

DBS MAINTENANCE LIMITED

**HEALTH, SAFETY &
ENVIRONMENTAL POLICY AND
SYSTEM OF WORK**

CONTENTS

SUBJECT

PAGE NO:

COMPANY POLICY

CONTENTS	3
Safety and Health Policy Statement	8
Environmental Policy Statement.....	10
Company Environmental Risk Assessment.....	11
POLICY OBJECTIVES	15
KEY PERFORMANCE INDICATOR (KPIs).....	15
Each and every project:	15
Supply chain management	16
Pre-work activity	16
Work activity	16
Completion of project.....	16
ORGANISATION – INDIVIDUAL RESPONSIBILITIES.....	17
Directors and Managing Director	19
Site Manager – Site Foreman	22
<u>ARRANGEMENTS</u>	29
Training	29
Fire.....	30
First aid	30
Maintenance of plant and machinery	30
Storage, transport and handling of paint and other substances.....	30
Personal protective equipment	30
Site auditing	30
Consultation	31
Statutory examinations	31

Communication of Health and Safety Policy to employees	31
Health and safety advice	31
Safety Policy review.....	31
Contractors	32
System of work/method statements.....	32
Health and safety requirements imposed by clients	32
Risk Assessments	32
Portable and other electrical equipment	32
Accident book.....	33
Stress.....	33
Smoking.....	33
Alcohol drugs and the misuse of solvents	33
Visitors.....	34
COMPANY SAFETY RULES	35
SYSTEM OF WORK INTRODUCTION	36
Traveling to site Driver Behavior.....	36
Unsafe Vehicle/Mechanical Failure.....	36
Parking/Reversing	36
Refuelling	37
Towing Trailers	37
Upon arrival.....	38
Safety equipment	38
Electrical tools and equipment	39
Site types and conditions.....	39
ACCESS FOR DELIVERY	42
UNLOADING AND LOADING ON SITE.....	43
Loading.....	43
FOUNDATIONS.....	44

PREPARATION FOR INSTALLATION	45
Weather	45
Breaks in programmed work.....	45
Work in artificial light	46
Work on site ceases.....	46
INSTALLATION RULES	47
Vertical access.....	47
Access across steel.....	47
Walking on the top surface of a beam.....	47
Beam straddling.....	47
Slinging	47
Bolting up joints.....	48
INSTALLATION SEQUENCE	49
Light gauge fascia design	49
Structural fascia design.....	52
Underlining and soffit light frames	54
Lighting and fascia signs	55
MOBILE ELEVATING WORK PLATFORMS (MEWP)	56
MOBILE TOWER SCAFFOLDS	57
LADDERS – WILL NOT BE USED ON BP SITES	58
CRANES AND LIFTING GEAR	59
RISK ASSESSMENTS	60
MANUAL HANDLING	61
NOISE	61
at the first action level of 80 dB(A).....	62
at the second action level of 85 dB(A)	62
Noise risk assessment.....	63
Site:	65

HOT WORKS PROCEDURE.....	67
General	67
Hot works on a live petroleum site	68
TRAVELLING FIRST AID KIT	69
SITE INCIDENT REPORTING PROCEDURES.....	70
Guide to types of accidents/incidents requiring reporting:-	70
ENCOUNTERING ASBESTOS.....	72
Site Incident report chart.....	72

Amendment record:

Date	Amendment	Initials
Aug 14	Policy updated to alter text on CDM	WSM
Aug 14	Refresh all section of policy to recognise adjustments raised by Operatives and staff.	WSM
Sep 14	Alteration to update the environmental policy to show activity	WSM
Nov 2015	Alteration of Company Director	DBS/AL
June 2019	Alterations to reflect revised SOPs	AL/AW

Safety and Health Policy Statement

DBS Maintenance Limited [The Company] recognises its responsibilities under the Health and Safety at Work etc Act, for ensuring so far as is reasonably practicable, the health safety and welfare of all its employees and contractors. This will be achieved by developing a structured safety culture throughout the organisation.

The company attaches the greatest importance to health and safety and environmental issues considering this to be a management responsibility ranking equally with other management functions within the organisation. It also recognises this as good business sense.

DBS Maintenance Ltd is committed to:

- Preventing accidents and ill health in all aspects of the company's operations.
- Continuously improving our processes and practices relating to health and safety
- Identifying, controlling and wherever possible reducing or eliminating health and safety risks associated with our activities.
- providing a clear definition of health and safety responsibilities throughout the company.
- Complying with all regulatory and legislative requirements
- Training all of our employees on important health and safety matters
- Ensuring that health and safety concerns are considered when developing and changing business activities, processes and products.
- Ensuring that DBS have a robust and appropriate Health & Safety management system.
- Setting objectives and targets on health and safety issues.
- Conducting annual managerial reviews of our performance and reviewing our policies.
- Ensuring adequate resources are available to fulfil this policy.

We aim to achieve these objectives through hazard identification, risk assessment and by implementing appropriate controls at our places of work. We require as an integral part of our processes that all our business is to be operated and managed so as to ensure a high level of protection for the health and safety of our employees, contractors, customers and the public. In addition, we will work with our main suppliers and main contractors to ensure their H&S processes are robust and we will advise where appropriate.

Our key aim is to ensure that all in the Company and all suppliers and contractors that work with us understand the policy and this will be continually communicated at the weekly meetings, site meeting and meetings with suppliers. All will be involved in helping us to achieve our key performance indicators [KPIs].

Health and Safety responsibilities are defined throughout the organization. Managerial and supervisory roles are given responsibility for implementing the defined safety arrangements for the areas and activities under their control. The effective implementation of this policy requires the co-operation and active involvement of employees at all levels and in all business areas.

The Company employ Working Safety Management Ltd to provide employees and contractors employees with advice and guidance as and when necessary

In summary employees are required to:

- Co-operate with the Company to ensure compliance with applicable statutory requirements by working in accordance with the safety management system and safe working procedures;
- Work safely to ensure their health and safety and that of any other persons who could be affected by their acts and omissions;
- Report any areas where the existing safety arrangements fail to reduce risks to an acceptable level.
- The Senior Management Team is responsible for implementing and reviewing this policy and overseeing the improvement of the Company's health and safety performance.
- This policy will be displayed on notice boards, on the Company internet site and is also publicly available to all interested parties.

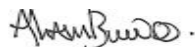
It is the policy of this company to take all reasonably practicable precautions for the prevention of accidents and dangerous occurrences and for the creation of working conditions which safeguard employees. To this end, the company will allocate the necessary resources and enlist the active support of all employees, upon whom duties are also imposed by the Health and Safety at Work etc Act. It is also recognised by the company that the environmental issues relating to the works carried out and the procedures for correct handling and disposal of unwanted materials is a high priority.

The company regards the standards set by the various relevant statutory provisions as the minimum standard which must be achieved, and will endeavor to improve on these standards where reasonably practicable.

The Company will ensure that these standards are continually re-iterated at every weekly meeting, on site meeting and any individual discussion held with employees or sub contract operative. In addition on-site tool box talks will be carried out.

Every element of the policy and procedures will be driven by safe systems of work as the Company recognise the benefits that safe working practices bring to the development of all employees.

This policy and the organisation, arrangements and safety rules which form part of it will be reviewed regularly and modified and updated as necessary.



Andrew Lamburne Director

Date: 1st November 2020

Review date: November 2021

Environmental Policy Statement

DBS Maintenance Ltd are one of the UK's leading petrol forecourt repair and maintenance specialists in addition to offering a wide array of solutions in structural steel work and cladding. We realise that environmental concerns should play an integral and fundamental part of our business.

To address the adverse environmental impacts of our operations, we will employ an environmental management system. Through this, we will identify any significant impacts and set clear objectives, against which we will monitor and manage our environmental performance and legislative compliance.


We will communicate with interested parties on aspects of our environmental performance, and will, whenever possible, incorporate their concerns in our environmental improvement program.

The company actively supports the principles of pollution prevention in order to reduce the adverse environmental impacts of our operations and products, within reasonably practicable levels. Through a program of continual environmental improvement, we will demonstrate our commitment to:

- Complying fully with all relevant environmental legislation.
- Reducing the environmental impact of associated activities.
- Waste minimisation
- Improving energy efficiency.
- Prevention of pollution.

This Environmental Policy has been reviewed and endorsed by the Company's management team, who take prime responsibility for the delivery of its aspirations.

Andrew Lamburne Director

Signed: 

Date: 1/7/2019

Company Environmental Risk Assessment

(C)	Environmental Consequence	(F)	Frequency	(RR)	Risk Rating (Consequence x Frequency)
S1	Negligible/No Effect	1	Negligible	1 – 4	Trivial
S2	Minor	2	Unlikely	5 – 8	Acceptable ACCEPTABLE
S3	Major	3	Likely	9 – 12	<u>Substantial WORK MUST</u>
S4	Serious	4	Probable	13 – 16	<u>Intolerable NOT START</u>

People affected: Members of the Public ✓. Site Staff ✓. Site Personnel ✓. Visitors to site ✓.

Risk	HAZARD	CAUSE/RISK	EFFECT	BEFORE CONTROL			CONTROL	AFTER CONTROL		
				(C)	(F)	(RR)		(C)	(F)	(RR)
				Vehicle emissions	CO2 emissions from vehicles	Damage to the environment from greenhouse gases		<ul style="list-style-type: none"> • Damage to the environment from greenhouse gases • Use of fossil fuels 	S4	4

Chemical Spill	Contamination by harmful chemicals	Chemicals spilt on site by other contractors or customers on the forecourt	<ul style="list-style-type: none"> Contamination of soil, water and surrounding environment 	S4	3	12	<ul style="list-style-type: none"> All vehicles to carry chemical spill kits 	S4	F2	8
Electrical tools	Electrical consumption	Electrical consumption	<ul style="list-style-type: none"> Damage to the environment from greenhouse gases Use of fossil fuels 	S4	4	16	<ul style="list-style-type: none"> Use only 110v tools to reduce energy consumption 	S4	F2	8
Energy consumption at the company HQ	Electrical consumption	Electrical consumption	<ul style="list-style-type: none"> Damage to the environment from greenhouse gases Use of fossil fuels 	S4	4	16	<ul style="list-style-type: none"> Use only LED lighting at company headquarters 	S4	F2	8
On site and office waste	Waste material from site	Left over/waste materials	<ul style="list-style-type: none"> Land fill over use Waste left on site 	S4	4	16	<ul style="list-style-type: none"> Recycling bins in the offices Vans carry a waste carrier licence allowing the responsible transit and disposal of waste For large waste that cannot be moved by company vehicles we only use certified waste removal companies 	S4	F2	8

Office consumables	Consumption of paper and other consumables that have a negative environmental effect	Over usage of paper contributing to unnecessary deforestation	<ul style="list-style-type: none"> • Deforestation • Unnecessary waste • Increase demand on landfill 	S4	4	16	<ul style="list-style-type: none"> • Use email as much as possible • Files and documents to be computer and iPad based as much as possible • Only print if absolutely necessary • Reuse packaging 	S4	F2	8
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Process of environment improvement:

- 1 The vehicles have been changed to enable better and more fuel consumption and environmental efficiency.
- 2 The garages where the vehicles are serviced have confirmed that they recycle waste oils through a registered environmental process.
- 3 All hired in tools are new or are of a quality that ensures they comply with the latest environmental standards.
- 4 Lamps in the office will be changed LED as the other fluorescent lamps become redundant.
- 5 Paper in the office is now bagged and sent to re-cycling
- 6 Materials from site are sent to a re-cycling centre where they are separated into specific use groups.
- 7 The Company consider environmental issues when selecting suppliers and sub- contractors and encourage them to cooperate with the policy objectives and to adopt sound environmental policy practices themselves so that:
- 8 **Timber** and timber products used by or on behalf of the Company carries the Forest Stewardship Council's (FSC) trademark).
- 9 Contractors follow the Company by not using any tropical hardwood unless it carried the FSC trademark.
- 10 **Paint** containing solvents should use those containing less than 5% of volatile organic compounds (VOCs).
- 11 **Anti-Graffiti or anti-climb** paint will have the lowest VOC available on the market.
- 12 Training resources will be allocated to further the effectiveness of the environmental policy and provide appropriate training to employees.

