICATION REQUIRED BY SDL</u>
Cut & wrap ACM removal	Certificate of re-assurance
Non-licensed ACM removal	Certificate of re-assurance
ACM gasket and cable ACM removal in controlled area	Certificate of re-occupation
Licensed ACM removal	4 stage clearance and Certificate of re-occupation

	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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3. ASBESTOS LICENSE REQUIREMENTS AND REGULATORY NOTIFICATION

- 3.1. The Control of Asbestos Regulations (CAR) 2006 dictates that an Asbestos Licence is required when undertaking work on Asbestos unless **ALL** of the following exemptions apply:
 - 3.1.1. The exposure is of “sporadic and low intensity” (less than 2 hours total or 1 hour for 1 man), **and**
 - 3.1.2. It is **clear** that the control limit (0.1 f/ml) will not be exceeded **and**
 - 3.1.3. The work involves;
 - 3.1.3.1. Short, non-continuous maintenance activities
 - 3.1.3.2. Removal of materials in which the asbestos fibres are firmly linked in a matrix (e.g. asbestos cement, floor tiles etc).
 - 3.1.3.3. Encapsulation or sealing of ACM which are in good condition.
 - 3.1.3.4. Air monitoring or collection and analysis of samples.
- 3.2. An Asbestos licence is granted by the Asbestos Licensing Unit (ALU) of the HSE and is valid for a maximum of 3 years and the HSE can impose conditions as they see fit. The HSE can also revoke or amend the conditions of our Asbestos Licence as the result of poor performance or enforcement action.
- 3.3. ACM removal and disposal sub-contractors will be assessed to ensure they have a full Asbestos Removal Contractors License issue by the HSE.
- 3.4. The following HSE License conditions must be adhered to without exception:
 - 3.4.1. A copy of the Asbestos Licence must be displayed on all licensed asbestos removal works.
 - 3.4.2. The Enforcement Authority (HSE / LA) must be notified at least a MINIMUM of 14 days in advance on an FOD ASB5 for all work which involves an asbestos licence.
 - 3.4.3. A site specific Method Statement / Plan of Work (Asbestos Risk Assessment) must be prepared AT THE TIME OF NOTIFICATION TO THE ENFORCMENT AUTHORITY for all LICENSED asbestos work.
 - 3.4.4. The Method Statement / Plan of Work can be requested at any time by the Enforcement Authority (HSE/LA).

 swansea drydocks Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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4. **TRAINING AND COMPETENCE OF ASBESTOS REMOVAL RESOURCES**

4.1. SDL are committed to ensuring that all ACM removal resources are adequately trained and competent to undertake the task which is required; the following minimum standards are required (unless otherwise agreed by SDL):

4.2. **ASBESTOS MANAGERS**

All Asbestos Managers must have the following competence based training;

- Minimum 5 years experience within the Asbestos Industry.
- CITB Site Managers Safety Training Scheme (SMSTS).

4.3. **HEALTH AND SAFETY ENGINEER**

- IOSH/NEBOSH Safety Management Diploma and committed to Continual Professional Development (CPD) / NVQ4 in Safety Management.
- Dangerous Good Safety Advisor (DGSA).

4.4. **ASBESTOS SUPERVISORS**

On promotion to Asbestos Supervisor, after a minimum of two years as an Asbestos Operative;

- 3 Day New Asbestos Supervisor (Class 1 UKATA Compliant) course must be undertaken and passed before being promoted to site supervisor.
- Annual Asbestos Supervisor Refresher (Class 1 UKATA Compliant).
- CITB Site Supervisors Safety Training Scheme (SSSTS).
- NVQ2 in Hazardous Waste removal (Asbestos).
- PASMA training Certificate.
- CSCS Carded.
- Any other course deemed suitable at time of appointment or on an as need basis

	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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4.5. ASBESTOS OPERATIVE

All New Asbestos employees;

- Attend and pass a 3 day New Operatives Course (Class 1 UKATA Compliant) within 1 month of joining the company, until this time they must be closely supervised by an experienced supervisor pending successful completion of their initial training.
- Annual 1 Day Asbestos Operative Refresher (Class 1 UKATA Compliant).
- NVQ2 in Hazardous Waste removal (Asbestos).
- PASMA training certificate CITB Health Safety Awareness (HSA).
- Any other course deemed suitable at time of appointment or on an as needed basis.

