Health and Safety Guidance

Risk Assessments and Control of Substances Hazardous to Health (COSHH)
Health and Safety Guidance

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INTRODUCTION

About Health and Safety at Work

Health and Safety at Work is an important matter and one that Alligator Drains takes very seriously. Under the Health and Safety at Work Act 1974 and subsequent legislation, the company is compelled to provide and maintain a healthy and safe working environment to protect its employees, all visitors to the company, contractors and temporary workers working on behalf of the company and members of the public who might be affected by our operations.

It is the obligation of all persons carrying out work for Alligator Drains to undertake that work in a safe manner at all times.

Whilst carrying out work on drainage systems there are many possible risks. You should always follow the guidelines described in this document in order to eliminate or reduce those risks and ensure your safety and that of others.

If you encounter situations or need to work with materials or substances not covered in this document then you must consult your line manager or the company’s Health and Safety Officer to establish any risks before proceeding. In any case, all such situations should be reported back to the Health and Safety officer to enable them to be included in later versions of this document.

IF YOU ARE IN ANY DOUBT PLEASE ASK.

If you are involved in any kind of accident or are exposed to any substances harmful to your health you must stop work immediately and follow the advice and information provided within this document.

All such incidents MUST be reported to the company’s Health and Safety Officer and recorded in the company’s Accident Book, which is located in the General Office.

About this Document

This document is intended to cover all of the situations involving risks to health and safety likely to be encountered during the course of carrying out work for Alligator Drains.

It is accepted that, from time to time, working situations or potential exposure to harmful substances not covered in this document may arise. If this happens, before proceeding, you must consult your line manager or the company’s Health and Safety Officer in order to establish any risks involved. Where risks are identified, a safe working procedure will be established and that information used to revise this document.

This document should only be reviewed and revised by the company’s Health and Safety Officer, or the Director responsible.
1. Health and Safety Policy Statement

It is the policy of Alligator Drains to comply with the terms of the Health and Safety at Work Act 1974 and subsequent legislation to provide and maintain a healthy and safe working environment. The Alligator Drains health and safety objective is to minimise the number of instances of occupational accidents and illnesses and ultimately achieve an accident-free workplace.

The company recognises and accepts its duty to protect the health and safety of all visitors to the company, contractors and temporary workers working on behalf of the company and members of the public who might be affected by our operations.

Our statement of general policy is:

- To provide adequate control of the health and safety risks arising from our work activities;
- To consult with our employees on matters affecting their health and safety;
- To provide and maintain safe plant and equipment;
- To ensure the safe storage, handling and use of substances;
- To provide information, instruction and supervision for employees;
- To ensure all employees are competent to do their tasks or supervised by a competent person whilst under training;
- To provide adequate training;
- To prevent accidents and cases of work related ill health;
- To maintain safe and healthy working conditions;
- To review and revise this policy as necessary, particularly when changes in the scale and nature of our operations arise and when changes in legislation occur.

Whilst the management of Alligator Drains will do all that is within its powers to ensure the health and safety of its employees and the self-employed under the company control, it is recognised that health and safety at work is the responsibility of each and every individual associated with the company.

It is the duty of each employee:

- To take reasonable care of their own and other people's welfare and to report immediately any situation that which could jeopardise their well being or that of any other person;
- To co-operate with the company on matters of health and safety;
- To correctly use work items;
- Not to interfere with or misuse anything provided for their health, safety or welfare.

Copies of this policy will be provided at induction training to all employees and sub-contractors working under our direct control and copies will always be made available for reference at company offices and at established site offices.

Risks associated with all the company’s activities will be assessed and regularly reviewed to enable safe working practices to be devised. Activities undertaken by company employees and sub-contractors working under our direct control will be monitored to ensure compliance with recommended safe working practices and relevant health and safety Legislation.

Where required, health surveillance will be provided.

Consultation on matters affecting health and safety will be undertaken with employees to ensure effective methods of working are developed compatible with the provisions of this policy and the capabilities of employees. Adequate resources will be provided to ensure that suitable provision is made to manage health and safety matters and to enable compliance with the requirements of legislation.

Signed: Date: 21st April 2015

Paul Draper
Alligator Drains Director responsible for Health and Safety.
RISKS AND GUIDELINES

The following sections of this document detail the risks and possible dangers to health that may be encountered when in carrying out a wide range of working operations associated with drainage maintenance, repair and installation.

Anyone carrying out work for or on behalf of Alligator Drains must familiarise themselves with the contents of this document and carry out works in accordance with the guidelines provided. Failure to do so could put operatives and other persons at risk and lead to criminal action.

Risk Assessment

The first section of this document covers:

• The risks that have been identified in carrying out working operations;
• Safe working practices to be employed in order to eliminate / reduce risks;
• Action to be taken in the case of accidents.

Control of Substances Hazardous to Health - COSHH

The final part of this document details:

• The nature of hazardous substances used during the working process;
• The risks to health posed by such substances;
• Safe working practices to be employed when using such substances;
• Measures to be taken in the case of accidental inhalation, ingestion, skin or eye contact.
2. Safety Method Statement

1. Activity
The repair, maintenance and installation of domestic and commercial drainage systems.

2. Resources Required

2.1 Management / Supervision
A visiting Manager / Supervisor who will visit on a frequency determined by the works in progress.
This person will be directly responsible for planning of work activities, liaising with the customer / client, resources and systems to meet project requirements, manage health, safety, welfare and risk control systems, ensure all operatives receive information, instruction and training on the devised safe systems of work and manage customer care policy and quality standards.
Site supervisor or working foreman directly responsible for day to day activities, ensuring the safe working practices detailed within this method statement are complied with. He shall liaise with the customer / client in relation to any issues that could affect personnel.

2.2 Personnel
Works will be carried out using an appropriate number of engineers, to be established on a job to job basis.

2.3 Site Accommodation / Storage
Within a designated area with appropriate warning notices and barriers.

2.4 Welfare arrangements
Clean water hand washing systems will be provided for all engineers and these will be left clean and tidy after use.

2.5 Plant / Equipment
When carrying out our works we propose to use the following, but not limited to:
- Hand tools;
- Hand held electrical power tools (wherever possible to run off 110v power source);
- Roding and blockage clearing equipment;
- Inspection equipment;
- Water jetting apparatus;
- Mechanical plant (as required, to include any of the following: excavators, diggers, heavy rollers, whacker plates, cement mixers);
- Access equipment (dependent upon site conditions and could include any of the following: traditional scaffold, mobile elevated work platforms, mobile tower scaffold, ladders or stepladder);
- Dust sheets / coverings, both internally and externally;
- Erection of barriers and display of warning notices where appropriate;
- Personal protective equipment

2.6 Materials
The following materials may be used on the project:
- Sand, gravel, cement;
- Plastic pipes and connectors;
- Silicone sealant
- Adhesive / glue
- Activator

Refer to appropriate company COSHH Assessments for details of risk control measures.
3. Hazards (Associated risks prior to control measures)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work at height</td>
<td>Medium</td>
</tr>
<tr>
<td>Hazardous substances; potential asbestos</td>
<td>Medium</td>
</tr>
<tr>
<td>Delivery and storage of materials</td>
<td>Medium</td>
</tr>
<tr>
<td>Distribution / manual handling of materials</td>
<td>Medium</td>
</tr>
<tr>
<td>Use of plant and equipment, including electrical power tools</td>
<td>Medium</td>
</tr>
<tr>
<td>Hazardous substances, including dust and materials</td>
<td>Medium</td>
</tr>
<tr>
<td>Work affecting others, including occupants / children</td>
<td>Medium</td>
</tr>
<tr>
<td>Slips and trips</td>
<td>Medium</td>
</tr>
<tr>
<td>Waste disposal</td>
<td>Low</td>
</tr>
</tbody>
</table>

4. Site Procedures

4.1 Liaison, Access and Storage

Prior to work commencing, Alligator Drains will liaise with the Customer or Principal Contractor Project Manager to discuss and agree the following:
- Proposed work programme;
- Interface of our work activities with other contractors and individuals;
- Location for storage of materials, plant and waste disposal;
- Material deliveries;
- Any additional hazards that may be present which we need to be made aware of.