POLICY OBJECTIVES

The objectives of this policy are:

1. To promote standards of health, safety and welfare within the company and to ensure compliance with all relevant statutory provisions.
2. To create and maintain safe and healthy places of work for all employees and to ensure that the safety and health of all persons other than our employees are not adversely affected by our work activity.
3. To promote and maintain levels of environmental care and awareness, ensuring compliance with all statutory requirements is met.
4. To ensure that staff at all levels are provided with adequate instruction, training and supervision.
5. To develop safety awareness and responsible attitudes at all levels.
6. To promote a joint consultation approach on health and safety matters.
7. To provide a framework within which our safety performance may be monitored.
8. To ensure that where specific instructions relating to health and safety are imposed by our clients, that these are communicated to all relevant company personnel and to our contractors, and that these instructions are complied with.

KEY PERFORMANCE INDICATOR (KPIs)

Introduction

A performance indicator or key performance indicator (KPI) is a type of performance measurement. The Company will use KPIs to evaluate its success, or to evaluate the success of a particular activity in which it is engaged. Sometimes success is defined in terms of making progress toward strategic goals, but often success is simply the repeated, periodic achievement of some level of operational goal (e.g. zero defects, 10/10 customer satisfaction, etc.). Accordingly, choosing the right KPIs relies upon a good understanding of what is important to the organization. Since there is a need to understand well what is important (to an organization), various techniques to assess the present state of the business, and its key activities, are associated with the selection of performance indicators. These assessments often lead to the identification of potential improvements, so performance indicators are routinely associated with 'performance improvement' initiatives. A very common way to choose KPIs is to apply a management framework such as the balanced scorecard. The Company will use the following

Each and every project:

A programme will be set up prior to each project with key dates for the following activities to have been achieved.

DBS will consider the following activities as KPIs

Supply chain management

1. All suppliers will have completed our competence questionnaire.
2. All suppliers will have responded to our requests for availability of supplies
3. All Contractors will have completed our competence questionnaire.
4. All Contractors will have responded to our requests for availability of manpower and resources

Pre-work activity

1. Ensure all contract documents are logged into the Company
2. Ensure traceability of handling of the contract documents
3. Ensure return dates are understood and achieved.
4. Ensure Suppliers and Contractors have the resources to complete the tasks

Work activity

1. Ensure resources are immediately available for the commencement of the contract.
2. Ensure Contractors are geared up for the commencement of the contract.
3. Two weeks prior to commencement confirm all suppliers and Contractors are ready to commence.
4. Start Date – Ensure welfare facilities are on site and functioning
5. Ensure initial Contractor/s arrive and commence works
6. Follow programme of works. Ensure the suppliers and Contractors listed on the programme are contacted one week prior to their due date to prove resources are available.
7. Adjust the programme as necessary to keep the client informed of any malfunction of the programme.

Completion of project

1. Ensure all contractors have supplied the necessary information for the completion of the programme. Where CDM applies this will be held in the health and safety file.
2. Ensure electrical and mechanical suppliers / installers are ready to provide certificates before completion of contract.
3. Ensure all contract tasks have been complete by re-visiting the contract document to check off all work activity / alteration to work activity.
4. When working for BP ensure handover certificate is completed.
5. Handover the project on time and on budget.

ORGANISATION – INDIVIDUAL RESPONSIBILITIES

The Managing Director is responsible for ensuring that the company Safety Policy is implemented in practice.

Managers have a day to day responsibility for applying safety arrangements and rules, ensuring that these are applied effectively and that there is adequate training, instruction and supervision.

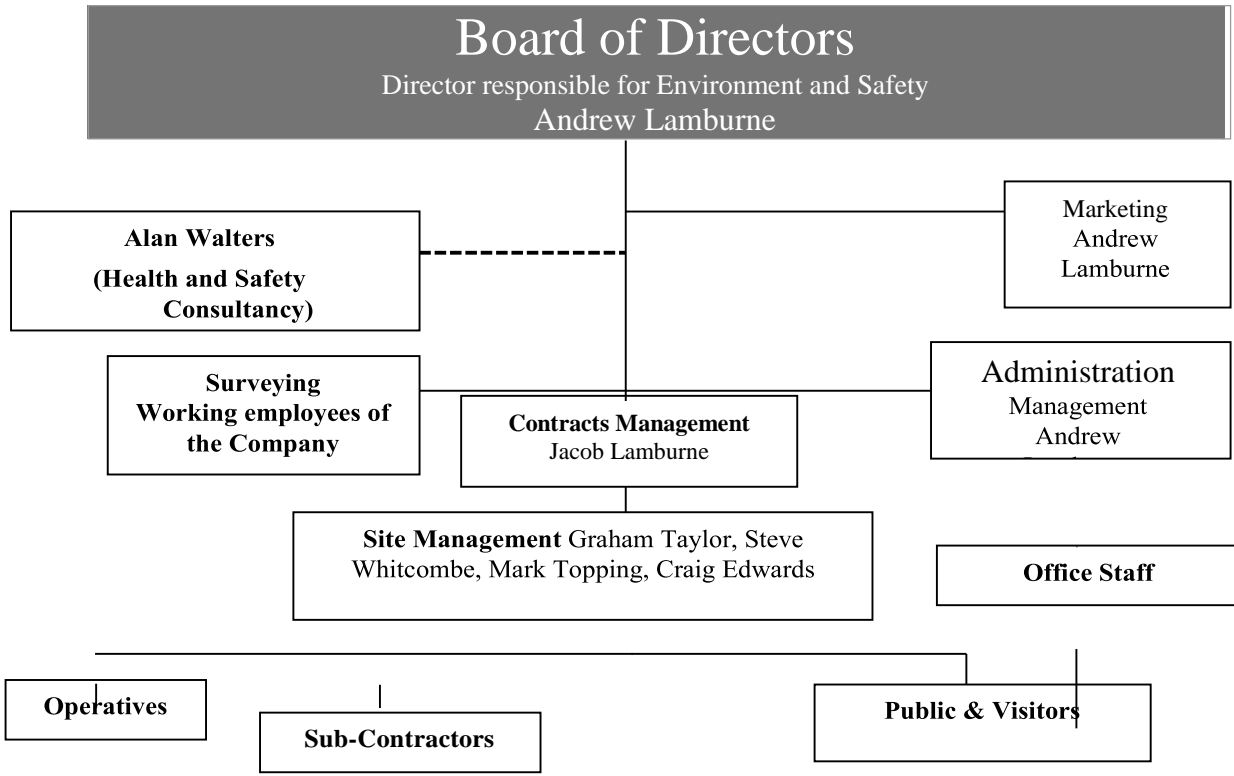
All employees regardless of position have a duty imposed upon them by the Health and Safety at Work etc Act to:-

1. Take responsible care for the health and safety of themselves or other persons who may be affected by their acts or omissions.
2. Co-operate with the company in the measures taken to safeguard health and safety at work.
3. Report to a person in authority any defects or site conditions which adversely affect health and safety at work.
4. Be aware of the company's safety organisation and arrangements, and those statutory provisions, company Safety Rules and client requirements relating to their work activity.
5. Ensure the environmental issues relating to working on a live site and the correct handling and disposal of materials are adhered to.

It should be noted that disciplinary action may be taken against employees who persistently and deliberately flout the requirements placed upon them by statutory provisions, company Safety Rules and client requirements.

DBS MAINTENANCE LTDS

ORGANISATION CHART



==== **Line of Authority and communication**
===== **Line of communication**

Directors and Managing Director

Initiate the Company Policy for Health, Safety, Welfare and the Environment to prevent injury, ill health, damage and wastage; set targets for the reduction of accidents.

Ensure that the Company Managers are aware of their responsibilities and that each administers and promotes with enthusiasm the requirements of this Policy throughout the entire Company.

Encourage training for all levels of employees to ensure a health and safety culture.

Ensure that safety directives (new legislation, etc.) are conveyed through all management levels down to site.

Ensure that adequate resources are provided to all employees to satisfy the standards detailed in the Company KPIs. Sanction the necessary funding for adequate welfare facilities and equipment, training and all matters of health and safety to meet the requirements of the Company Policy.

Set a personal example when visiting sites by wearing the appropriate clothing and/or protective equipment.

Admonish any employee or contracted labour for failures in compliance with the policies. Enable a verbal warning, written warning and similar letter to be produced and use on those who fail to comply with safe working practices.

Monitor effectiveness and review periodically.

Project Manager / Commercial Manager

Understand the Company Policy for Health, Safety and Welfare and ensure that it is readily available on each site. Plan all works in accordance with its requirements and ensure that it is regularly examined to establish if improvements or additions should be made

Have a wide knowledge of the requirements of The Construction (Design and Management) Regulations 2015 (CDM) The Management of Health and Safety at Work 1999 and other relevant legislation.

Determine at planning stage:-

- The requirements of the pre-tender safety plans on CDM projects.
- The most appropriate order and method of working.
- The provision of adequate lighting and safe method of electrical distribution.
- The allocation of responsibilities to each level of staff.
- The welfare facilities and fire precautions required.
- Any specific training or instruction required for personnel.

Ensure that adequate resources are provided to all employees to satisfy the standards detailed in the Company KPIs. Sanction the necessary funding for adequate welfare facilities and equipment, training and all matters of health and safety to meet the requirements of the Company Policy.

Provide written instructions in unusual situations not covered by Company Policy to establish working methods and sequences, outline potential hazards at each stage and indicate precautions to be adopted. This requires the preparation of written risk assessments as required under the Regulations for the Control of Hazardous Substances, Noise, Manual Handling, work at Height and the Management of Health and Safety. Make them available to the Site Manager and discuss them fully

Ensure, so far as is reasonably practicable, that work, once started: -

- Is carried out as planned and that account is taken of changing or unforeseen conditions as work proceeds and update the written assessments as necessary.
- Is carried out in accordance with The Construction (Design and Management) Regulations 2007 and other appropriate statutory requirements.

Ensure that any electricity supply is installed and maintained in a safe and proper manner. Protect all overhead services in accordance with the service authorities or the Health and Safety Executive (HSE) recommendations and this Company Policy before work starts.

Ensure that any design calculations for unusual scaffolds, falsework, etc. are independently checked.

Reprimand any member of site supervisory staff or sub contractors for failing to discharge safety responsibilities satisfactorily.

Set a personal example when visiting sites by wearing appropriate protective clothing and equipment.

Ensure that all design risk assessments and sub contractors method statements and risk assessments are available prior to work commencing.

Read additional duties detailed in the General Arrangements Section.

Admonish any employee or contracted labour for failures in compliance with the policies. Execute verbal warning, written warning and dismissal letter on those who fail to comply with safe working practices.

Site Manager – Site Foreman

Understand the Company Policy for Health, Safety and Welfare and ensure that it is brought to the notice of all employees, particularly new starters. Carry out all work in accordance with its requirements and bring to the notice of the Contracts Manager any improvements or additions which you feel necessary.

Know the requirements of The Construction (Design and Management) Regulations 2015 and other relevant legislation and ensure that they are observed on site. Particularly with regard to the provision and maintenance of Welfare Facilities.

Ensure all planning is defined to complete the KPIs relevant to the task to be in control of.

Organise sites so that work is carried out to the required standard with minimum risk to employees, other sub contractors, visitors, the public, equipment or materials.

Ensure that registers, records and reports are up to date and properly filled in and ensure that they are kept in a safe place. Ensure that copies of Regulations are available and statutory notices are prominently displayed.