4.6. VALIDITY OF TRAINING CERTIFICATES

- Asbestos Training Certificates are valid for 1 year from the date of the course.
- Copies of all Training Certificates must be stamped and authorised BY A MANAGER as a “true copy”.
- Copies of Asbestos Training Certificates are to be kept on site at all times.
- All Training certificates are to be retained for 5 years after their expiry date.

4.7. NO ASBESTOS EMPLOYEE IS PERMITTED TO WORK ON A LICENSED ASBESTOS PROJECT WITHOUT A VALID IN DATE UKATA CLASS 1 LICENSED ASBESTOS TRAINING CERTIFICATE.

4.8. NO EMPLOYEE IS PERMITTED TO WORK ON A NON-LICENSED ASBESTOS PROJECT WITHOUT A VALID IN DATE UKATA CLASS 2 NON-LICENSED ASBESTOS TRAINING CERTIFICATE. (Class 1 covers this requirement).

4.9. ALL TRAINING CERTIFICATES MUST BE ENTERED ON THE COMPANY TRAINING MATRIX AND RECORD FOR THAT EMPLOYEE.

 Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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5. **ACCIDENTS AND EMERGENCY PROCEDURES**

5.1. The Accident Management and Emergency Response Plan (SD-DOC-005) specifies the overall SDL plan and response systems but below is that which pertains specifically to the ACM removal operations.

5.2. **EMERGENCY PROCEDURES**

The following procedures are put in place should an accident, incident or emergency occur which could put people at risk because of the presence of Asbestos Containing Materials (ACM). Such events may include;

- An employee collapsing or suffering a serious injury within an active ACM stripping enclosure.
- Fire within or outside the enclosure.
- An uncontrolled release of ACM e.g. damage to the enclosure.
- Newly identified or suspect ACM during dismantling.
- Spillage from ACM waste bags when removing waste.

ALL site employees will be briefed of these procedures by a toolbox talk prior to work commencing to ensure they are aware of these requirements.

The nominated Site Supervisor is to take charge in the event of a site emergency and will ensure the full site address is given to the relevant emergency service - this is to be found on the front cover of the Site Specific Method Statement

5.3. **IN THE EVENT OF PERSONAL INJURY OR PERSON COLLAPSE**

In the event of an accident requiring an injured person to be removed from the ACM removal area, the following procedures apply:

- 5.3.1. Call a first aider and instruct the Supervisor to call the emergency services by dialling **999**.
- 5.3.2. In the event of an emergency which requires immediate access into an asbestos enclosure, the person requiring access should be fully inducted by the asbestos removal company and/or analyst working in the enclosure. SDL and/or analyst shall also provide the required Personal Protective Equipment (PPE) including respiratory protection (RPE) and advise of any risks and procedures involved.

 swansea drydocks Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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- 5.3.3. As far as practicable, operatives should vacuum clean the victim and themselves and the immediate vicinity, using a type 'H' vacuum.
- 5.3.4. Respirators and boots should be sponged clean.
- 5.3.5. If breathing has ceased, RPE respirators will have to be removed in order to apply mouth to mouth resuscitation.
- 5.3.6. If the victim can be moved, remove him from the working area. If necessary, slit & reseal the enclosure.
- 5.3.7. Once outside the enclosure cut off contaminated clothing and bag as ACM waste. This will enable the victim to be wrapped in a blanket and transported by ambulance without contaminating the ambulance.
- 5.3.8. Direct and assist the emergency services so as to ensure the quickest possible attention to the victim.
- 5.3.9. When the victim is in competent hands, completely decontaminate all equipment and personnel.
- 5.3.10. The SDL main office and H&S Engineer should then be notified of the details of the incident and you must include the following information: -
 - Name of employee or employees injured (in case family need to be contacted).
 - Location (as per method statement).
 - Details of injury.
 - Where casualty is being taken.
 - Names of any other casualties.