All material deliveries will be pre-planned and vehicles will follow the designated traffic routes as signposted and observe any speed restrictions.

Access and egress to and from the work location will be by following the designated routes as indicated by the Customer or in the Principal Contractor’s construction phase health and safety plan. Access to the site will only be permitted following the Customers instructions or Principal Contractor site safety induction. This induction training will be followed by Alligator Drains company induction. During this induction our operatives will to be fully briefed on the devised safe systems of work and sign the briefing register to confirm that they fully understand.

An evaluation and selection of suitable plant and equipment, safe means of access and egress to the work areas for engineers and materials and the location for storage and waste disposal will to be undertaken prior to work starting.

Safe work at height will be achieved by the provision of a suitable work platform wherever practicable. All work platforms will be inspected before being taken into use for the first time, after any substantial addition, dismantling or alteration, after any event likely to have affected stability or strength and at regular intervals not exceeding seven days. All inspections will be undertaken by a competent person.

Alligator Drains will ensure that all site operatives are experienced and trained in the work they are to undertake and equipment to be used. Competent persons will supervise inexperienced operatives at all times.

Prior to delivery Alligator Drains will ensure that a safe and secure storage area is available for equipment and materials. All material deliveries will be pre-planned.

All equipment and materials will be unloaded by hand, utilising the appropriate number of persons necessary to undertake this safely, without risk.

All plant and equipment used on site by our operatives will be suitable for the task and adequately maintained, inspected and tested. All records of inspections, testing and maintenance are kept at company head office. Any defective equipment identified by operatives during daily visual inspections must not be used and must be reported to the contract manager immediately.
4.2 Work at Height

All work at height will be properly planned and organised by management to ensure that adequate measures have been taken to prevent persons from falling. All arrangements for working at height will be determined by a risk assessment approach.

The hierarchy of measures that will be followed will include:

- Avoid the need to work at height where it is reasonably practicable;
- Prevent falls - where it is not reasonably practicable to avoid work at height. Undertake a risk assessment and take measures to allow work to be done whilst preventing people or objects falling. This may include ensuring work is carried out safely from an existing place of work, choosing the correct work equipment to prevent falls;
- Minimise the distance and consequence of a fall by using suitable work equipment (type of equipment dependent on the risk assessment);
- At all stages we shall give collective protective measures (i.e. guardrails, nets, airbags, etc) precedence over personal protective measures (i.e. safety harness).

Ladders and stepladders will only be used as work equipment where the risk assessment shows that the use of other work equipment is not justified because of the low risk and short duration of the job.

All persons undertaking work at height will be competent in the work equipment to be used. By being competent they will be able to:

- Undertake safely their specified activity;
- Understand fully any potential risk related to the work activity they are engaged in;
- Detect any defects or omissions and recognise any implications for health and safety with the aim of specifying appropriate remedial actions that may be required in relation to their particular work activity. This is to include refusing to do a particular task if the potential risk is assessed as being too great.

To prevent injury, heavy or awkward loads are to be shared. Safe lifting techniques and sensible handling of loads is always to be followed.

4.3 Protection of other persons affected by the works

To prevent other persons from gaining access into our working area there may be a necessity to barrier off the working area.

Three methods are to be considered:

1. The erection of hi-visibility tape wrapped around stakes in the ground;
2. The erection of brightly coloured PVC fencing tied to stakes in the ground;
3. The erection of 2m high metal security fencing, such as Heras fencing.

Sufficient protective coverings are to be laid internally and externally to avoid soiling or causing damage to floor coverings or garden areas.

A policy of 'NO SMOKING' will apply at all times.

4.4 Work equipment

All plant and equipment used on site will be suitable for the task, safe for use and adequately maintained, inspected and tested. Only 110V electrical equipment must be used. Should use of 240V equipment be necessary, it must be for short-term usage and protected by a safety device such as an RCD.

Abrasive wheels will only be mounted by trained, competent persons appointed to this duty by the company.

4.5 Site Order (Housekeeping)

High levels of housekeeping are to be maintained by all our operatives at all times with surplus materials and waste being taken to a safe area in readiness for re-use or disposal.
Health and Safety Guidance

No material or debris is to be thrown from height. All spillages must be picked up with a shovel and brush rather than by hand. When doing so, gloves and wrist protection must be worn. All records of waste movements are to be maintained by the contract manager.

4.6 Installation work instructions

Scope
This procedure covers Alligator Drains methods of:
• Survey of existing site and system (if appropriate);
• Installation of new product;
• Safety measures and safe operations;
• Limitations

Responsibilities
The Operations Director of Alligator Drains is responsible for:
• Preparing a documented work package;
• Appointing a Supervisor / Foremen / Chargehand for all site installation works;
• Ensuring that only trained installers are employed;
• The Supervisor / Foremen / Chargehand is responsible for ensuring all works are carried out in a safe manner.

Health and Safety

Task Assessments
• All personnel are reminded that the compliance with the company Policy for Health and Safety is mandatory and that any non-compliance will lead to their removal from site. All activities defined in this work instruction are therefore to be performed in line with this Policy.
• Before commencing any works the Supervisor / Chargehand shall assess the required task. This will cover the method of work to be undertaken and if any potential hazards exist.
• The entire engineering team will be briefed and the Supervisor / Chargehand shall be satisfied that all tasks to be undertaken are fully understood and that the persons are capable of performing the tasks before work can proceed.

Ambient Conditions
• Before work can proceed, the supervisor / Chargehand shall assess the weather conditions and deem that they are satisfactory and are likely to stay satisfactory for the duration of the task;
• Work shall be discontinued if precipitation interferes with visibility or other activities, to the extent that working is impractical or deemed unsafe;
• Working shall normally be confined to conditions where adequate lighting allows clear visibility. If working at night there shall be adequate floodlighting.

Action
During the works, the Supervisor / Chargehand shall check the following points:
• Weather and environmental protection is suitable for the conditions at the work site;
• The installers under his / her supervision are using the required protective clothing and safety equipment;
• Access equipment is being used correctly.

Engineers
Prior to starting works the installer shall check the following:
• He / she has been issued with and understands the appropriate paperwork and instructions;
• He / she has been issued with sufficient materials and tools;
• He / she has the required P.P.E. to carry out works safely.
4.7 Work Methods (in order of sequence)

Before any works are carried out the engineering team or teams will present themselves to the site Manager and verbally agree sequence of work.