Where necessary, issue written instructions setting out the method of work. Refer regularly

to the prepared written risk assessments as required under: - The Management of Health

and Safety at Work Regulations 1999

And related specific regulations:

Construction (Design and Management) Regulations 2015

The Control of Substances Hazardous to Health Regulations 2002 (COSHH)

The Control of Asbestos Regulations 2012

The Noise at Work Regulations 2005

The Manual Handling Operations Regulations 1992

The Provision and use of Work equipment regulations 1998

The Lifting Operations and Lifting Equipment Regulations 1998 The Work at Height Regulations 2005

Make the Control Measures determined by the assessments made under the regulations available to all operatives, including sub contractors and ensure full compliance.

Ensure that all hazardous substances and or materials are properly marked, used and stored, as outlined in the COSHH assessments.

Read additional duties detailed in the General Arrangements.

Plan for and maintain a tidy site by using the following Site Managers checklist.

Abmonish any employee or contracted labour for failures in compliance with the policies. Execute verbal warning, written warning and dismissal letter on those who fail to comply with safe working practices.

SITE MANAGERS CHECKLIST

No.	SUBJECT	Tick when completed or NA
1	Arrange delivery and safe stacking of materials to avoid double handling and ensure that off-loading and stacking is carried out safely.	
2	Implement arrangements with sub contractors and others on site to avoid confusion about areas of responsibility for health, safety and welfare.	
3	Ensure that all relevant information available relating to underground services on the site is obtained and available on site and that services are located, marked and plotted accurately before excavation work starts. Do not allow mechanical excavation within limits of the underground service laid down by the service authority.	
4	Protect all overhead services in accordance with the service authorities recommendations and Company Policy before work starts.	
5	Satisfy yourself that the competent persons appointed to make the necessary inspections of scaffolding and plant, etc., have sufficient knowledge and experience to evaluate all aspects of safety relating to the item being inspected. Request proof of competence where necessary. Ensure any necessary records are kept up to date.	
6	Ensure that the Construction Phase Health and Safety Plan where required by The Construction (Design and Management) Regulations 2015 (CDM) is available and updated as work progresses and that all necessary method statements are available prior to starting the specific work activity.	
7	Ensure that sub contractors under your control are aware of their responsibilities for safe working and that they are not required or permitted to take unnecessary risks. Stop any work if you consider that there is an imminent risk of serious injury to any person.	
8	Ensure that any electricity supply is installed and maintained in a safe and proper manner and a certificate for temporary electrical installation is obtained.	
9	All electrical equipment must be tested for safe working, tagged and a register kept. These inspections will be carried out at intervals laid down by Company Policy. No electrical equipment will be brought onto site by anyone, including sub contractors, without the appropriate proof of regular testing.	
10	All plant and machinery must be tested at the statutory intervals and will not be brought onto site by anyone, including sub contractors, without the appropriate certified proof of regular testing.	
11	Ensure that drivers of any plant or machinery hold current CTA certificates of competence or equivalent.	

Site Managers check list continued.

12	Check that all machinery and plant on site, including power and hand tools, are maintained in good condition and that all temporary electrical equipment is not more than 110 volts.	
13	Ensure that adequate supplies of protective clothing and equipment are maintained on site and that the equipment is suitable. Ensure that it is issued when required and keep a register of PPE issue.	
14	Set a personal example by wearing the appropriate protective clothing and equipment on site.	
15	Ensure that first aiders or appointed persons and adequate first-aid facilities, as required by The Health and Safety (First Aid) Regulations 1981, are on site and that all persons on site are aware of their location and procedure for receiving treatment for injuries.	
16	Ensure that a system is organised in the event of an emergency for applying first aid and taking care of casualties. Know where to obtain medical help and how to call the emergency services.	
17	Ensure that any accident on site, which results in an injury to any person (not just employees) and/or damage to plant or equipment, is reported in accordance with Company Policy.	
18	Accompany the Health and Safety Executive Inspector on site visits and act on his recommendations. In the case of the Inspector issuing a Notice, (Prohibition or Improvement), contact the Contracts Manager immediately after complying with any requirements to stop work.	
19	Ensure that adequate fire precautions are provided for site, site offices and welfare facilities and that any flammable liquids or liquefied petroleum gases are stored and used safely.	
20	Liaise when necessary with the Fire Brigade on fire prevention.	
21	Co-operate with your nominated Safety Adviser. Ask for his advice <u>before</u> commencing new methods of work or potentially hazardous operations. The Safety Adviser is given authority by the Company to stop any work where there is an imminent risk of serious injury.	
22	Ensure all those working on site are aware of their duties as detailed on page 15 of the Health and Safety Policy (Employees and Labour only Contractors).	

Employees and Labour only Contractors

The attention of all employees is drawn to their responsibilities under The Health and Safety at Work etc Act 1974 and any other legislation. This means that:-

- It shall be the duty of every employee while at work to take reasonable care for the health and safety of him/her self and of other persons who may be affected by his acts or omissions at work.
- As regards to any duty or requirement imposed on his employer or any other person by or under any of the relevant statutory provisions, to co-operate with him so far as it is necessary to enable that duty or requirement to be performed or complied with.
- No person shall intentionally or recklessly interfere with or misuse anything provided in the interests of health, safety and welfare in pursuance of any of the relevant statutory provisions.

Employees are reminded here that a breach of safety procedures could possibly result in disciplinary action being taken by the Company, and that provision is made in Law for certain breaches to be actioned by the Health and Safety Executive. In simple terms this means, employees shall: -

- Read and understand the relevant part Company Policy for Health, Safety and Welfare as detailed by your manager and carry out work in accordance with its requirements such as:
 - Use the correct tools and equipment for the job.
 - Keep tools in good condition.
 - When specified wear safety footwear and at all times foot wear should be suitable, and use, where necessary all protective clothing and safety equipment provided, e.g. safety helmets, respirators, etc.
 - Work in a safe manner at all times. Do not take unnecessary risks that could endanger yourself or others. If possible, remove site hazards yourself, e.g. remove or flatten nails sticking out of timber, tie unsecured access ladders, etc.
 - Warn other employees, particularly new employees and young people, of particular known hazards.
 - Do not use plant or equipment for work for which it was not intended, or if you are not trained or experienced to use it.
 - Report to your supervisor any damage to plant or equipment.
 - Do not play dangerous practical jokes or "horseplay" on site.
 - Report to your supervisor any person seen abusing welfare facilities provided.
 - Report any injury to yourself that results from an accident at work, even if the injury does not stop you working.
 - Suggest safer methods of working.

Sub-Contractors

This section will be issued to sub-contractors as part of their contract with DBS Maintenance Limited:

All sub contractors will be expected to comply with the Company Policy for Health, Safety and Welfare and must submit their own Health and Safety Policy Statement to the Company for verification. Sub contractors will receive a copy of the Company's Safety Rules and Requirements and sub contractors operatives will be expected to be fully aware of what is required of them whilst working on company sites.

Sub contractors must provide relevant assessments (Design, Risk, COSHH, Noise, Vibration and Manual Handling) as appropriate and method statements if necessary prior to commencement on site.

All work must be carried out in accordance with the relevant statutory provisions and taking into account the safety of others on the site and the general public and sub contractors employees must comply with any safety instruction given to them by the Site Manager.

All plant or equipment brought onto site by sub contractors must be safe and in good working condition, fitted with any necessary guards and safety devices, and with any necessary certificates available for checking. All operatives must be adequately trained in the use of such plant and equipment and, where appropriate, provide proof of competence.

Sub contractors employees are not permitted to alter any scaffold provided for their use, or use, or interfere with any plant or equipment on the site, unless authorised. Where sub contractors are required to hire or erect scaffolding they shall ensure that a suitably trained and certificated person inspects it weekly and the appropriate entry is made in the Scaffold Inspection Register.

No power tools or electrical equipment of greater than 110 volts may be brought onto site. All transformers, generators, extension leads, plugs and sockets must be to the latest British Standards for industrial use, and in good condition. All such equipment must be regularly tested for safe working and suitably tagged in accordance with the requirements of this Policy.

Any injury sustained or damage caused by sub contractors' employees must be reported immediately to the Site Manager.

Sub contractors will provide the Site Manager with the name of the person they have appointed as Safety Supervisor.

The Company has engaged Working Safety Management to inspect sites and report on health and safety matters. Safety Advisers have the Company's authority to stop work at any time that they consider that there is an imminent risk of serious injury. Sub contractors informed of any hazards or defects noted during these inspections will be expected to take immediate action.

Sub contractors will be required to prove, when appropriate, that at least one of their workforce on site is a suitably trained first aider.

Any material or substance brought on site must be used and stored in accordance with the legislation and manufacturers recommendations, and hazard information must be provided to the Site Manager and any other person who may be affected on site.

Sub contractors are particularly asked to note that workplaces must be kept tidy and all debris, waste materials, etc. cleared as work proceeds.

It is the policy of this Company that all operatives, sub contractors, visitors, etc. on the Company's sites will wear high visibility waistcoats and safety helmets at all times other than in specifically designated 'no risk' areas by the Site Manager. Sub contractors will be required to provide and wear and/or use any appropriate items of protective clothing and equipment required for the process in which they are engaged.

Estimators

Read and understand the Company Policy for Health, Safety and Welfare and relevant legislation and ensure that it is brought to the notice of any employees under your control.

Ensure that so far as reasonably practicable, detailed consideration is given to and provision made within the tender for safe methods and systems of work and ensure those issues highlighted within any Pre-tender Health and Safety Plan are adequately addressed.

Read additional duties detailed in the General Arrangements Section.

Office Staff

Read and understand the Company Policy for Health, Safety and Welfare and carry out your work in accordance with its requirements.

Do not try to use, repair or maintain any office equipment or machinery for which you have not received full instructions or training. Report any defects in office equipment or machinery immediately to your Supervisor.

Find out from your Manager the position of the First Aid Box and who is responsible for it. Ensure that you know the procedure in the event of a fire.

Report any accident or damage, however minor, to your Manager. Ensure that corridors, office floors, doorways, etc. are kept clear and free from obstruction.

Do not attempt to lift or move, on your own, articles or materials so heavy as likely to cause injury. Do not attempt to reach items on high shelves unless using steps or a properly designed hop-up; do not improvise or climb.

Know your fire escape route and an alternative route should your primary route be obstructed.

Know the assembly area and ensure that you report to the assembly area in the event of an emergency.

Suggest ways of eliminating hazards and improving working methods. Warn new employees, particularly young people, of known hazards.

ARRANGEMENTS

Training

Hazards

The company recognises that there are many hazards arising from using incompetent and poorly trained personnel to undertake work activities. Many accidents at work stem from a mismatch between an individual's capability and training to perform the work activities required by his job. Examples include incorrect use/misuse of hand and powered tools, personal protective equipment, access and egress

All employees will be given training appropriate for the work they do. A register is held within the office recording all information and detailing dates for renewal.

Safety awareness training will be given to all personnel whose activities involve visiting or carrying out work on site.

Personnel operating plant or machinery will be given appropriate training prior to being allowed to operate the equipment.

Monitoring and Control

The Contract Manager and Site Manager must ensure that:

- Only competent personnel undertake the work activities under his control. Where individuals display incompetence in the way the work is being executed then he must take steps to rectify the situation by:
- An individual is removed from a work activity until his competence level can be developed through training and experience to the level required.
- The level of direct supervision of the individual by competent, experienced personnel in the work activity, is increased, detailing the limits of the individual's involvement in the work.
- Where new systems of work or changed techniques are being implemented then the required information and training is undertaken prior to the work activity commencing.
- Where appropriate, refresher training is undertaken prior to executing work activities not regularly encountered. This will ensure those involved raise their competence level to that required by the work.
- Where personnel deputise for others that they are sufficiently competent to undertake the changed activities.

- Before entrusting work activities to individuals, their capability to perform the work to the health and safety standards and other criteria required has been assessed. (See Guidance at the end of this section.)
- Where deficiencies in competence are identified these are addressed by the provision of adequate training, development experiences and, where appropriate, the required level of supervision.
- Appropriate refresher and re-training is undertaken to meet the needs of individuals and requirements of changing systems of work, new techniques and changing risk environments.