5.4. FIRE

- 5.4.1. All site staff must make themselves aware of / be instructed to use the following:
 - The alarm signals for evacuation.
 - How to operate the alarm system.
 - How to operate the fire extinguishers.
 - The most direct exit routes in the event of an emergency.
 - The circumstances in which the site water supply may be used to fight fire.

 swansea drydocks Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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5.4.2. In the event of a fire the procedure will be:

- Raise the alarm.
- If the fire is in the enclosure, or the enclosure is penetrated, switch off all negative pressure equipment.
- Attempt to extinguish the fire if possible without personal risk.
- Evacuate the area, cutting the enclosure if necessary.
- Assemble at the designated assembly point.

5.5.2. Site management/supervisor will be instructed to contact the emergency services immediately upon hearing the alarm.

5.5.3. The above information is displayed in the security office and is freely available with details of Muster Points.

5.5.4. Site presence of all personnel is maintained by the Operations Manager to assist accounting for individuals during fire response.

5.6. UNCONTROLLED RELEASE OF ASBESTOS & PENETRATION OF THE ENCLOSURE

Ensure that any people in the vicinity who are not wearing PPE / RPE are instructed to leave THE AREA IMMEDIATELY. If a "LIVE" asbestos working enclosure is penetrated:

- STOP WORK IMMEDIATELY!!
- Ensure that all connected negative pressure units are operating at full capacity.
- Gently spray a curtain of water on surfaces in the immediate vicinity of the penetration.
- Where possible maintain this water curtain until the penetration is sealed.
- Place plastic sheeting over the penetration and temporarily secure it.
- After 15 minutes shut off negative pressure units and carry out a smoke test, sealing apertures where necessary.
- Vacuum clean all surfaces in the vicinity of the penetration. Where practicable spray a solution of PVA.
- Carry out air sampling and cleaning until a clearance certificate can be issued.

 Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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5.7. UNAUTHORISED ENTRY TO A LIVE ENCLOSURE

Supervisors must ensure that the work area is secure and this occurrence never manifests itself. However, in the event of unauthorised entry the trespasser must be dressed in overalls over all other clothing and taken to the hygiene facility. At the start of the personal decontamination procedure all clothing must be removed and disposed of as ACM waste.

5.8. NEWLY IDENTIFIED ACM DURING OTHER WASTE REMOVAL AND DISMANTLING

5.8.1. It is the responsibility of all employees to report any suspected or damaged ACM material.

5.8.2. Waste removal and dismantling employees will be trained in basic asbestos awareness to ensure competence in their actions should unforeseen ACM become noticed.

5.8.3. Where ACM is found it is presumed to be asbestos and the Operations Manager will be contacted immediately and shown the area of concern.

5.8.4. The Operations Manager will quarantine the area, damp down the ACM and engage the ACM removal sub-contractor who will establish air monitoring in the vicinity and safely remove and dispose of the ACM.

5.9. ACTION IN THE EVENT OF SPILLAGE OF ASBESTOS WASTE

- Clear the area of all personnel except those dealing with the spillage.
- Erect barriers to prevent personnel approaching the spillage.
- If outdoors, cover with suitable sheeting, e.g. polythene sheet, heavy paper, cardboard, and weight the edges to prevent fibres being blown about by the wind.
- Using a fine water spray allow a curtain of water to fall on the spilled material until it is thoroughly dampened.
- DO NOT AIM SPRAY DIRECTLY AT THE ACM MATERIAL.
- Using a shovel and scraper, not a broom, place the bulk of the material into a new asbestos waste bag, when this is half full, seal it and "double-bag" it in the usual way. Dispose of any covering material as ACM waste.

	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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- Clean up the immediate area using an approved filtered vacuum cleaner.
- Have air samples taken to ensure that the area is fit for reoccupying, continue cleaning until it is.
- Remove barriers.
- INFORM the Operations manager if you cannot deal with the situation.

5.10. ACCIDENT REPORTING

It is essential that where any person has been injured or where damage to property or equipment or the environment has occurred, it must be reported and investigated thoroughly, this will enable you in conjunction with the company to prevent it happening again.

5.10.1. WHAT TO REPORT

ANY Personal Accident to any person including members of the public, Near Miss, Dangerous Occurrence or Environmental Incident.