Once this has been agreed the engineering teams will prepare the working area and this may involve the following:

- Moving any obstructions to the area to be excavated / exposed;
- Laying external ground sheets for protection of persons who may be working below. This may also include scaffold boards;
- To prevent access into our working area from third parties we will sometimes need to erect temporary barriers with appropriate warning signs.

Carrying out the Works

Ensure an appropriate number of persons are employed during the process of carrying out the works.

Where power tools are used, ensure where reasonably practicable, they are battery powered or of 110V rated.

Note: If allowed to use 240V equipment then the use of an RCD protector is required.

P.P.E. may be required - see Risk Assessment.

Upon completion of said works, obtain a signed certificate of satisfaction from the client.

4.8 Information, Instruction, Training and Supervision

Induction Training

All site operatives will be provided with a site-specific safety induction before starting any work. The induction will be a full brief on the contents of this method statement, risk and COSHH assessment. All in attendance will sign briefing register to acknowledge receipt.

Tool Box Talks

As the project progresses, site management shall carry out further training through tool box talks. This will ensure operatives are kept up to date with good working practices. Talks will be carried out on a regular basis.

Skills Training

Operatives appointed to operate particular plant / equipment and to erect mobile tower scaffolds will be competent to do so and hold safety training certificates.

Information

Information, including contract information, will be communicated to staff through memorandums, site safety meetings and toolbox talks.

Management and Supervision

The person with overall responsibility for the works is Mr Paul Draper. The week to week running of the job shall be the responsibility of Alligator Drains office staff.

4.9 Control of Substances Hazardous to Health (COSHH)

All substances that are a risk to health and to be used by site personnel have been assessed and control measures implemented to reduce those risks. Site operatives have been provided with information and training on the hazards and associated risks from the products and instructed on the risk control measures that must be followed to reduce those risks. This was undertaken during the site safety induction.

All hazardous substances are to be securely stored until required.

4.10 Personal Protective Equipment

All site personnel have been issued with the following PPE:

- Hard Hats
- Safety Footwear
- Hi-Visibility vests / jackets
- Eye protection
- Hand protection
- Respiratory protection
- Hearing protection
- And any other PPE considered necessary.
5. Procedures for Emergencies on Site and Accident Reporting/Recording

All operatives will be made aware of first aid and emergency procedures at site induction. The principal contractor is to inform all Alligator Drains site staff of their arrangements for emergencies on site during their site safety induction.

All operatives are to report all accidents and near misses, no matter how trivial they may seem. All accidents are to be recorded in our site accident book.

6. Monitoring

The working method will be monitored by the contract manager and working foreman against the method statement and risk assessments. All non-conformances will be brought to the attention of those operatives. If, after a warning at site level, the operative(s) continue to flaunt safe working practices the company will investigate disciplinary action being taken.

All deviations will be assessed for their safety and risk. If found to be acceptable, the method statement will be amended to incorporate the change and reissued. If not acceptable, the deviation will be stopped. All amendments will be added to this method statement. All changes are to be brought to the attention of the site operatives.

7. Sub-Contractors

Where Alligator Drains are to subcontract any of the works we will ensure sub-contractors are assessed, competent and have adequate resources to carry out the works.

8. Environmental Arrangements

Every effort will be made to keep noise, dust and waste levels to a minimum and to ensure that they do not cause a hazard or become a nuisance to others. Working areas will be tidied regularly and waste placed in skips or in the back of the engineer’s vehicle in readiness for removal from site.

9. Method Statement Issue List

1. Alligator Drains employees.
2. Sub-contractors.
3. Office Main File.
3. COSHH – Control of Substances Hazardous to Health

The following data sheets detail the control of hazardous substances that may be used, in part or in entirety, by Alligator Drains personnel and its sub-contractors when carrying out works on behalf of customers / contractors.
**Health and Safety Guidance**

**ALLIGATOR DRAINS**

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Hazard Classification</th>
<th>Workplace Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewage (including industrial effluent and possibly harmful chemicals)</td>
<td>Can result in Weil’s disease and other health problems if contaminated. Potentially lethal if conditions left untreated.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

- **Location** | Various |
- **Persons likely to be affected** | Operatives and others coming into contact. |
- **Work activity** | Drain clearance and repair. |

**Physical and Chemical Properties**

- **Physical**: N/A.
- **Chemical**: Possibly various micro-organisms, industrial effluent and other chemicals.

- **Manufacturer**
  - N/A.
  - N/A.

- **Quantities Used**
  - Frequency of Use
  - Data Sheet Available
  - N/A. | N/A. | No |

**Hazards and Health Effects**

- **General**: The majority of illnesses are relatively mild cases of gastroenteritis, but potentially fatal diseases, such as leptospirosis (Weil’s disease) and hepatitis, are possible. Excrement is the major source of harmful micro-organisms, including bacteria, viruses and parasites.
- **Eyes**: Certain organisms can enter the body through the surfaces of the eyes, nose and mouth.
- **Skin**: Micro-organisms can enter the body through cuts, scratches and penetrating wounds.
- **Inhalation**: Micro-organisms can enter the body through inhalation, either as dust or mist.
- **Ingestion**: The most common way is by hand-to-mouth contact during eating, drinking and smoking, or by wiping the face with contaminated hands or gloves, or by licking splashes from the skin.
- **Fire**:

**Risks to Health – Exposure Assessment**:

- **Ingestion**: M
- **Inhalation**: M
- **Skin**: M
- **Eyes**: M
- **Systemic**: M

**Monitoring Required**: No

**Of control measures necessary**: Through site inspections / tours

**Is Health Surveillance necessary?** Information, Instruction and Training

**Not deemed necessary**: Initially through site induction then updated via toolbox talks.
Control Measures

- Weil’s disease, a flu-like illness with persistent and severe headache, transmitted by rat urine. Damage to liver, kidneys and blood may occur and the condition can be fatal. Hepatitis is also a risk.
- Since micro-organisms are an inherent part of sewage, the hazard cannot be eliminated.
- A proper assessment of risk should be carried out, but this should not include analysis of sewage for micro-organisms as they can constantly change.
- Exposure to sewage should be eliminated or minimised by using remote-controlled robotic cameras for sewer inspection; drying sludge before disposal; incineration of sludge; injection of sewage into land rather than spreading; damming and bypass pumping of sewer sections prior to reconstruction.
- Wear suitable PPE: waterproof, disposable gloves, footwear, eye and respiratory protection. Face visors are effective against splashes.
- Cover cuts and abrasions with sterile dressings.
- Remove contaminated clothing and wash hands thoroughly before touching your face, drinking, eating or smoking.
- If you experience flu-like symptoms, seek medical attention immediately and inform your doctor you have been in contact with raw sewage.
- If you suffer from a skin problem, seek medical advice before working with sewage.
- Wherever possible and practicable the company will endeavour to look for safer, alternative working procedures that are less hazardous, however this is dependent on contract conditions.