Fire

Office - In the event of fire all personnel should vacate the premises via the nearest exit and assemble in the car park adjacent to the building.

Site - The Project Manager should obtain the site emergency procedures in advance from the client or ensure that the installation crew is advised of these by the client or contractor immediately they arrive on site.

First aid

The designated person for the offices is the Commercial Manager and for sites is the Foreman.

Maintenance of plant and machinery

All plant and machinery owned by the company will be maintained in accordance with legal requirements and the manufacturer's instructions. Records of all maintenance carried out will be held by the Managing Director.

Storage, transport and handling of paint and other substances

All substances of a hazardous nature will be stored, transported and handled in accordance with the manufacturers' Material Safety Data Sheets and the relevant COSHH Assessments prepared by the company.

Personal protective equipment

Safety helmets, safety boots, overalls, gloves, high visibility vests and where necessary, ear defenders and goggles will be supplied by the company and registers of issue will be kept. All company personnel are required to look after their PPE and to report any defects immediately to their immediate supervisor.

Site auditing

Site auditing will be carried out by the Site Manager. Audits will also be carried out on an 'ad-hoc' basis by a member of the management team.

Consultation

Consultation with the staff on matters affecting health and safety will be carried out by the Managing Director. Additionally a monthly meeting will be held by the Managing Director with the Project Managers to discuss health and safety on site.

Statutory examinations

All equipment owned by the company which is subject to statutory examination will be tested in accord with legal requirements and a record kept of same. Where equipment is hired the documentation e.g. test certificates will be inspected by the company Site Manager or Foreman to ensure they are in order before the equipment is brought into use.

Communication of Health and Safety Policy to employees

All employees will receive a copy of the Health and Safety Policy upon joining the company and a new copy whenever the policy is revised.

Relevant elements of the policy will be discussed at the weekly meetings and during site induction training.

Health and safety advice

Health and safety advice can be obtained in the first instance from the Managing Director or for site operations from the Project Manager. Advice may also be obtained from the following:-

Environmental Health Officer (for the office)
Eastleigh Borough Council
Civic Offices
Leigh Road
Eastleigh SO50
9YN
Tel: 023 8061 4646

Health and Safety Executive (for work on site)
Priestley House
Priestley Road
Basingstoke
RG24 9NW
Tel: 01256 404000

Safety Policy review

The company Health and Safety Policy and associated documents will be reviewed annually in September of each year, or earlier if changes in legislation or company activities occur, as a result of incidents, or concerns are raised by company personnel.

Contractors

All contractors working on behalf of the company must be competent to carry out the work as required by the Construction (Design and Management) Regulations 2015 and/or other relevant legislation. All contractors will be required to provide copies of their health and safety policy, together with copies of risk assessments and method statements, before being permitted to commence work. Contractors will also be required to produce evidence that their operatives have been trained and are competent to carry out the work.

This will be achieved by issuing contractors one of the two in-house questionnaires. All contractors and their personnel are required to comply with the following:-

- When working in the UK - all current UK health and safety legislation;
- When working abroad - all current UK health and safety legislation which is to be considered a minimum, together with all current legislation in the country in which the work is to be carried out;
- DBS Maintenance Ltd's requirements for health and safety;
- Specific requirements laid down by our clients.

System of work/method statements

Where the need is identified method statements will be prepared for use by employees and where appropriate contractors.

Deviations from systems of work/method statements will not be permitted. Where changes are required revised documentation will be prepared.

Health and safety requirements imposed by clients

Where our clients have issued specific health and safety instructions over and above those imposed by law, the Project Manager is responsible to ensure that all personnel, including those of any contractor engaged by the company, are made fully aware of, and comply with these instructions.

Risk Assessments

These will be prepared as follows:-

Office - By the Commercial Manager
Site - By the Project Manager

Portable and other electrical equipment

To ensure that all portable and other electrical equipment is properly maintained, a formal and regular system of routine inspection and test has been established. A register of equipment and its test status is held by the Managing Director.

Accident book

The company accident book is held in the company offices, and ALL accidents and near misses should be reported. This must include those which occur on the company premises and on site. If a major incident occurs on site, details should be phoned IMMEDIATELY to the Contracts Manager and then a Site Incident Report Form should be completed by the Foreman or Deputy and sent in to the Contracts Manager. If necessary, the Area Health & Safety Officer will be informed and an investigation of the incident will be carried out as soon as possible.

Stress

The Health and Safety Executive define stress as “the adverse reaction people have to excessive pressure or other types of demand placed on them”. This makes an important distinction between pressure, which can be a positive state if managed correctly, and stress which can be detrimental to health.

In order to limit stress in the work place the following procedures are followed:

- Ensure good communication between management and staff, particularly where there are organisational and procedural changes.
- Ensure staff are fully trained to discharge their duties.
- Ensure staff are provided with meaningful developmental opportunities.
- Monitor workloads to ensure that people are not overloaded.
- Monitor working hours and overtime to ensure that staff are not overworking.
- Monitor holidays to ensure that staff are taking their full entitlement.
- Attend training as requested in good management practice and health and safety.
- Ensure that bullying and harassment is not tolerated within their jurisdiction.
- Be vigilant and offer additional support to a member of staff who is experiencing stress outside work e.g. bereavement or separation

Smoking

This is a non-smoking company. Smoking is not permitted on company premises, nor is it permitted on any site, except in areas designated for the purpose.

Alcohol drugs and the misuse of solvents

People at work under the influence of drink, illegal drugs or the misuse of solvents are a danger to themselves and the people they work with. The health and safety of staff and contractors is of paramount importance to the company, which has a duty of care to others, and therefore the company must act to ensure that this is never compromised. Personnel under the influence of alcohol, illegal drugs or solvents will be stopped immediately from working on site.

It should be noted that possession and/or use of illegal drugs on company premises or sites is an illegal act and the company must act accordingly to uphold the law.

However the company recognises that alcohol, drug or solvent abuse is a medical condition and will view sympathetically any employee who is willing to seek help and will treat such requests for help in the strictest confidence.

If absenteeism or poor job performance is linked to the condition then the company's disciplinary procedures will apply, although their onset may be delayed if the employee has agreed to seek help. A failure to agree to seek help or to follow through on any treatment offered would normally lead to formal disciplinary procedures being adopted immediately.

Some prescribed or over the counter drugs and medicines cause drowsiness and therefore it can be dangerous to drive vehicles or operate plant or machinery. Employees should check for any warnings on the bottle or packet, or refer to their doctor or pharmacist.

Personnel must not drive or operate machinery if their ability to do so is likely to be impaired by any medication.

Visitors

All visitors must report to Reception and sign the Visitors Book upon arrival.

COMPANY SAFETY RULES

DO:-

- Use guards, safety equipment and personal protective equipment provided
- Report loss or damage to guards, safety equipment and personal protective equipment immediately to the Commercial Manager so that this can be remedied
- Report accidents, incidents and near misses to the Project Manager for those occurring on site and to the Commercial Manager for those occurring elsewhere
- Switch off and unplug all portable electrical equipment and flexible cable when not in use
- Stop and isolate plant and machinery before carrying out checks or maintenance
- Familiarise your self with the positions of Fire Exits and Fire Extinguishers for both the office and when on site and keep Fire Exits clear

DO NOT:-

- Attempt to carry out work on or operate plant, machinery or equipment you are not competent or authorised to use
- Take short cuts and chances
- Skylark
- Overload lifting appliances.
- Use ladders on BP sites
- Carry out lone working

SYSTEM OF WORK

INTRODUCTION

General

This System of Work details the safe working practices which are to be adopted by DBS Maintenance Ltd on all sites, including installation, repairs, maintenance and refurbishment.

Safe access and egress to and from the place of work and safety of all persons whilst at work or who may be affected by the work must be maintained.

All operatives and managers whilst on site will wear a safety helmet, safety boots and high visibility vest. In addition operatives will wear company coveralls or approved company work trousers/shirt and jumpers, and as appropriate, safety harnesses and lanyards, gloves or gauntlets, eye protection and ear protection.

Traveling to site

Driver Behavior

1. Only drivers who have an appropriate driving license, are suitably trained in driver awareness may drive Company vehicles.
2. Drivers should familiarize themselves with the layout of the driver's controls before commencing the journey.
3. A second authorized driver must be available to share long journeys.
4. Drivers of Company vehicles must not use mobile phones whilst driving
5. Drivers must not drive when tired. They should not drive for periods of more than 2 hours without a reasonable break.
6. Drivers must drive in accordance with the Highway Code, and pay particular attention to speed restrictions and the prevailing road/weather conditions.

Unsafe Vehicle/Mechanical Failure

1. All Company vehicles should be checked, maintained and serviced as follows:
 - Daily - drivers checks visual - brakes, tyres, mirrors, windows, horn, brakes and all controls
 - Weekly - vehicle inspection forms completed
 - Manufacturer's recommended servicing and maintenance
 - The annual MOT examination
2. All drivers should be aware of the action to take in the event of a breakdown
3. Drivers should have access to a mobile phone to contact their manager and the breakdown services.

Parking/Reversing

1. All vehicles on Company premises should only park in designated parking areas.
2. Parked vehicles must not obstruct fire exits, fire fighting equipment, access routes or pedestrian routes
3. Parked vehicles should be left in 'neutral', power switched off, brakes applied, starter key removed.
4. Reference should be made to the 'Reversing Vehicles Safe System of Work

Refuelling

- 1.** The 'No Smoking' rule must be strictly adhered to during refuelling, and in the vicinity of fuel pumps.
- 2.** Under no circumstances should mobile telephones be used in petrol filling stations due to the risk of them igniting and causing an explosion. All mobile telephones should be switched off before any person carrying them gets out of the vehicle when it is stopped in a fillingstation.

Towing Trailers

- 1.** Only drivers who have an appropriate driving license and are suitably trained and authorised may use a company vehicle to tow a trailer.
- 2.** Drivers must ensure the vehicle is well within its towing capability when the trailer is fully loaded.
- 3.** Drivers must ensure the trailer is safe to use - tyres, brakes lights, correct towing vehicle registration plate.
- 4.** Drivers must ensure the load is securely restrained.
- 5.** Only mini-buses with near-side and off-side passenger doors should be used to pull trailers if opening the rear access door is restricted by the trailer.

Upon arrival

The Foreman should report to the Site Agent/Site Manager and outline the work to be carried out.
Before commencing work

The Foreman must review the:-

1. Site Specific Method Statement
2. Risk Assessment
3. COSHH Assessments where appropriate
4. Erection Instructions

Should there be any discrepancies which cannot be safely resolved on site then the Project Manager should be informed.

Safety equipment

Safety helmets to BS EN397 or BS 5240 or DIN 4840 Safety

boots to BS EN345 or BS 1870

Safety harness to BS EN 361 or BS 1397 Gloves

to BS EN 388

Gauntlets to BS EN 407

Eye protection to BS EN 166-9 or BS 679 or BS 1542 Ear

protection to BS EN 352

DBS Maintenance Ltd approved coveralls/works trousers/shirts/jumpers High

visibility vest to BS EN 471

Lone Working Policy

DBS do not allow lone working.

Electrical tools and equipment

At all times electrical tools and equipment used on site will be 110 volt powered, using a transformer.

Where the use of 240 volt equipment is unavoidable suitable protection in the form of a 30mA/40mS circuit breaker must be used at all times.

Site types and conditions

Although the principals of canopy installation are generally the same for all sites, each type of site presents particular difficulties that may effect the installation.

Sites fall into three major types:-

- a. New or green field sites
- b. Existing operational sites
- c. Industrial i.e. non-petroleum forecourt use

New sites

These sites relate to a conventional construction site with no existing fuel storage involved.