5.10.2. HOW TO REPORT AN ACCIDENT

All incidents and near misses must be reported using the company accident book and must be notified to the H &S Engineer IMMEDIATELY. The completed accident book entry must be removed and kept in the employees Personnel File.

5.10.3. ACCIDENT INVESTIGATION

Any accident which requires any person (i.e. employee, other contractor or member of the public) to seek medical advice / First Aid and does not return to work immediately (Minor Injury) or is off work as a result of ANY Incident will be investigated by the H&S Engineer.

The incident/accident is investigated and reported using Standard Forms 20, 21, and 22 in accordance with the Health & Safety Plan (SDL-DOC-001).

 swansea drydocks Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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6. CONTROL MEASURES TO PROTECT SITE PERSONNEL AND PUBLIC

6.1. CONTROL MEASURES TO PROTECT ACM REMOVAL PERSONNEL

All operatives will be trained, certified and competent.

6.1.1. All operatives will be issued with and wear appropriate PPE and RPE.

6.1.2. The ACM removal enclosure will be smoke tested to prove integrity before ACM removal work commences.

6.1.3. Negative pressure units will be applied to the enclosure at all times when "live".

6.1.4. Operatives working inside enclosures will be randomly selected to wear and undertake personal monitoring to detect ACM fibres.

6.1.5. The ACM removal works inside the enclosure will be monitored by viewing panels and/or CCTV during ACM removal operations.

6.1.6. The ACM removal techniques will be by wet stripping only.

6.1.7. ACM removal operations and Plan of Work will comply fully with CAR 2006.

6.2. CONTROL MEASURES TO PROTECT SITE WORKFORCE

6.2.1. All operatives will be trained, certified and competent.

6.2.2. All operatives will be issued with and wear appropriate PPE and RPE.

6.2.3. The ACM removal enclosure will be smoke tested to prove integrity before ACM removal work commences.

6.2.4. Negative pressure units will be applied to the enclosure at all times when "live".

6.2.5. The ACM removal techniques will be by wet stripping only.

6.2.6. Waste removal operatives (other than ACM) and dismantling operatives will be trained in basic asbestos awareness to ensure they are aware of the dangers, can reasonably identify unforeseen ACM during dismantling and know the control procedures involved in the works.

6.2.7. Transit routes for ACM removal will be designed into the Plan of Work to ensure no contamination of personnel.

6.2.8. The transit routes will be identified, labelled and barriered to prevent unauthorised access to non-ACM removal qualified operatives.

 Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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6.3. CONTROL MEASURES TO PROTECT THE GENERAL PUBLIC AND ENVIRONMENT

- 6.3.1. All waste removal and disposal will be in full accord with the Waste Management Plan (SDL-DOC-003) which specifies and controls the storage, containers and transportation standards; together with waste tracking methods.
- 6.3.2. All operatives will be trained, certified and competent for their tasks.
- 6.3.3. The ACM removal enclosure will be smoke tested to prove integrity before ACM removal work commences.
- 6.3.4. Negative pressure units will be applied to the enclosure at all times when "live".
- 6.3.5. The ACM removal techniques will be by wet stripping only.
- 6.3.6. Site and perimeter air monitoring will be employed and reported as per section 7 below.

 Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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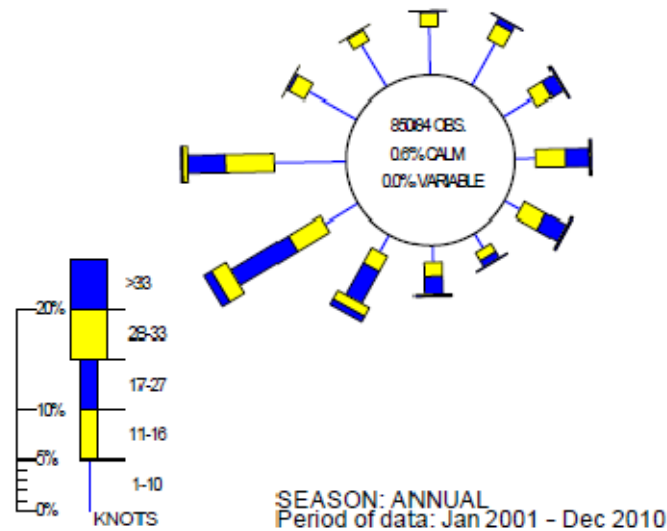
7. AMBIENT AIR MONITORING AND HEALTH SURVEILLANCE