Personal Protective Equipment (PPE)

| Respiratory Protection: Required if working in an area where ventilation is in question. Wear a half face re-usable twin filter mask with A1P3 cartridges. |
| Hand Protection: Wear appropriate disposable gloves. |
| Eye Protection: Safety goggles should be worn. |
| Skin Protection: Overalls are recommended. |

Storage and Handling

| Storage: N/A |
| Handling: Follow above controls. |

First Aid

| Inhalation: Move to fresh air. |
| Eye Contact: Wash eyes immediately with plenty of water. |
| Skin Contact: Wash affected area thoroughly with soap and plenty of water. |
| Ingestion: Drink plenty of water. Obtain medical attention. |

Disposal Methods

| Residual product must be disposed of as hazardous waste. |

Assessment completed by:

| Signature: ………………………………………………………. | Date: …………………………… |
| Review Date: ……………………………... |
# Health and Safety Guidance

## ALLIGATOR DRAINS

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Hazard Classification</th>
<th>Workplace Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement, concrete and stone</td>
<td>Irritant, burns and respiratory damage.</td>
<td>Respirable dust: OES 4mg/m³ 8 Hours TWA.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Persons likely to be affected</th>
<th>Work activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various</td>
<td>Operatives and others coming into contact.</td>
<td>Handling, mixing and working with cement or cutting concrete and stone.</td>
</tr>
</tbody>
</table>

**Physical and Chemical Properties**

- **Physical:** Mixture of natural aggregates, cement and water. Other ingredients may include admixtures, Ground Granulated Blast-Furnace Slag (GGBS). Such additions are made to alter/improve the working characteristics of the material or to affect/enhance its hardened properties.
- **Chemical:** Abrasive and Alkaline typically pH10-14.

**Manufacturer**

Portland cement and others.
Tel: 01942 258011

<table>
<thead>
<tr>
<th>Quantities Used</th>
<th>Frequency of Use</th>
<th>Data Sheet Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>Dependent upon site conditions</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Hazards and Health Effects**

- **General:** Irritant to eyes, respiratory system and skin.
- **Eyes:** Splashes in the eye may cause irritation and reversible local damage.
- **Skin:** Cement burns, a form of skin ulceration, may result from contact with freshly mixed concrete.
- **Inhalation:** Inhalation of silica particles in dust created by cutting or surface treatment of hardened concrete containing high silica aggregates (e.g. flint, quartzite, granite) may cause respiratory damage.
- **Ingestion:** For wet concrete, wash out mouth and drink plenty of water. Seek medical attention if large amounts are swallowed.
- **Fire:** Non-combustible.

**Risks to Health – Exposure Assessment:**

- **Ingestion:** L
- **Inhalation:** M
- **Skin:** L
- **Eyes:** M
- **Systemic:** L

**Monitoring Required:** No

**Of control measures necessary:** Through site inspections / tours

**Is Health Surveillance necessary?**

- **Information, Instruction and Training:**
  - Initially through site induction then updated via toolbox talks.
  - Not deemed necessary
Control Measures
Avoid skin and eye contact. Wear protective clothing.
Environmental measures
Avoid entering drains, sewers or water courses.
Methods of cleaning
Recover bulk spillage as quickly as possible in the wet or semi-dry state using a suction system or mechanical shovel.
Avoid skin and eye contact. The mixture is abrasive and highly alkaline.
Concrete dust
Cutting and surface treatment of hardened concrete should be worked to minimise the creation of airborne dust.
Engineering control measures such as containment and local exhaust ventilation should be applied when airborne dust exposure levels are approached
Take measures to prevent:
Direct skin contact with fresh concrete should be avoided. It is also important not to kneel or sit on the material as harmful contact can occur through saturated clothing. The surface treatment and cutting of hardened concrete can create dust which may contain quartz. If inhaled in excessive quantities over an extended period, respirable dust containing quartz can constitute a long term health hazard
PPE as detailed below.

Personal Protective Equipment (PPE)
Respiratory Protection: Suitable respiratory protective equipment to HSE approved standard.
Hand Protection: Abrasive resistant gloves when cutting or impervious gloves for wet concrete.
Eye Protection: Immediately irrigate with clean water for at least 10 minutes. Seek medical attention.
Skin Protection: Overalls are recommended or long sleeved clothing, full length trousers and impervious boots.

Storage and Handling
Storage: Store cement in a clean, dry environment. Keep out of the reach of children.
Handling: Follow above controls. Heavy so adhere to manual handling guidelines.

First Aid
Inhalation: Move to fresh air.
Eye Contact: Wash eyes immediately with plenty of water for at least 15 mins. Seek medical help.
Skin Contact: Where skin contact occurs with wet concrete, either directly or through saturated clothing, the concrete must be washed off immediately with soap and water.
Ingestion: DO NOT INDUCE VOMITING! Wash out mouth and drink plenty of water. Seek medical attention if large amounts are swallowed.

Disposal Methods
Not hazardous. However, disposal subject to local authority current requirements and regulations.

Assessment completed by:
Signature: .................................................. Date: ........................................
Review Date: ......................................
<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Hazard Classification</th>
<th>Workplace Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester Resin L705-NDA-06 UN1866</td>
<td>Highly Flammable</td>
<td>LTEL: 8 hour TWA - 430 mg/m3 for resin.</td>
</tr>
</tbody>
</table>

**Location**
Various

**Persons likely to be affected**
Operatives and others in the vicinity.

**Work activity**
Used for sewer pipe repair/re-lining.

**Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thick amber paste resin supplied in sealed containers.</td>
<td>Resin - Polyethylene Terephthalate 99-99.9%, Titanium dioxide &lt; 1%.</td>
</tr>
</tbody>
</table>

**Manufacturer**
AOC Europe, Broomvale ThreeB, Broomvale Business Centre, Little Blakenham, Ipswich, Suffolk, IP8 4JU.
Tel: 01473 835750

**Quantities Used**

<table>
<thead>
<tr>
<th>Small</th>
<th>Frequency of Use</th>
<th>Data Sheet Available</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dependent upon site conditions</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Hazards and Health Effects**

**General**: Harmful- irritant and highly flammable.

**Eyes**: Splashes in the eye may cause itching, burning, tearing and redness.

**Skin**: Possible skin irritation with prolonged use.

**Inhalation**: Inhalation of vapours can irritate mucous membrane and respiratory system.

**Ingestion**: Large amounts may cause gastrointestinal blockage with stomach distress.

**Fire**: Highly flammable. Use dry chemical or CO2.

**Risks to Health – Exposure Assessment**

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>Inhalation</th>
<th>Skin</th>
<th>Eyes</th>
<th>Systemic</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>L</td>
</tr>
</tbody>
</table>

**Monitoring Required**
No

**Monitoring Method**
Through site inspections / tours

**Is Health Surveillance necessary?**
Initially through site induction then updated via toolbox talks.
**Control Measures**

- Keep in original containers and seal well when not in use.
- Clean all spillages immediately.
- Do not smoke in the vicinity of this product.

**PPE should be worn:**

- **Personal Protective Equipment (PPE)**
  - **Respiratory Protection:** Required if product is to be used in areas where ventilation is in question. Wear a half face reusable twin filter mask with A1P3 cartridges.
  - **Hand Protection:** Nitrile disposable glove or dextile glove must be worn when using product.
  - **Eye Protection:** Safety goggles should be worn.
  - **Skin Protection:** Overalls are recommended.