Difficulties that may be experienced are a failure by the site to provide:

- a. a suitable installation area free from excavations for pipe runs etc., to the full plan extent of the canopy, plus an area 2 metres wide to the complete perimeter of the canopy;
- b. a suitable surface for the use of mobile elevating work platforms or mobile towers;
- c. other trades intending to work beneath the canopy whilst it is being installed;
- d. materials and excavations external to the canopy area obstructing access for craneage and delivery vehicles.

Existing operational sites

The difficulties stated above for new sites can also be experienced on existing operational sites. However there are other problems that are faced on operational sites and these are detailed below:-

- a. Many canopy sites are located adjacent to busy roads. It is imperative that adequate access for delivery vehicles and adequate operating space is available for mobile cranes. In some cases it will be necessary to offload the vehicle from the roadway. In these cases permission from the Police should be obtained in advance by the Project Manager and suitable precautions taken e.g. warning signs placed and the area to be barriered off to advise and protect the public.

- b. Petrol is a highly volatile and gives off flammable vapour even at very low temperatures. Therefore existing fuel storage will present a hazard due to the risk of fire and explosion. To ensure the safe operation of a petrol forecourt and that adequate care is taken to prevent fire and explosion by persons working on site, the concept of hazardous area classification and zoning set out in BS 5345 Parts 1 and 2 should be followed. All sources of ignition, including those associated with sparks of any sort or hot surfaces of electrical equipment, should be excluded from hazardous areas, or in the case of electrical equipment should be specially protected. This includes fixed and portable equipment.

BS 5345 defines the following hazardous zones as follows:-

Zone 0: in which an explosive gas-air mixture is continuously present, or present for long periods.

Zone 1: in which an explosive gas-air mixture is likely to occur in normal operation.

Zone 2: in which an explosive gas-air mixture is not likely to occur in normal operation, but if it occurs, will exist for only a short time.

In view of the above, particular vigilance **MUST** be exercised during operations where flame and/or sparks could arise e.g. using a generator, cutting using burning gear and/or disc cutters and electric arc welding. (See Hot Works Procedures on page 66)

- c. The movement of site staff and the public are hazards which must be taken into account. All members of the installation crew have a responsibility to protect the site staff and members of the public from risks to their health and safety. It is therefore preferred, and in some cases essential, that retail sales cease during some operations. In all cases the working area must be barriered off to prevent access by unauthorised persons and appropriate warning signs erected.
- d. Where the site remains open or partially open, operations which involve an interface with the site staff and the public should be conducted in such a way that a physical barrier is installed and maintained between these parties and the working area. The area of operation should be fenced off using traffic cones with pairs of horizontal red and white barrier boards between them (height to top board to be 1.0 metre); or with temporary fencing e.g. "Heras". No member of the site staff or the public is to be allowed within the area of operation. Adequate notices should be displayed to inform the public of the operations being undertaken (e.g. Men at Work, Hard Hat Area, and Unauthorised Persons Prohibited etc).

Industrial non-petroleum sites

Items detailed in the above new and operational site sections also apply to this type of site with the exception of petroleum related conditions.

The installers' obligations to the employees of the client should be as if these persons were members of the public i.e. total segregation of the work area from the general area of the site, erect warning signs.

Client requirements

Additional requirements may be imposed by the client in respect of safe working methods and procedures. These must be adhered to in their entirety, even when these impose a more severe constraint on work operations than are detailed in this System of Work or the DBS Maintenance Ltd method statement.

Disposal of unwanted and/or damaged materials from site

Prior to arriving on site provision must be made for the removal and disposal of any materials. This should be arranged with a recognised and certified environmental waste disposal company. Where necessary a skip will be organised for the site collection of any waste materials (if quantities demand) or the materials should be stacked neatly in a safe position for collection before the site is left.

ACCESS FOR DELIVERY

Satisfactory means of access to the site free of obstructions must be provided so that delivery vehicles can safely reach the unloading point. Care must be taken to ensure that no overhead cables or other obstructions such as lamp standards, manhole covers, sewer access shafts, excavations etc., prevent the movement of delivery vehicles or mobile cranes or other plant. Suitable unloading facilities must be available and the ground must be capable of withstanding the wheel loads imposed by the delivery vehicle as well as any plant used for offloading. In addition sufficient storage area adjacent to the working area must be available.

Where any vehicle is reversed, a competent banksman must be in attendance. The banksman should stand in a secure position where HE CAN SEE THE LOAD AND CAN BE SEEN CLEARLY by the driver. Face the driver where possible, ensuring each signal is distinct and clear.

As an approximate guide vehicle capacities and sizes are as follows:-

Maximum load gross weight - 38 tonnes
Maximum load any one axle - 10 tonnes
Height of cab - 3.210 metres
Overall width of vehicle - 2.600 metres Overall

length when coupled to trailer:-

8.5 metres - 12.70 metres
10.0 metres - 14.20 metres
12.0 metres - 16.40 metres
13.8 metres - 17.90 metres
15.0 metres - 19.40 metres
18.0 metres - 22.50 metres

Access width required for right angled bend:- 12

metre trailer - 5.50 metres
15 metre trailer - 6.10 metres
18 metre trailer - 10.40 metres

Access reminders:-

Turning circle tractor/trailer

Haul road capable of withstanding wheel loading and free from obstructions Radius of any bends to suit maximum tractor/trailer length

Before offloading commences the composition of the load must be known. The Foreman must examine the delivery ticket and in conjunction with the general arrangement drawing, plan the offloading with the installation sequence in mind.

UNLOADING AND LOADING ON SITE

Unloading

First ensure that the delivery vehicle and crane are standing on firm and level ground. Ground conditions should be capable of remaining sound even after bad weather and sustained heavy rain.

Ascertain the composition of the load and ensure that it has not shifted during transit. The Foreman must examine the delivery ticket and in conjunction with the general arrangement drawing, plan the offloading with the installation sequence in mind.

One competent person (Full CPCS certified Slinger/Banksman) to act as banksman and be responsible for crane signals.

Driver to vacate cab prior to unloading.

Maintain the stability of the vehicle and load by offloading evenly to avoid imbalance and tipping.

Stack the materials, ideally maximum two units high, on firm dry hardstanding as near to the point of installation as possible. Blocks and wedges must be used to avoid the risk of sliding, collapse or distortion. NB. Stack steel in such a way that it will not be necessary to move one piece to get at another. Place separate items (e.g. columns, bracing, beams etc) close to where they are to be finally installed.

Advise the Project Manager of any shortages as soon as possible.

Keep people clear of the areas around the vehicle and beneath suspended loads.

Where it is necessary to move the delivery vehicle with only a part load left onboard, ensure the load is secure and that the vehicle remains stable whilst being moved.

Loading

Special care must be taken in loading fabricated steel members. They must be loaded in such a way e.g. with the use of dunnage, to ensure stability during transit and so that chains or slings may be placed easily for offloading.

No one should be in the cab of a vehicle during loading. The driver must be able to check the position of the load and its fastenings before taking the vehicle onto the public highway. As far as possible, members which are of such a shape or weight as to involve difficulty in offloading must be in a position from which they can be lifted directly without adjustment of their position before slinging.

Cold rolled items should be protected to prevent damage in transit and during offloading.

FOUNDATIONS

The concrete must be laid to the prescribed specification by the foundation contractor and be protected from adverse weather conditions, such as extreme heat and cold where appropriate.

Holding down bolts must be accurately placed, greased and protected by the foundation contractor during placing of the concrete. The bolts must be loosened after compaction of the concrete, by rotating them in their sleeves.

In the case of holding down bolts which are cast solid i.e. with no movement after hardening the concrete, the foundation contractor must ensure that there is no movement of the bolts from the set out position during pouring and compaction of the concrete.

Holding down bolts should be cleaned where necessary using a wire brush and the nuts run down prior to the commencement of the installation.

There is normally a tolerance between the prescribed level of the concrete and the level of the underside of the stanchion base plates. This will allow for small discrepancies in the level of the concrete and to include for the placing of grout between the stanchion base plates and the concrete. The foundation contractor must ensure that the area covered by the base plates of the stanchions is prepared to a smooth and level finish.

Base packs should be positioned by the canopy installation team prior to the erection of the stanchions, and the amount placed at each base recorded for checking when the stanchion is installed on the base.

PREPARATION FOR INSTALLATION

Preparation

Ensure that all equipment and materials necessary for installation are on site.

Check all cleats on steel members to ensure that they are not damaged. If they are bent straighten them with a hammer. In some cases, cleats for the fixing of secondary members to the columns are supplied loose and these should be bolted to the stanchions before lifting. (For details see marked up installation drawings).

Remove the nuts from the holding down bolts.

Weather

Work should not take place in weather conditions which introduce an undue element of risk. These include:-

- a. High wind
- b. Heavy rain
- c. Presence of frost
- d. Poor visibility due to fog mist or glare
- e. Snow and ice
- f. Moisture on gloss finish steelwork

If conditions deteriorate to such an extent that the Foreman considers that safe working is not possible, then only further work to ensure stability of the structure should be carried out.

Where suspension of the installation of a structure already in progress would introduce a hazard then that part of the work should be completed, or if necessary dismantled as soon as possible.

Where conditions do not permit safe working the decision made by the Foreman to stop work should only be influenced by the safety of the persons involved. The weather conditions should be monitored constantly by the Foreman to ensure that it is safe to use cranes, handle sheeting etc. Installers should wear weatherproof clothing when conditions require it.

Breaks in programmed work

If, due to programme or end of the working day, or if weather conditions dictate that a break in operations occurs:-

All work must be completed to such a stage that the structure is safe in respect of stability and/or security.

Any item left on the structure must be secure and safe. In particular, bundles of sheets or other light gauge items must be securely tied to the frame.

Work in artificial light

When installation and ancillary works are carried out under artificial lighting, the following criteria should be followed:-

At all times the Foreman is to decide whether the level of lighting is adequate to carry out the work. If the lighting is not adequate no work is to take place.

Where a crane is being used, the load being raised must be illuminated from the crane jib and from standing light sources and the banksman must be clearly visible to the crane driver and the installers.

The elimination of shadow must be the aim of the lighting. Where there is an obstruction e.g. excavations these must be adequately lit and be barriered off.

Work on site ceases

Where work on site ceases due to bad weather, inadequate lighting, or for any other reason the Project Manager must be informed immediately.

INSTALLATION RULES

General

To reduce time working at height, as much as possible of the structure should be assembled on the ground and lifted into position.

Materials, tools or other objects must not be thrown up to or from height.

All practicable steps must be taken to prevent danger from live electrical cables or apparatus. Cable runs must be maintained in a tidy state.

Vertical access

This will normally be by the use of a mobile elevating work platform (MEWP) or mobile tower scaffold. Where work is of short duration a properly positioned, tied and footed ladder may be used. See site specific method statements for variations to this.

Access across steel

The steelwork should not be used as a means of access. If a change in position is required then the MEWP should be moved to the new position.

Walking on the top surface of a beam

Walking on the top surface of a beam is not permitted.

Beam straddling

This should not be attempted unless the installer is wearing a safety harness and his lanyard is attached to the steel using the holes provided for this purpose. The installer should only use this method whilst carrying out work in one position.. He should not use this method to move along the beam.

Slinging

When chains or slings are attached to steel, consideration must be given to the position at which the lifting appliance is attached, as this will determine the position of the steel when it is hanging from the appliance.

Timber friction blocks must be used unless a cleat or similar can be utilised to restrain the chains/slings in position. Members must always be slung so that the minimum amount of effort is required to bring the surfaces of the joints into contact with those on the member to which it is to be fixed.

For example a stanchion must always be slung near the top so that it hangs vertically, whereas a spine beam should be slung with the chains positioned equally distant from each end so that it hangs horizontally. Use a light manila or hemp rope as a tag line to assist in attaining and maintaining the correct position.

Chain brothers that is a pair of identical chains with a hook on the end of each and a common ring on the other for attachment to the crane hook will give greater stability to the lift than a single or collar chain.

The load should always be lifted gently by the crane to check the safety of a chain or sling and the balance of the load. If it is not seen to be safe SLING THE STEEL AGAIN.