- 7.1. In accordance with the responsibilities of SDL and the requirements of the Environmental Permit EPR/UP3298VL, an ambient air monitoring strategy for the control and measurement of asbestos fibres by an independent analyst will be implemented.
- 7.2. The monitoring will be established and a baseline set of measurement will be taken prior to any ACM work being undertaken.
- 7.3. The monitoring will be undertaken whenever ACM materials are on site in waste ships or waste ships are being dismantled at the site or whenever ACM is stored on site awaiting disposal.
- 7.4. The ambient air monitoring will in accordance with Environment Agency Guidance 'M17' Monitoring of Particulate Matter in Ambient Air Around Waste Facilities.
- 7.5. SDL shall undertake asbestos fibre emission monitoring at quarterly frequencies in and around the perimeter of the site to detect concentration of asbestos fibres.
- 7.6. The monitoring regime will be undertaken by a UKAS accredited company.

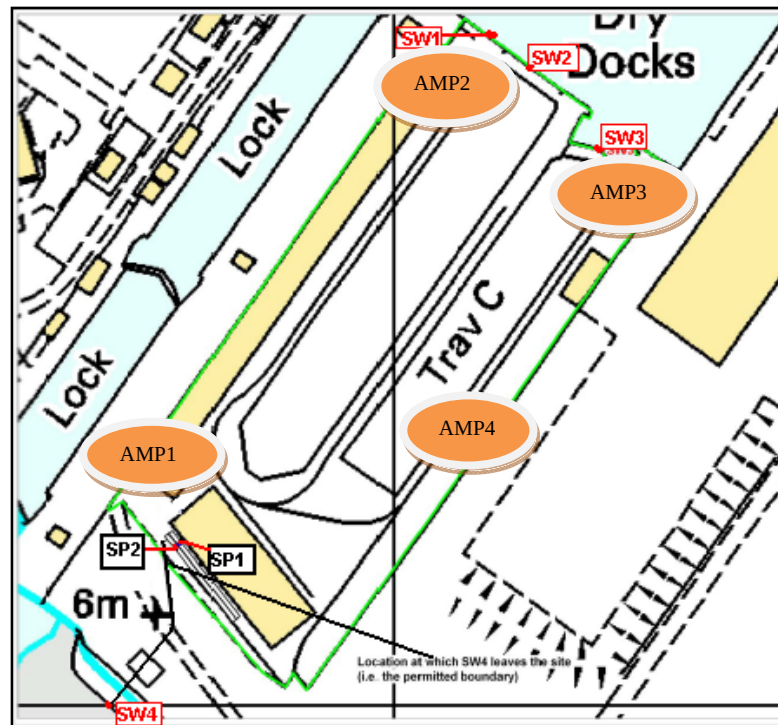
7.7. PREVALING WIND CONDITIONS

The prevailing wind conditions at the site are from the south and south west as shown by the wind rose below which is representative of the SDL ship recycling site. This data informs the location of the perimeter sample points for the monitoring equipment. The wind rose shows that the prevailing wind direction is from the southwest and west, accounting for 44% of the time per annum. The remainder of the time is from: North @ 6%; East @ 8% and South @ 5%.

WIND ROSE FOR MUMBLES HEAD
N.G.R: 2627E 1870N ALTITUDE: 43 metres a.m.s.l.



The monitoring points at and around the SDL site are therefore planned at AMP1, AMP2, AMP3 and AMP4 as shown:



 Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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7.8. AMBIENT AIR MONITORING POINTS

Monitoring equipment will therefore be sited in four (4) locations within the facility as shown.

The four (4) monitoring points have been chosen to assist with the consideration of the effects of dispersion the locations take into account topographical features of the facility and will be positioned to enable the potential maximum amount of fibres to be collected.