**Storage and Handling**

- **Storage:** Keep away from heat, sparks and flame.
- **Handling:** Follow above controls.

**First Aid**

- **Inhalation:** Move to fresh air and seek immediate medical attention.
- **Eye Contact:** Wash eyes immediately with plenty of water. Seek medical help if irritation persists.
- **Skin Contact:** Wash affected area thoroughly with soap and plenty of water. Seek medical help if irritation persists.
- **Ingestion:** Do not induce vomiting. Obtain medical attention.

**Disposal Methods**

- **Residual product must be disposed of as hazardous waste. If no resin remains, empty container can be disposed of as construction waste. Recycle paper/board packaging where applicable.**

**Assessment completed by:**

- **Signature:** ...............................................................  **Date:** ......................................................
- **Review Date:** .................................................
Health and Safety Guidance

ALLIGATOR DRAINS

COSHH ASSESSMENT SHEET

ADCS04

Page 1 of 2

Substance Name | Hazard Classification | Workplace Exposure Limit
---|---|---
Peroxan BP-40 LS. | Highly Flammable Risk phrases: R36/37/38 Irritating to eyes, respiratory system and skin. R42 may cause sensitisation by inhalation. | STEL: 104mg/m³, 40 ppm LTEL: 10 52 mg/m³, 20 ppm Sk ‘particulate’ vapour

Location | Various
Persons likely to be affected | Operatives and others in the vicinity.
Work activity | Catalyst used for sewer pipe repair/re-lining.

Physical and Chemical Properties

Physical: White fluid in container.
Chemical: Hazardous. Dangerous components: dibenzoyl peroxide (Xi R36; Xi R43; E R3; O R7) 30-40%, ethanediol (Xn R22) 25-30%, 2-ethylhexyl benzoate (R53) 10-20%, oxirane, methyl-, polymer with oxirane, monobutyl ether (Xn R22) 1.0-2.5%

Manufacturer

PERGAN GmbH, c/o Newgate Simms Limited, Broughton Mills Road, Bretton, Chester, CH4 0BY
Tel: 01244 660771

Quantities Used | Frequency of Use | Data Sheet Available
---|---|---
Small | Dependent upon site conditions | Yes

Hazards and Health Effects

General: Irritating to eyes, respiratory system and skin. Harmful if swallowed. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Eyes: Splashes in the eye may cause irritation.
Skin: May cause sensitization by skin contact.
Inhalation: Low risk if working in a well ventilated environment.
Ingestion: Harmful if swallowed.
Fire: Highly flammable. Use CO2, powder or water spray

Risks to Health – Exposure Assessment: H - High, M – Medium, L – Low Monitoring Required | No
---|---|---|---|---|---|---|---
Ingestion | H | Inhalation | M | Skin | M | Eyes | M | Systemic | M

Monitoring | Method
---|---
Of control measures necessary | Through site inspections / tours

Is Health Surveillance necessary? Information, Instruction and Training
Not deemed necessary because of small amount used. Initially through site induction then updated via toolbox talks.
Control Measures

Do not mix with peroxide accelerators or reducing agents. Product must only be used in well-ventilated areas. This should be achieved by natural ventilation, use of local exhaust ventilation and good general ventilation, where necessary. All non-essential personnel must be excluded from work area when the product is being used.

Keep containers tightly closed when not in use. Product should only be used in areas in which all-naked lights and other sources of ignition have been excluded. Non-sparking tools must be used.

Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Prevent spillages, contamination of soil, drains and water courses. For storage arrangements refer to details listed below. Maintain a high level of housekeeping and personal hygiene. Wash your hands before eating, drinking or using the lavatory. Smoking, eating and drinking should be prohibited in the work area. Do not smoke in storage area. Do not use solvents to dean your skin. Those persons handling this substance will be provided information, instruction and training through the explanation of the requirements of this assessment, including the harmful nature of the substance and the control measures to be followed. Where these persons are not able to comply with the control measures they are to report this to their manager immediately and await further instructions. Management are responsible for monitoring working practices to ensure that control measures are followed and that they are satisfactory. The following personal protective equipment should be worn:

Personal Protective Equipment (PPE)

Respiratory Protection: Use suitable respiratory device for prolonged use - Filter A2.
Hand Protection: Use protective cream and wear protective gloves - only chemical-protective Nitrile or similar gloves with CE labeling of category III.
Eye Protection: Tightly sealed safety goggles should be worn when using.
Skin Protection: Overalls should be worn.

Storage and Handling

Storage: Store in a dry and cool, well-ventilated area away from direct sunlight, ignition sources and naked lights. No smoking. Keep container tightly closed when not in use.
Handling: Follow above controls.

First Aid

Inhalation: Move to fresh air and seek medical attention.
Eye Contact: Wash open eye with running water. Seek medical help if symptoms persist.
Skin Contact: Immediately wash affected area with soap and water and rinse thoroughly. Immediately remove contaminated clothing.
Ingestion: Do not induce vomiting. Obtain immediate medical attention.

Disposal Methods

Dispose of this material and its container as hazardous waste. Do not allow it to enter waterways or the sewage system.

Assessment completed by:

Signature: .......................................................... Date: ..............................................

Review Date: ....................................................
## Health and Safety Guidance

### Substance Name: PERGAQUICK A3

<table>
<thead>
<tr>
<th>Hazard Classification</th>
<th>Workplace Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritant</td>
<td>Diisobutyl phthalate 5 mg/m3 LTEL</td>
</tr>
</tbody>
</table>

### Location

Various

### Persons likely to be affected

Operatives and others in the vicinity.

### Work activity

Accelerator used for sewer pipe repair/re-lining.

### Physical and Chemical Properties

**Physical:** Colourless – yellowish fluid in container.

**Chemical:** Toxic. Dangerous components: diisobutyl phthalate 80-90%, N,N-diethylaniline (T,N R23/24/25-33-51/53) 5-10%.

### Manufacturer

PERGAN GmbH, c/o Newgate Simms Limited, Broughton Mills Road, Bretton, Chester, CH4 0BY

Tel: 01244 660771

### Quantities Used

<table>
<thead>
<tr>
<th>Small</th>
<th>Frequency of Use</th>
<th>Data Sheet Available</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dependent upon site conditions</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Hazards and Health Effects

**General:** Immediately remove clothing soiled by the product. Remove breathing equipment only after contaminated clothing. In case of irregular breathing or respiratory arrest, apply artificial respiration.

**Eyes:** No irritant effect.

**Skin:** No irritant effect.

**Inhalation:** Toxic by inhalation. Dizziness and eventual unconsciousness if over exposed to this substance.

**Ingestion:** Harmful if swallowed.

**Fire:** CO2, powder or water spray.

### Risks to Health – Exposure Assessment

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>Inhalation</th>
<th>Skin</th>
<th>Eyes</th>
<th>Systemic</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>H</td>
<td>L</td>
<td>L</td>
<td>M</td>
</tr>
</tbody>
</table>

### Monitoring

- **Monitoring Method:** Through site inspections / tours

### Is Health Surveillance necessary?

Information, Instruction and Training

- **Not deemed necessary because of small amount used:** Initially through site induction then updated via toolbox talks.
Control Measures

Product must be used in well-ventilated areas. This should be achieved by natural ventilation, use of local exhaust ventilation and good general ventilation, where necessary. Keep containers tightly closed when not in use. Avoid skin and eye contact. For storage arrangements refer to details listed below. Maintain a high level of housekeeping and personal hygiene. Wash your hands before eating, drinking or using the lavatory. Smoking, eating and drinking should be prohibited in the work area. Do not smoke in storage area. Do not use solvents to dean your skin.