A chain or wire rope may be shortened by passing it two or more times around the object to be lifted. Special care should be taken to provide suitable friction blocks in this case.

Chains must only be shortened by the use of shortening clutches. Do not knot.

Ensure that the chains/slides are the correct strength for the load and that they are not twisted.

Use only chains with hooks fitted with safety catches or use closed hooks. Never wrap a chain or sling under load round the crane hook.

Ensure that the load is supported in the bowl of the hook not the tip and avoid snatch or sudden loads.

Where prefinished/fully painted items are to be lifted, slings manufactured from man made materials such as nylon, polypropylene etc (sometimes referred to as strops) should be used. Care should be taken to ensure that slings are protected from sharp edges to avoid damaging them. Ensure that the SWL is not exceeded by having a sling angle greater than 90°.

Always ensure that there is no one beneath the load whilst it is being lifted, positioned and secured.

Bolting up joints

The maximum number of joints should be made at ground level. When joints are made on the structure:-

Use MEWP or mobile tower scaffold to gain access. If this is not possible and only for short duration work, access may be gained using a tied and footed ladder, in this case the installers safety lanyard must be secured to a steel member. – See site specific method statements for any variations to this.

Always ensure that sufficient nuts, washers and bolts are carried in a pouch and the correct size and strength spanners are placed in the installer's tool frog.

Ensure that the nuts and bolts are tightened before leaving the connection to ensure the stability of the structure and that they are retightened after the structure is plumbed and lined.

INSTALLATION SEQUENCE

General

An installation sequence must be followed which ensures the stability of the steel frame and its components at all stages. The aim is to stabilise each component as soon as possible after installation.

A site specific method statement is normally produced by DBS Maintenance Limited which will include annotated sketches/plans to indicate delivery vehicle and crane standing positions and other relevant details.

If spine beams are spliced it is advantageous to complete this operation in advance of positioning the stanchions, which once installed will often limit the available space for manoeuvring excessively long beams.

There are two main canopy designs, the light gauge fascia design and the structural fascia design. The sequence of installation of the two types is as follows:-

Light gauge fascia design

Underlining grid

Position all necessary cleats including purlin, gutter and fascia cleats together with splices where required, at ground level and fix to the grid using the nuts and bolts provided

Gutter

Pre-assemble all small items to the gutter sections at ground level Fit swan neck to outlets using jubilee clips

Fit gutter butt straps and EPDM pads to one end of a gutter section using nuts and bolts provided

Stanchions

Ensure correct packing is placed in position Lift into position using a crane with chains Initially tighten nuts on holding down bolts Plumb column Fully tighten nuts on holding down bolts Release chain

Outrigger

Lift into position using a crane with chains

Gain access to top of stanchion using MEWP or if not possible a footed & tied ladder.

- See site specific method statements for any variations to this.

Align holes on base plate with holes on stanchion cap plate using podger spanner Insert nuts, bolts and washers and tighten

Release chains

Install as many stanchions/outriggers as possible, but avoid imposing restrictions by remaining within the crane's capabilities.

Having installed adjacent stanchions/outriggers, (generally two or more in line) it is now normally possible to sling, lift and position the spine beams.

Spine beams

Lift into position using a crane with chains, using tag lines as necessary

Gain access to the end of the outrigger using MEWP a footed & tied ladder. - See site specific method statements for any variations to this.

Align holes on spine beam with holes on outrigger using podger spanner Insert nuts, bolts and washers and partially tighten

Repeat the operation at other outrigger/spine beam positions Fully tighten nuts and bolts at all outrigger/spine beam positions Release chains

NB. On non-symmetrical outriggers it is prudent to install the spine beam on the shortest outrigger side first. This will help avoid any imbalance that could result from this arrangement.

Light gauge tubular bracing

Lift using MEWP

Place into position by hand

Insert nuts, bolts and washers and fully tighten

Underlining grid

Gain access to cleat positions using MEWP

Lift into position using a crane with chains using tag lines as necessary, or for small lengths lift by hand using ropes

Fix grid to spine beam cleats using two nuts and bolts at each cleat position Release chains or ropes

Eaves channel rails

Gain access to cleat positions using MEWP

Lift into position using a crane with chains using tag lines as necessary, or for small lengths lift by hand using ropes

Fix eaves channel to fascia cleats using two nuts and bolts at each cleat position and fix splices where necessary

Release chains or ropes

Purlins

Gain access to cleat positions using MEWP

Lift into position using a crane with chains using tag lines as necessary, or for small lengths lift by hand using ropes

Fix purlins to purlin cleats using two nuts and bolts at each cleat position and fix splices where necessary

Release chains or ropes Gutters

Gain access to gutter positions using MEWP

Lift gutter sections into position using a crane with chains, or for small lengths lift by hand using ropes

Fix gutters to cleats on the outriggers using two nuts and bolts at each cleat position Fix the sections together using nuts, bolts and washers at butt strap positions

Ensure gutter cleats on underlining grid fit under the top flanges of the gutter sections and fix the top flanges to the gutter cleats with self drill screws

Release chains or ropes Tie

rods

Gain access to tie rod positions using MEWP

Place the first tie rod into position in the first bay in conjunction with the corner windbrace by hand

Insert nuts and washers and initially tighten Place the remaining tie rods into position Insert nuts and washers and initially tighten

Align the eaves channel using the tie rod and fully tighten the nuts

NB. Safety nets should then be fixed to the underlining grid and edge protection installed by competent installers

Roof sheeting

Ensure weather is suitable before commencing work

Roof sheets are supplied in bundles and should be lifted onto the roof using a crane Tie bundles to structure and only release as each bundle of sheets is to be fixed The installers should access the roof using MEWP or tied ladder

Ensure adequate self drill screws including caps are available either in a pouch or in a secured box on the roof

Commence laying sheets at one end of the structure and secure using tek screws starting at the gutter end first

At approximately 2 metres in from each end and at maximum 6 metre spacings one installer should drill through the top sheets and the spine beam top flanges and fit safety eyebolts with the neoprene washer

The second installer using the MEWP should fit the steel washer and locknut to each safety eyebolt from underneath and tighten

NB. The safety nets and edge protection should now be removed.

Light gauge fascias

Ensure that a 2 metre working area is available to the complete perimeter of the canopy with a firm and level surface

Commencing at one corner lift fascia panels up to the fascia using the MEWP or mobile tower

Fit panels to fascia cleats and join each panel to its neighbour using a butt strap Align fascias and then tighten nuts on butt straps

Finally fix panels to the fascia cleats using self drill screws and rivets

Structural fascia design

Stanchions

Ensure correct packing is placed in position Lift into position using a crane with chains Initially tighten

nuts on holding down bolts Plumb column

Fully tighten nuts on holding down bolts

Release chain

Spine beams

Lift into position using a crane with chains, using tag lines as necessary

Gain access to the top of the stanchion using MEWP or if not possible a footed ladder Align holes on spine beam with holes on stanchion cap plate using podger spanner Insert nuts, bolts and washers and partially tighten

Repeat the operation at other stanchion/spine beam positions Fully tighten

nuts and bolts at all stanchion/spine beam positions Release chains

Inner span intermediate rafters

Lift into position using a crane with chains, using tag lines as necessary Gain access to the end of the rafter using MEWP

Insert two outer nuts and bolts through the rafter end plate into the spine beam web at one end and partially tighten

Repeat operation at other end of rafter

Lower chains and release and untie hand lines Repeat operation for each intermediate rafter

Outer wing rafters

Lift into position using a crane with chains, using tag lines as necessary Gain access to the end of the rafter using MEWP

Insert required number of nuts and bolts through the rafter end plate into spine beam web and through the inner span rafter end plate and partially tighten

Lower chains and release and untie hand lines Repeat operation for each intermediate rafter

Eaves beams

Lift into position using a crane with chains, using tag lines as necessary Gain access to the end of the outer wing rafters using MEWP
Insert required number of nuts and bolts through the eaves beam cleats and the rafter end cleats and tighten
Lower chains and release and untie hand lines Repeat
operation for each eaves beam

End rafters

Lift into position using a crane with chains, using tag lines as necessary Gain access to the end rafter using MEWP
Starting at one corner insert required number of nuts and bolts through the eaves beam end cleats and the end rafter end cleats and partially tighten
Insert correct number of nuts and bolts through spine beam end cleat and the end rafter cleat and partially tighten
Lower chains and release and untie hand lines Repeat
operation for each end rafter

Bracing

Lift into position using a crane with chains, or if light gauge using MEWP Place into position between end rafters and first intermediate rafters by hand Insert nuts, bolts and washers and fully tighten

NB. Once all hot rolled components are fitted and the structure is plumb and square, fully tighten all nuts and bolts

Underlining grid

Gain access to cleat positions using MEWP
Lift into position using a crane with chains using tag lines as necessary, or for small lengths lift by hand using ropes
Fix grid to spine beam cleats and eaves beam cleats using two nuts and bolts at each cleat position
Release chains or ropes

NB. Safety nets should then be fixed to the underlining grid and edge protection installed by competent installers

Purlins

Lift into position using a crane with chains using tag lines as necessary, or for small lengths lift by hand using ropes
Fix purlins to intermediate rafter cleats using two nuts and bolts at each cleat position and fix splices where necessary
Release chains or ropes

Gutters

Lift gutter sections into position using a crane with chains, or for small lengths by hand using ropes

Fix gutters to cleats on the inner span intermediate rafters

Fix the sections together using nuts, bolts and washers at butt strap positions Release chains or ropes

Roof sheeting

Ensure weather is suitable before commencing work

Roof sheets are supplied in bundles and should be lifted onto the roof using a crane Tie bundles to structure and only release as each bundle of sheets is to be fixed The installers should access the roof using MEWP or tied ladder

Ensure adequate self drill screws including caps are available either in a pouch or in a secured box on the roof

Commence laying sheets at one end of the structure and secure using tek screws starting at the gutter end first

NB. The safety nets and edge protection should now be removed.

Underlining and soffit light frames

The fixing of profiled underlining sheets and light frames is broadly similar for both types of canopy.

Access to the underside of the canopy should be gained using a MEWP or mobile tower scaffold if ground conditions are suitable.

Soffit light frames

Light frame positions are determined from the dimensions shown on the general arrangement drawing. The frames should be installed as follows:-

a) Timber

The frames consist of two 75 x 50 longitudinal timbers and two 50 x 50 spacer timbers, fixed together by wire nails. The longitudinal timbers should be notched over the underlining grid as necessary and fixed to the grid using self drilling screws. The frames should be fitted flush with the underside of the underlining grid.

b) Steel

The frames consist of two longitudinal sections and two spacer sections. The frames are formed and fitted to the grid using self drilling screws. The frames should be fitted flush with the underside of the underlining grid.

Profiled underlining

The underlining sheets may be lifted and fixed one at a time using the MEWP. If using a mobile tower scaffold, one sheet at a time should be handed up to the installer on the tower by his assistant standing on the ground. The assistant should then climb up the inside of the tower to assist with the installation of the sheet.

The underlining sheets should be fixed with the corrugations running parallel to the traffic flow. Fixing should commence at the egress end of the canopy and subsequent sheets overlapped to ensure that the end laps of the sheets are not visible to approaching traffic. Side laps should face away from the road. NB. Where this is not the case site specific instructions will be issued.

Tray underlining

Where this is required site specific instructions will be issued.

Lighting and fascia signs

The same rules regarding access to install underlining also applies to installing lighting and signs i.e. MEWP or if ground conditions are suitable mobile tower scaffolds should be used.

Only competent persons will be allowed to install lighting and fascia signs.