7.9. WEATHER CONDITIONS

7.9.1. The wind direction and speed will be considered on the day of ambient air monitoring and if the locations are adjusted from the above plan then they will be recorded as such with reasons why.

7.9.2. Monitoring will only be carried out in suitable weather conditions particularly when there is no precipitation, cloud cover and temperature and ground conditions will also be factored into the ambient air monitoring report.

7.9.3. All weather conditions will be recorded on the ambient air monitoring report.

7.10. AMBIENT AIRBORNE ACM FIBRE MEASUREMENT

7.10.1. Ambient air monitoring involves drawing a known flow rate of air through a filter for a measured time, so that airborne particles are collected. The test filter is prepared for examination under a microscope and analysed with all fibres of a certain type being counted. The number of fibres is compared against the sample's volume of air, and the fibre concentration is calculated.

7.10.2. The method of filter analysis normally carried out is Phase Contrast Microscopy (PCM), which is suitable in almost every circumstance. If results are influenced by other non-ACM fibres, then a Scanning Electron Microscopy (SEM) or Transmission Electron Microscopy (TEM) will be used to ensure accurate ACM fibre results. Although Phase Contrast Microscopy (PCM) will meet most of the requirements of work involving asbestos based materials, the method gives a total

 swansea drydocks Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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fibre count and cannot positively distinguish between asbestos and other inorganic and organic fibres. The alternative measurements allow ACM fibres to be identified by chemical composition using x-ray analysis.

7.10.3. The sampling equipment to be used at SDL ship recycling site will be low-flow sampling pumps fitted and cellulose acetate filters held in cowed filter holders.

7.10.4. Samples will taken at a height of approximately 1m above ground over a period of 2 to 3 hours, fibres on the cleared filter will then be counted and the results assessed against the lower limit of measurement of 0.01 fibres/cm³.

7.10.5. The resulting Ambient Air monitoring report is issued by the independent analytical company to SDL Director Ship Recycling for onward communication to the EA and to the TCM Manager for record keeping.

7.11. HEALTH SURVEILLANCE FOR ACM OPERATIVES

7.11.1. All ACM removal operatives must undergo a 2 yearly medical examination by an EMAS doctor appointed by the HSE.

7.11.2. The Operations Manager is to ensure that this is undertaken so that no asbestos removal Operative goes 'out of date' for their medical.

7.11.3. Asbestos removal operatives are not permitted to undertake Licensed Asbestos Removal unless they have a Valid in date Medical Certificate from an HSE registered Employment Medical Advisory Service (EMAS) Doctor.

7.11.4. The examination of asbestos workers consists of the clinical examination, including the lung function test In the clinical examination, apart from a general assessment of the fitness, the doctor looks for any signs of any chest disease which might for instance make respirator wearing difficult. The lung function test also helps the doctor establish that the lungs are performing well and to exclude other diseases.

7.11.5. A 'certificate' is issued by the examining doctor to the employer; the employee will also be given a copy of the certificate. Employees are to receive a copy of the certificate within 4 weeks of the date of examination.

 Ship Repair & Recycling	ASBESTOS MANAGEMENT PLAN	Date: NOV 2011
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7.11.6. The ACM removal sub-contractor's copy of the medical certificate is to be retained by them for a period of 40 years.

7.12. HEALTH RECORDS

7.12.1. A record is maintained by the ACM removal sub-contractor which lists the type of job performed with start and end dates and the average duration of exposure in hours per week. Employees are entitled to see this record at any time (with sufficient notice) and also request a copy on leaving their company employ.

7.12.2. Note: This record is to be kept by the ACM removal sub-contractor for a period of at least 40 years from date of last entry.

7.13. PERSONAL EXPOSURE RECORD

In addition to the Health Record, a further record is maintained where 'personal air monitoring' has taken place during stripping operations. Not every operative will be involved in this type of monitoring as the purpose is to take a representative sample whilst work is in progress, this will ensure that control measures being taken i.e. spray and penetration techniques are maintaining fibre levels to as low a level as possible and in any case below the control limit. As with the personal health record, this record is also kept by the ACM removal sub-contractor for a period of 40 years from date of last entry.