Storage: Store in a dry and cool, well-ventilated area away from direct sunlight, ignition sources and naked lights. No smoking. Keep container tightly closed when not in use.

Handling: Follow above controls.

First Aid

Inhalation: Move to fresh air and seek medical attention.

Eye Contact: Wash open eye with running water. Seek medical help.

Skin Contact: Immediately wash affected area with soap and water and rinse thoroughly. Immediately remove contaminated clothing.

Ingestion: Do not induce vomiting. Obtain immediate medical attention.

Disposal Methods

Dispose of this material and its container as hazardous waste. Do not allow it to enter waterways or the sewage system.

Assessment completed by:

Signature: ………………………………………………….  Date: …………………………….

Review Date: …………………………….
4. Risk Assessments

The following data sheets detail the activities carried out when working on site, identify the risks / hazards involved in carrying out the activities and identify the measures to be taken to eliminate / minimize the identified risks. These assessments must be used, in part or in entirety, by Alligator Drains personnel and its sub-contractors when carrying out works on behalf of customers / clients.
### Location:
Various

### Work activity:
Activities involving risk of contracting Leptospirosis (Weil’s Disease), hepatitis A, tetanus and polio.

### Persons affected / Damage Anticipated:
Anyone who is exposed to rat’s urine or comes into contact with sewage or contaminated water.

Serious and sometimes fatal. Leptospirosis symptoms start with flu-like illness with persistent and severe headache, which can lead to vomiting and muscle pains and ultimately jaundice, meningitis and kidney failure.

### Significant Hazards:

<table>
<thead>
<tr>
<th>Serious injury to health following contact with rat’s urine, sewage or contaminated water. The bacteria can get into the body through cuts and scratches and through the lining of the mouth, throat and eyes after contact with infected urine or contaminated water.</th>
</tr>
</thead>
</table>

### Assessment of risk before precautions taken:

<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### Controls:

- Do not touch any rats or suspected contaminated water with unprotected hands.
- Ensure that there is adequate provision or welfare facilities on site. This must include supply of clean hot and cold or warm water, soap or other suitable means of cleaning, towels or other suitable means of drying.
- Washing facility rooms must be kept clean and tidy at all times.
- Wear PPE at all times and do not put hands near face, eyes, nose or mouth. Never lick splashes off clothing.
- Maintain a high level of personal hygiene, washing your hands after handling any animal or any contaminated clothing or other materials and always before eating, drinking or smoking.
- Ensure adequate provision of first aid stock is available on site and site operatives are made fully aware of the site arrangements for first aid.
- Wash and cuts and grazes immediately with soap and running water and cover all cuts and broken skin with waterproof plasters before and during work.
- Clean all tools and equipment thoroughly after use. Never re-use protective nitril gloves. Remove contaminated overalls and clothing and seal in a plastic bag for laundering. Add a warning label to the bag to prevent cross-contamination.
- Managerial / Supervisory: Responsible for informing the site operatives of the risk of Leptospirosis (Weil’s disease) on site and instructing them of the precautions to be taken. Responsible for ensuring adequate provision of washing facilities and first aid on site. Responsible for monitoring of site activities to ensure the above safe working practices are followed. To review this risk assessment to ensure that it is suitable and sufficient for the proposed work. To amend the assessment if additional hazards exist that requires additional precautions.
- Operatives: Must follow the precautions as detailed above. Report the above symptoms to their doctor immediately, telling them about their work. If the doctor diagnoses you have Leptospirosis, report this to the company health and safety officer as the disease is reportable to the HSE.
- Training: All site operatives must have explained to them the information contained within this risk assessment.
- Personal Protective Equipment: Always wear your protective clothing. This must include overalls, face, eyes, nose, mouth and hand protection (nitrile gloves).
- Additional Control Measures Necessary: None deemed necessary.
- Remaining Residual Risk (should be insignificant): Insignificant

### Circulation of Risk Assessment:
Employees ; Sub-Contractor ; Main Contractor/Customer/Client ; Site Copy †
### RISK ASSESSMENT – SITE CHECK

| Additional hazards identified: |  |
| Uncontrolled risks identified: |  |
| Further action required: | e.g. additional assessments, emergency provisions, change in method of working |
| Competent person undertaking check: |  |

| Signature: | Date: |

**BRIEFING RECORD**

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.

Assessment undertaken:

| Signature: | Name: |
| Date: | Review Date: |
**Health and Safety Guidance**

<table>
<thead>
<tr>
<th>ALLIGATOR DRAINS</th>
<th>RISK ASSESSMENT</th>
<th>USE OF DRAIN RODS FOR CLEARANCE</th>
<th>ADRA02</th>
<th>Page 1 of 2</th>
</tr>
</thead>
</table>

**Location:** Various

**Work activity:** Clearing pipe blockages using drain rods and attachments.

**Persons affected / Damage Anticipated:** Anyone who is exposed to sewage or rat’s urine or comes into contact with contaminated water.

Leptospirosis (Weil’s disease), hepatitis, tetanus. Serious and sometimes fatal. Symptoms of Leptospirosis start with flu-like illness with persistent and severe headache, which can lead to vomiting and muscle pains and ultimately jaundice, meningitis and kidney failure.

<table>
<thead>
<tr>
<th>Significant Hazards</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Serious injury to health following contact with sewage, rat’s urine or water contaminated with rat’s urine. The bacteria can get into the body through cuts and scratches and through the lining of the mouth, throat and eyes after contact with infected urine or contaminated water.</td>
<td>X</td>
</tr>
</tbody>
</table>

**Controls:**

- Carry out inspections of equipment before leaving for site. Report any defects to manager or company.
- When on site contact person responsible to confirm arrival. Obtain relevant information and carry out site familiarisation. Establish if hazardous chemicals have been put into the system. If so, identify chemical and associated hazards. Refer to your line manager if unsure.
- Secure the working area to prevent unauthorized entry.
- Use safe lifting procedures when opening manholes.
- Before commencing work, don overalls and appropriate PPE to cover face, eyes, mouth and hands (disposable nitrile gloves).
- Affix appropriate attachment for the blockage to be cleared to the end of the first rod.
- Insert rods into pipe in an upstream direction where possible.
- Begin to rod, adding rods as required and rotate rod clockwise and anti clockwise as it is moved along the pipe to clean and remove debris from all round the inside of the pipe.
- When the blockage is reached, move the rod back and forth a little way repeatedly until the blockage is cleared and the water runs freely. Use alternative tools if necessary to clear the blockage.
- Do not enter a confined space without checking with your line manager and a detailed risk assessment has been carried out.
- Remove waste and dispose of it in a sealed container.
- After use, clean rods and other tools thoroughly. Dispose of contaminated PPE safely. Contaminated overalls should be put into a sealed bag for laundering and labeled to prevent cross-contamination. Wash your hands thoroughly.
- Managerial / Supervisory: Responsible for informing the site operatives of the risk of Leptospirosis (Weil’s disease), hepatitis and tetanus on site and instructing them of the precautions to be taken. Responsible for ensuring adequate provision of washing facilities and first aid on site. Responsible for the monitoring of site activities to ensure the above safe working practices are followed. To review this risk assessment to ensure that it is suitable and sufficient for the proposed work. To amend the assessment if additional hazards exist that requires additional precautions.
- Operatives: Must follow the precautions as detailed above. Report any flu like symptoms to your doctor, informing them about your work. If the doctor diagnoses you have Leptospirosis, report this to the company health and safety officer as the disease is reportable to the HSE.
- Training:
  - All site operatives must have explained to them the information contained within this risk assessment.
  - Personal Protective Equipment:
    - Always wear your protective clothing. This must include overalls, face, eyes, mouth and hand protection.