MOBILE ELEVATING WORK PLATFORMS (MEWP)

MEWP refers to pedestrian controlled, self propelled and power operated elevating and access platforms, including those commonly referred to as cherry pickers and scissor lifts. The provision and use of these must comply with the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) and the Provision of Work Equipment Regulations 1998 (PUWER):-

Before first use:-

- Check the test/examination certification
- Ground conditions are satisfactory
- There are no overhead power lines within 15 metres of any part of the machine
- No cellars or drains beneath the working area
- Machine is level
- All outriggers and stabilisers where required are safely deployed
- Tools and materials are secure
- The safe working load is never exceeded
- Wind speed does not exceed that specified by the manufacturer

Daily inspections:-

- Tyre pressures and wheel nuts
- Brakes and steering
- Fuel, oil, water, hydraulic fluid and battery levels
- Lights and warning devices
- All operating controls
- Structure for visible defects
- All hydraulic and fuel lines for leaks however small If the

machine is designed for movement whilst occupied:-

- Check that there are no holes, trenches, overhead cables, building projections or other obstructions in the path of travel
- Nothing is left unsecured and is liable to fall off
- Adequate warning is given to others

- NB.
- 1) Operators should be suitably trained and competent.
 - 2) No two platforms should be linked together or bridged. Manufacturers can advise on the interlocking of platforms and controls so that one set of controls operates both platforms.

MOBILE TOWER SCAFFOLDS

Mobile tower scaffolds should be manufactured BS 1139 or DIN 4422 and must be constructed and used in accordance with the manufacturer's instructions (a copy of which must be on site at all times), and current health and safety legislation.

The following applies to the erection and use of mobile tower scaffolds:-

1. The ratio of maximum platform height to base dimension to be as specified by the manufacturer, or alternatively, to be 3 times the smallest dimension including outriggers where fitted.
2. Must be adequately braced and stable.
3. Fitted with toe boards.
4. Fitted with a top guard rail between 0.95 metres and 1.0 metre above platform level and an intermediate guard rail spaced at a maximum of 0.470 metres above the toe boards and a maximum of 0.47 metres beneath the top rail.
5. All wheels to be locked when tower is in use.
6. Access always internal to the tower. The working platform must incorporate a trap door for access.
7. All personnel must be off the tower when it is moved. Movement must be made only from the base.
8. Regularly check mobile towers for any defects, e.g. cracking of welds etc.
9. All operatives to be fully qualified and certified with PASMA certification.

LADDERS – WILL NOT BE USED ON BP SITES

Ladders must comply with the following standards:- New ladders:

EN 131 - Maximum static load 150 kg

Existing ladders: Wood - BS 1129 Class 2

Metal - BS 2037 Class 2

Ladders must:-

- Project at least 1 metre above the landing place or above the highest rung reached by persons using the ladder
- Tools must not be carried in the hands when climbing up or down.
- The upper 3 rungs should not be stepped on.
- Be placed at an angle of 75° (4 metres up to 1 metre out)
- Not be painted, but can be treated with wood preservative or clearvarnish
- Not be used with defective or missing rungs
- Have a firm base
- Never be wedged up on one side if ground is uneven
- Not be used as a crawling board
- If over 3 metres in length, must be tied at the top with a man at the foot whilst being tied, or must be secured at the bottom
- Must stand on their stiles and never be supported on a rung

Precautions:-

- Never use a ladder which is too short or stand it on a mobile tower scaffold, oil drum, bricks etc., to gain extra height
- Watch out for live overhead cables, particularly when using metalladders
- Beware of wet, icy and greasy rungs
- Do not overreach from a ladder - move it
- Never slide down a ladder
- Never straddle between a ladder and another foothold
- Beware of site plant that may foul a ladder. Erect barriers to protect it

Inspections:-

- Stiles for cracks, splintering or other damage
- Rungs for cracks, wear, looseness or missing
- Wedges and tie rods to ensure tight
- Feet for splitting or fraying
- Ropes and fittings for wear

CRANES AND LIFTING GEAR

The provision and use of a mobile crane and lifting gear is covered by the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) and BS 7121 Part 1 Safe Use of Cranes.

Before lifting commences check:-

- The test/examination certification of the crane and its lifting gear
- The certification of the operator
- That a trained and competent slinger/signaller is available to take charge of the complete lifting operation so that it will be carried out in a safe manner
- Ground conditions are satisfactory
- There are no overhead power lines in the vicinity of the crane and its extended jib. See HSE Guidance Note GS6: Avoidance of danger from Overhead Power Lines
- There are no cellars or drains beneath the working area
- Machine is level
- All outriggers and stabilisers are safely deployed
- That the capacity of the crane is adequate so that the safe working load is never exceeded
- That all chains, ropes and slings are properly made, strong enough and not damaged
- That wire ropes are not damaged or rusty
- That all hooks are fitted with safety catch, moused or shaped to prevent sling eye coming off the hook e.g. 'C' hook
- That all chains or rope slings are properly attached to crane hook e.g. by a ring or thimble and eye
- That chains, wire or rope have not been shortened by tying knots in them, if so do not use
- That chains have not been shortened or joined to another by bolts passed through a link, if so do not use
- That multiple slings have their loads evenly distributed over each leg

NB. Where loads are lowered onto installed steelwork, ensure they are placed so as not to cause any violent shock to the steel.

Tandem lifting:-

- Where two or more cranes are used to lift, the whole operation must be supervised by a competent person
- No machine should take more than its calculated share of the load
- No machine should become out of level
- Hoist cables should remain plumb

RISK ASSESSMENTS

The Management of Health and Safety at Work Regulations 1999 require that every employer make a suitable and sufficient assessment of the risks to the health and safety of both its employees, and persons who are not in its employment but who may be affected by its undertaking. The purpose of the risk assessment is identify preventive and protective measures that need to be taken to comply with health and safety law.

NB. The assessment of risks at the workplace is as important for repair, maintenance and refurbishment work as it is for new installation work.

Definitions

Hazard - Anything with a potential to cause harm or damage
Risk - The likelihood of a hazard causing harm or damage

Control measures - The preventive and protective measures employed to either eliminate the risk or reduce the risk of harm to an acceptable level.

Issue of risk assessments

In most cases this will consist of a generic risk assessment which should be prepared by the Project Manager.

Where as a result of a pre-contract meeting or information provided by the client or Principal Contractor, specific hazards are identified then a site specific risk assessment will be issued by the Project Manager.

Review of risk assessment

Every assessment will contain a facility for amendment so that any additional site specific risks noted by the Foreman can be recorded and acted upon. This section should be completed and signed by the Foreman prior to the commencement of work on site.

Where additional control measures are identified, these must be acted upon before any work affected is carried out. Where no additional risks are identified and therefore no additional control measures are needed, the Foreman should complete the 'Site Location' section, write 'NONE' in the section 'Additional Specific Hazards Identified' and simply sign and date the form. A copy of the risk assessment should then be handed to the Site Agent/Site Manager for his records and at the end of the job a copy should be forwarded to the Project Manager.

NB. Where in the opinion of the Foreman site conditions do not permit safe working and the problem cannot be resolved on site, work should stop and the Project Manager be informed in order that appropriate action can be taken.

MANUAL HANDLING

Many injuries to the back, hands arms and feet occur due to incorrect lifting and moving of items. It is therefore important the undernoted instructions are followed:-

Always

- Wear gloves and protective clothing
- Inspect the object for sharp or jagged edges
- Check the route to ensure there are no obstructions or slippery surfaces
- Ensure that the weight of the item is known
- Place feet as far apart as is comfortable, bend knees to crouch position, with back straight and arms close to body
- Get a firm grip
- Lift with thigh muscles by straightening legs
- Make sure you can see over the object being carried
- Walk forwards slowly
- Lower the object by reversing the lifting procedure

Never:-

- Lift an object that is too heavy obtain help if required, nominating one man to give the instructions
- Walk backwards
- Change grip when carrying, rest the load on a firm surface and then change grip
- Drop the load

This information will be detailed in the Company Manual Handling Assessment/s which will accompany the project information for each specific site.

NOISE

Noise assessments for fixed locations are normally carried out by specialists using specialist instruments. There is however mobile phone applications or handheld instruments which will assist in determining a reasonable noise figure in the field.

An attempt to determine the noise levels in the working area can be made by checking the manufacturer's information of the equipment in use. Noise levels in dB(A) are normally quoted and you must be aware that if you wish to use two or more tools the dB(A) levels have to be converted to a power setting then converted back to dB(A) once calculated. See assessment form.

dB(A) is an 8 hour time weighted designator. An individual will therefore only experience the specific harmful effects of defined noise level if they are exposed to the noise over an 8 hour period

The law requires the following action:

at the first action level of 80 dB(A)

- Inform those working in the area of the hazard and provide them with suitable ear protection.
- create a noise zone with signs defining the noise levels likely to be encountered beyond the warning tape etc. (See calculation below for distances).

at the second action level of 85 dB(A)

- create a noise zone with signs defining the noise levels likely to be encountered beyond the warning tape etc. (See calculation below for distances).
- instruct operatives and those who wish or need to enter the noise zone to wear ear protection. Take action against anyone not taking adequate precautions.

When the noise level is known (in dB(A)) then the following calculator can be used to define the noise safety zone.

Being one metre from the noise will reduce the hazard by 3dB(A)

Reduce the noise factor in dB(A) by a factor of 3dB(A) every time you double the distance from the noise.

E.G. Noise is 90dB(A) -

1m away it will be 87dB(A) 2m

away it will be 84dB(A) 4m away

it will be 81dB(A)

8m away it will be 78dB(A) which is now below the 1st action level.

Walls will normally reduce noise by a factor of 3dB(A) however some rooms will amplify the noise.

Ear protection must be the last resort but will provide a reduction in affective noise levels of 30dB(A).

The same factors can be used for **time**. E.G. Noise is 97dB(A)

Only working for 4 hours would mean the noise will be 94dB(A) Only working

for 2 hours would mean the noise will be 91dB(A) Only working for 2 hours

would mean the noise will be 88dB(A)

Only working for 1 hour would mean the noise will be 85dB(A) Which is at the 1st action level.

Any impact noise of 120 dB(A) cannot be reduced by this method and action must be taken to protect individuals from such noise levels.

Noise risk assessment

PROJECT:	REF:
ACTIVITY:	DATE:
Description of Works	

Noise of combined equipment can be calculated by adding a figure to the highest noise level based on the table below (Exclude any level that has a difference of 12 below any other figure). Ambient noise levels in Business or commercial area = 62dB

Example:

Take all noise levels and put them in numeric order i.e.

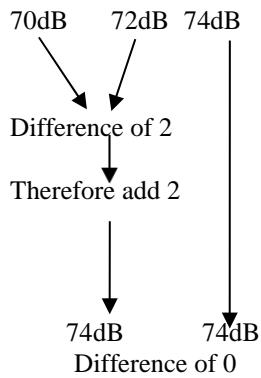


TABLE		
Difference		Add
0.0	+	3.0
1.0	+	2.5
2.0	+	2.0
3.0	+	2.0
4.0	+	1.5
5.0	+	1.5
6.0	+	1.0

Therefore **add 3** to the highest level = 77dB(A) is the noise that will be created by the combined equipment

Equipment in use					
Equipment	Time	dB	Equipment	Time	dB

Control measures

Signature:	Print:
Position:	Company:

VIBRATION

In a similar manner to noise modern equipment have a figure recorded on them to show the exposure level suffered by those using the tools.

Exposure limit values and action values:

Hand arm vibration—

- (a) the daily exposure limit value is 5 m/s² A(8);
- (b) the daily exposure action value is 2.5 m/s² A(8), and daily exposure shall be ascertained on this.

Whole body vibration—

- (a) the daily exposure limit value is 1.15 m/s² A(8);
- (b) the daily exposure action value is 0.5 m/s² A(8),

Using the assessment below will determine the time that any individual can use the equipment for a day. Planning must take account of these figures

Vibration magnitude m/s ²	Vibration Exposure Table									
	15m	30m	1h	2h	3h	4h	5h	6h	8h	
30	450	900								
25	315	625	1250							
20	200	400	800							
19	180	360	720	1450						
18	160	325	650	1300						
17	145	290	580	1150						
16	130	255	510	1000						
15	115	225	450	900	1350					
14	98	195	390	785	1200					
13	85	170	340	675	1000	1350				
12	72	145	290	575	865	1150	1450			
11	61	120	240	485	725	970	1200	1450		
10	50	100	200	400	600	800	1000	1200		
9	41	81	160	325	485	650	810	970	1300	
8	32	64	130	255	385	510	640	770	1000	
7	25	49	98	195	295	390	490	590	785	
6	18	36	72	145	215	290	360	430	575	
5.5	15	30	61	120	180	240	305	365	485	
5	13	25	50	100	150	200	250	300	400	
4.5	10	20	41	81	120	160	205	245	325	
4	8	16	32	64	96	130	160	190	255	
3.5	6	12	25	49	74	98	125	145	195	
3	5	9	18	36	54	72	90	110	145	
2.5	3	6	13	25	38	50	63	75	100	
2	2	4	8	16	24	32	40	48	64	
1.5	1	2	5	9	14	18	23	27	36	
1	1	1	2	4	6	8	10	12	16	

Low Covers low vibration equipment, some of which can be used for up to 8 hours in a working day before the EAV is reached.

Medium Covers medium vibration equipment, where the EAV and the ELV will be reached after a relatively short duration of use.

High Covers high vibration equipment where the EAV and the ELV will be reached after a short duration of use.

Note:

EAV (Exposure Action Value) - The EAV is the daily amount of vibration exposure above which employers are required to take action to control exposure. For hand-arm vibration the EAV is a daily exposure of 2.5 m/s² (over an average 8 hour working day) or 100 points.

ELV (Exposure Limit Value) - The ELV is the maximum amount of vibration an employee should be exposed to on any single day. For hand-arm vibration the ELV is a daily exposure of 5 m/s² (over an average 8 hour working day) or 400 points.

The Vibration Exposure Table below can be used to calculate daily vibration exposures. All you need is the vibration magnitude (level) and exposure time. The table covers a range of vibration magnitudes up to 30 m/s² and a range of exposure times up to 8 hours. Where different types of equipment are being used in a working day, exposure points can be added together in order to assess the overall daily exposure to vibration.

Site:

Vibration Exposure Calculator

Process or Tool	Vibration Magnitude ms ²	Daily Duration		Partial Exposure ms ²
		hours	minutes	

Daily vibration exposure, ms² A(8) **0.0**

HSE Action Level Guidelines

Name of operative	Duration of work permitted		Date	Signature
				2.5

COSHH ASSESSMENTS

The Control of Substances Hazardous to Health Regulations 1994 requires that no work that is liable to expose anyone to substances hazardous to health may be carried out unless an assessment has been made of the risks to health. This means:-

- a. Evaluating the risk to health arising from work involving substances hazardous to health.
- b. Establishing what has to be done to meet the requirements of the COSHH Regulations.

Substances are "hazardous to health" if they fall within the following descriptions:-

- a. Very toxic
- b. Toxic
- c. Harmful
- d. Corrosive
- e. Irritant
- f. A substance with an Occupational Exposure Limit or Maximum Exposure Limit
- g. Micro-organisms
- h. Dusts in substantial concentrations

The assessment of substances will be carried out by the Project Manager based upon the Material Safety Data Sheets provided by the manufacturer and taking into account the conditions of use.

The COSHH Assessment will either be a generic assessment or a site specific one. The assessment will detail the measures needed to control exposure to the substance together with the Personal Protective Equipment that is required to be worn

The Project Manager is to ensure that the crew have a copy of the assessment in their possession.

The Foreman is to ensure that the instructions (Control Measures) regarding controlling exposure and the use of Personal Protective Equipment is followed.

These details will be found in the COSHH Assessment for the substances being used.

HOT WORKS PROCEDURE

Hot works permit

Before commencing work ensure that a Hot Works Permit has been issued by the Client/Principal Contractor. If not the Foreman should contact the Project Manager for further instructions before carrying out any hot works. (See Appendix E for DBS Maintenance Ltd Hot Works Permit to Work).

General

Welding

Welding should be carried out in accordance with the requirements of BS EN 288. Screening

Suitable screening should be provided for the protection of others from arc-eye, welding splatter and accidental contact with hot metal.

Fit-up access and position

Careful consideration must be given to fit-up of parts with regard to tolerances and any lack of alignment. Welds should be readily accessible for welding and inspection.

Ventilation

Normally welding is carried out in the open air and therefore ventilation is not a problem. However where metals are coated (e.g. zinc, cadmium or paint), precautions should be taken to avoid inhalation of the resultant fumes. Paint adjacent to welds should be removed before welding commences. In choosing a suitable solvent it should be remembered that this might involve a fume or flammability hazard, in which case follow the directions in the COSHH Assessment.

Pre-welding site preparation

All welding equipment must be firmly secured before work commences.

All flammable materials e.g. oil, wood, plastics, paint chemicals etc must be removed at least 10 metres away from the vicinity of the welding arc and the spread of welding splatter and sparks. Where flammable materials cannot be removed they must be protected by a fire resisting blanket.

Cutting

The severing of parts may impart a severe shock to the structure which could lead to instability. The work must therefore be planned in advance by the Project Manager with the assistance of a Designer where appropriate and detailed instructions issued to the crew regarding the sequence of operations. The cutting of coated materials should be carried out with particular care to avoid the inhalation of any fumes.

Handling of gas cylinders

Cylinders must be handled with care to avoid risk of mechanical damage to the cylinder, regulator and fittings.

Lifting of cylinders by chains and slings can be hazardous. It is preferable for cylinders to be moved on site in a special carrier or trolley.

Cylinders should be stored and used in an upright position. All valves must be closed before cylinders are moved.

Cylinders in use on stagings or platforms must be secured and should never be left unattended.

Angle grinder/disc cutter

All flammable materials must be removed at least 10 metres from the vicinity. Precautions should be taken to protect other persons in the vicinity.

The angle/grinder disc cutter must be fitted with a guard at all times. Eye protection to BS EN 166 must be worn.

Ear protection to BS EN 352 must be worn.

Where there is a risk of inhalation of dust particles a respirator to BS EN 149 must be worn.

Angle grinders/disc cutters should normally only be used at ground level. Where this is not possible, the equipment should be attached by a line to the frame of either the MEWP or mobile tower scaffold, to prevent it falling should the operative release his hold during cutting operations.

Fire precautions

Where there is a risk of fire, there must be a competent person with at least 2 suitable fire extinguishers to hand, positioned adjacent to the welding/burning area to act as a sentry. The sentry must remain in position during the whole of the work and for at least 1 hour after it is completed.

Hot works on a live petroleum site

Before work can be carried out the local Petroleum Officer must be advised by the Project Manager and his agreement obtained regarding the precautions to be taken.

Before commencing work on site reference should be made to:-

- a) The DBS Maintenance Ltd method statement and riskassessment

b) Appendix F of this System of Work, the Hazardous Area Classification and appropriate action taken e.g. place generators outside hazardous zones, use BASEEFA or similar approved hand tools and equipment etc.

Site to be closed to the public in all respects and pumps switched off. Where this is not possible e.g. Motorway Service Areas, the working area must be barriered off to prevent access to unauthorised persons.

Warning signs must be erected e.g. Men at Work, Hard Hat Area, No Unauthorised Access etc.

Combustible materials to be removed at least 10 metres from the vicinity Oil cabinets

to be closed and locked

Waste bins to be covered or moved aside.

Pumps to be covered by protective fire resistant blankets.

Fire sentry with 2 fire extinguishers i.e. dry powder or foam, to be positioned adjacent to the working area during the work and for 1 hour after the work is completed.

Fire sentry to connect water hose to mains and thoroughly dampen down working area before commencing work and at all times whilst work is carried out.

TRAVELLING FIRST AID KIT

All vehicles should carry a first aid kit containing the following:-

2 x Triangular bandages 1 x
Large dressing
2 x 5cm conforming bandages 6 x
Moist cleaning wipes
5 x Low adherence sterile pads 5cm x 5cm 1 x Roll
adhesive tape 1.25cm x 5m
2 x Plastic finger stalls
1 x Pack 20 assorted plasters 1 x
Pair 9cm scissors
6 x Safety pins
1 x Pair disposable vinyl gloves 1 x
First aid leaflet

Kits should not contain medication of any kind.

Kits must be replenished after use and should be checked regularly to avoid any degradation of the contents.

SITE INCIDENT REPORTING PROCEDURES

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) require death, injury (including those caused by physical violence), disease and dangerous occurrences to be reported to the relevant enforcing authority, which for offices is the local Environmental Health Officer and for construction and site working is the office of the Health and Safety Executive local to the site.

To assist compliance a flow chart is included in this section. The chart is not an exhaustive statement of law, but will enable the company to identify trends in frequency and causes of incidents and decide on appropriate preventive action where necessary.

The flow chart should be used for all incidents reportable under RIDDOR, but also to include 'near misses' i.e. incidents which did not result in injury, but from which benefit could be derived from an examination of the event, so that a repetition can be avoided.

The Foreman or his deputy should report the incident to the Project Manager verbally and then complete a Site Incident Report Form and forward same to the Project Manager.

Guide to types of accidents/incidents requiring reporting:-

Death

- Of an employee or other person as a result of our work activities

Major injuries or conditions

- Fracture other than to fingers thumbs or toes
- Any amputation
- Dislocation of shoulder, hip knee or spine
- Permanent loss of sight
- Chemical or hot metal burn to the eye or any penetrating injury to the eye
- Injury from an electric shock or electric burn leading to unconsciousness or requiring resuscitation or admittance to hospital for more than 24 hours
- Any other injury leading to hypothermia, heat induced illness or unconsciousness; or requiring resuscitation; or admittance to hospital for more than 24 hours
- Unconsciousness caused by asphyxia or exposure to harmful substance
- Acute illness requiring medical treatment, or loss of consciousness arising from absorption of any substance by inhalation, ingestion, or through the skin

Dangerous occurrences

- Collapse, overturning or failure of load bearing parts of lifts and lifting equipment e.g. cranes, MEWP
- Explosion, collapse or bursting of any closed vessel or associated pipework
- Plant or equipment coming into contact with overhead power lines
- Electrical short circuit or overload causing fire or explosion
- Collapse or partial collapse of a scaffold over 5 metres high, or erected near water where there could be risk of drowning after a fall
- Unintended collapse of: any building or structure under construction (whether above or below ground), alteration or demolition where 5 tonnes of material falls; a wall or floor in a place of work; any falsework
- Explosion or fire causing suspension of normal work for over 24 hours
- Sudden uncontrolled release in a building of 10 kg or more of flammable gas
- Accidental release of any substance which may damage health

Over 7 day injury

Any accident at work where, because of injury, a person is away from work or is unable to do their normal work for more than 7 consecutive days, not counting the day of the accident, but counting rest days, weekends etc.

Reportable diseases

Reportable diseases are not specifically covered by the flow chart. However a disease must be reported where it has been diagnosed in a person doing a specified type of work and a medical certificate is issued by a doctor. For fuller details please refer to the regulations.

Near Misses

This is an incident that could have caused injury to persons or damage to property, but for the quick thinking of an operative or perhaps simply due to luck, no injury or damage occurred.

It has been proved that by reducing the number of near misses in site, the number of injuries to persons and damage to property may be significantly reduced. Therefore it is vital that all near misses are reported to the company via the Project Manager, by the completion of a Site Incident Report form. An examination of the circumstances will then take place to ascertain the circumstances involved and any action needed to benefit all site operatives.

ENCOUNTERING ASBESTOS

Site should have an asbestos register and this will be discussed by the Surveyor prior to arrival on site.

No works will be carried out by the Company on asbestos containing materials [ACMs]

Anyone location suspicious material will stop work, clear everyone else from the work area, prevent anyone entering the work area and contact the office ASAP.

The same procedure as shown below in the incident reporting chart will be carried out.