**Additional Control Measures Necessary:**

- None deemed necessary.

**Remaining Residual Risk (should be insignificant):**

- Insignificant

**Circulation of Risk Assessment:**

- Employees
- Sub-Contractor
- Main Contractor
- Site Copy
### Risk Assessment - Site Check

| Additional hazards identified: |  |
| Uncontrolled risks identified: |  |
| Further action required: | e.g. additional assessments, emergency provisions, change in method of working |
| Competent person undertaking check: |  |

| Signature: | Date: |

### Briefing Record

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.

Assessment undertaken:

| Signature: | Name: |
| Date: | Review Date: Annually |
**Health and Safety Guidance**

### ALLIGATOR DRAINS

#### RISK ASSESSMENT

**HIGH PRESSURE WATER JET CLEARANCE**

**ADRA03**

| Location: | Various |
| Work activity: | Clearing pipe blockages using high pressure water jet |
| Persons affected / Damage Anticipated: | Anyone who is exposed to sewage or rat's urine or comes into contact with contaminated water. Leptospirosis (Weil's disease), hepatitis, tetanus. Serious and sometimes fatal. Symptoms of Leptospirosis start with flu-like illness with persistent and severe headache, which can lead to vomiting and muscle pains and ultimately jaundice, meningitis and kidney failure. |

### Significant Hazards:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of infection from biological hazards. E.g. Leptospirosis, Hepatitis A, Polio, tetanus.</td>
<td>X</td>
</tr>
<tr>
<td>Impact injuries. Cutting and penetrating injuries to the body from the water-jet.</td>
<td></td>
</tr>
</tbody>
</table>

#### Controls:

- Carry out inspections of equipment before leaving for site. Report any defects to manager or company. Ensure pump filter is clear of debris to prevent cavitations to the pump.
- When on site contact person responsible to confirm arrival. Obtain relevant information and carry out site familiarisation. Establish if hazardous chemicals have been put into the system. If so, identify chemical and associated hazards. Refer to your line manager if unsure.
- Secure the working area to prevent unauthorized entry.
- Use safe lifting procedures when opening manholes.
- Check condition of drain pipe and select suitable nozzle and jet pressure (max 1500psi/100bar for uPVC or pitch fibre). Check that there are no obstructions in the nozzle. Use protective gloves when doing this.
- Before beginning work, ensure you are using suitable PPE.
- If possible approach blockage at a constant speed in an upstream direction. Use a guide tube to ensure that the hose is inserted into the pipeline.
- Turn on the water and rotate hose clockwise and anti clockwise as it is moved along the pipe to clean and remove debris from the inside of the pipe.
- When the blockage is reached, move the hose back and forth a little way repeatedly until the blockage is cleared and the water runs clean.
- Keep the hose moving at all times if possible. Never let it remain stationary for more than 30 seconds when water is turned on.
- Check that the system is flowing freely. If not, repeat the above operation until it is.
- Do not enter a confined space without checking with your line manager and a detailed risk assessment has been carried out.
- Remove waste and dispose of it in a sealed container.
- After use, clean water jet equipment and other tools thoroughly. Dispose of contaminated PPE safely. Contaminated overalls should be put into a sealed bag for laundering and labeled to prevent cross-contamination. Wash your hands thoroughly.
- Managerial / Supervisory:
  - Responsible for informing the site operatives of the risk of Leptospirosis (Weil's disease), hepatitis and tetanus on site and instructing them of the precautions to be taken. Responsible for ensuring adequate provision of washing facilities and first aid on site. Responsible for the monitoring of site activities to ensure the above safe working practices are followed. To review this risk assessment to ensure that it is suitable and sufficient for the proposed work. To amend the assessment if additional hazards exist that requires additional precautions.
- Operatives:
  - Must follow the precautions as detailed above. Report any flu like symptoms to your doctor, informing them about your work. If the doctor diagnoses you have Leptospirosis, report this to the company health and safety officer as the disease is reportable to the HSE.
- Training:
  - All site operatives must have explained to them the information contained within this risk assessment.
- Personal Protective Equipment:
  - Always wear your protective clothing. This must include waterproof overalls, face, eyes, mouth and hand protection.

### Additional Control Measures Necessary:

- None deemed necessary.

### Remaining Residual Risk (should be insignificant):

- Insignificant

### Circulation of Risk Assessment:

- Employees
- Sub-Contractor
- Main Contractor
- Site Copy

---

Page 27
### RISK ASSESSMENT – SITE CHECK

| Additional hazards identified: |
| Uncontrolled risks identified: |
| Further action required: e.g. additional assessments, emergency provisions, change in method of working |
| Competent person undertaking check: |
| Signature: | Date: |

### BRIEFING RECORD

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.

Assessment undertaken:

| Signature: | Name: |
| Date: | Review Date: Annually |
**ALLIGATOR DRAINS**

**RISK ASSESSMENT**

**USE OF PORTABLE ELECTRIC HAND TOOLS**

**ADRA04**

<table>
<thead>
<tr>
<th>Location: Work</th>
<th>Activity: Persons affected</th>
<th>/ Damage Anticipated:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Significant Hazards:</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury from electrocutton</td>
<td>Low Medium High</td>
</tr>
<tr>
<td>Injury from fire or explosion</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to use of poorly maintained equipment</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to lack of knowledge/training and instruction</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to lifting/carrying of equipment</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to access to dangerous parts of machinery</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to exposure to noise</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to exposure from vibration</td>
<td>X</td>
</tr>
</tbody>
</table>

### Controls:

**Planning:**

Management must ensure that equipment is suitable for the task and the site and the equipment is used by persons who have received adequate information, instruction and training. If the equipment is hired, instructions on safe use of the equipment must be supplied and be made ready available. The company is to continually review the purchase of equipment to ensure tools with lower rated vibration levels are purchased. Equipment used will be fit for its purpose with regard to voltage, power and environmental conditions. All company owned electrical equipment is individually marked with unique company number, is subject to planned maintenance and must display an up-to-date inspection tag. Physical Controls (user precautions):

- Operators must carry out visual inspections of all work equipment before use and then daily. Equipment found to be defective must not be used and reported to line management immediately. Leads and extension cables must be routed so as to minimise the likelihood of damage and trip hazards. Only equipment operating at 110 volts or less will be permitted for use on sites. Dangerous or specified parts of machinery are to be properly guarded at all times. The guards should be of substantial construction and kept in place at all times when the machinery is in use. It is an offence for an employee to misuse or recklessly interfere with anything provided in the interest of safety. First aiders will be available on site and trained in electric shock treatment. To reduce vibration exposure, take regular breaks, job rotate use of equipment, keep hands warm during cold weather, use bits that are sharp, keep tools in good working order, do not use defective equipment, report any signs of aches and pains in hands and arms immediately to the line manager. All sub-contractors will be made aware of the above policy concerning use of electrical equipment.

**Managerial / Supervisory**

- Will ensure the equipment is suitable for the tasks and site conditions. Will ensure that the operatives are suitably trained to use the equipment. Will monitor site operations to ensure that safe systems of work are followed. Will ensure only competent persons test, repair and maintain portable electrical equipment. To review this risk assessment to ensure that it is suitable and sufficient for the proposed work. To amend the assessment if additional hazards exist that require additional precautions.

**Operatives:**

- Will work to the safe systems of work detailed in this risk assessment. Will not interfere with safety devices fitted to equipment. Will inspect the equipment on a daily basis and report defects to their line manager immediately. No defective equipment is to be used. Will report to management any situations where they may not be able to comply with the devised safe systems of work.

**Training**

- Operatives will be suitably trained in the precautions and safe use of portable electrical equipment.

**Personal Protective Equipment:**

- Dependent on equipment used and will include: Hard hat, Safety footwear, Hi-vis jacket, Hand protection, eye protection and hearing protection.

### Additional Control Measures Necessary:

- Additional assessments will be required for use of electrical equipment in flammable atmospheres.

### Remaining Residual Risk (should be insignificant):

### Insufficient

<table>
<thead>
<tr>
<th>Circulation of Risk Assessment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees ↑ Sub-Contractor ↑ Main Contractor ↑ Site Copy ↑</td>
</tr>
</tbody>
</table>

**Assessment undertaken:**

- **Signature:**
- **Name:** Duncan Williams
- **Date:**
- **Review Date:** Annually

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**Alligator Drains**

**Health and Safety Guidance**

### Risk Assessment – Site Check

| Additional hazards identified: |
| Uncontrolled risks identified: |
| Further action required: | e.g. additional assessments, emergency provisions, change in method of working |
| Competent person undertaking check: |

| Signature: | Date: |

**Briefing Record**

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
ALLIGATOR DRAINS

RISK ASSESSMENT

USE OF HAND TOOLS (NON-POWERED)

Page 1 of 2

Location: Work
activity: Persons affected
/ Damage Anticipated:

Significant Hazards:

Assessment of risk before precautions taken

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye injury due to flying fragments, etc, from poorly maintained equipment</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Injury to hands, feet and body</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Controls:

Planning:
All tools must be fit for purpose, fit for the environment in which they are to be used, in good working order and in good repair. Equipment must display unique company mark. Equipment not displaying mark must not be used. Maintenance log is kept of all maintenance activities undertaken. Users must have received adequate training in its safe use. When hired, equipment must be supplied with up-to-date inspection/maintenance records.

Physical Controls (user precautions):
All hand tools must be fit for purpose, in good working order and in good repair. Open-bladed knives, screwdrivers and other sharp tools are to be carried and used so as not to cause injury to the user or others. Tools with sharp blades must have the facility to retract the blade when not in use or an appropriate guard available that can be fixed in place to cover sharp edges.
Non-ferrous (spark free) tools are to be used in flammable atmospheres.
Insulated tools must be used where there is a possibility of live electrical work.

Managerial / Supervisory
Will ensure the equipment is fit for purpose, fit for the environment in which they are to be used, in good working order and good repair. Will ensure that operatives are suitably trained in the use of the equipment. Will monitor site operations to ensure precautions are followed and operators are competent to use equipment. To review this risk assessment to ensure that it is suitable and sufficient for the proposed work. To amend the assessment if additional hazards exist that require additional precautions.

Operatives:
Will work to the safe systems of work detailed in this risk assessment. Will not interfere with safety devices fitted to equipment. Will inspect the equipment on a daily basis and report defects to their line manager immediately. No defective equipment is to be used. Will report to management any situations where they may not be able to comply with the devised safe systems of work.

Training
Operatives will be instructed in the correct method of use and maintenance requirements at induction. Updated training will be carried out through toolbox talk sessions.

Personal Protective Equipment:
Eye protection is to be provided and used whenever work is carried out using tools where there is a risk of flying particles or pieces of the tool breaking off.
Other personal protective equipment is to include the use of: Hard hats, Hand protection and Safety footwear.

Additional Control Measures Necessary::
None.

Remaining Residual Risk (should be insignificant):
Insignificant

Circulation of Risk Assessment:
Employees †  Sub-Contractor †  Main Contractor †  Site Copy †

Assessment undertaken:

Signature:  Name:  Duncan Williams
Date:  Review Date:  Annually
### RISK ASSESSMENT – SITE CHECK

| Additional hazards identified: |  |
| Uncontrolled risks identified: |  |
| Further action required: | e.g. additional assessments, emergency provisions, change in method of working |
| Competent person undertaking check: |  |

| Signature: | Date: |

### BRIEFING RECORD

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
### Health and Safety Guidance

**ALLIGATOR DRAINS**

**RISK ASSESSMENT**  
**BATTERY POWERED CORDLESS DRILL**  
**ADRA06**  

<table>
<thead>
<tr>
<th>Location:</th>
<th>Various</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work activity:</td>
<td>Use of battery powered cordless drill.</td>
</tr>
</tbody>
</table>
| Persons affected / Damage Anticipated: | Operator  
Possible ringing in the ears after daily use. |

**Noise Sources**

<table>
<thead>
<tr>
<th>Noise Source</th>
<th>Noise Level (LAeq dB)</th>
<th>Exposure duration (Hours / minutes)</th>
<th>Daily Noise Exposure (LEP,d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V battery powered cordless drill</td>
<td>80</td>
<td>4 hours in 8 hour day</td>
<td>77 (Result taken from HSE Noise exposure calculator, copy attached)</td>
</tr>
</tbody>
</table>

**Action levels exceeded?**

<table>
<thead>
<tr>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower exposure action value of 80dB(A), LEP,d with peak sound pressure of 135dB</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Upper exposure action value of 85dB(A), LEP,d with peak sound pressure of 137dB</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Daily / Weekly personal exposure limit value of 87dB(A), LEP,d with peak sound pressure of 140dB</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

**Recommendations for action:**

Noise levels are below action levels and therefore no further action considered necessary. However, noise levels should be assessed regularly. Further assessments are required when new equipment is purchased. The company policy of purchasing quieter tools shall apply whenever new equipment is to be purchased. Consult with the company health and safety officer in this regard.

These tools are to be inspected, tested and maintained in accordance with company procedures and manufacturers’ recommendations.

Employees are to report any problems where they feel noise levels have increased and if they feel their hearing is being affected by using these tools.

**Remaining Residual Risk:**

- Insignificant
- Tolerable
- Medium (additional measures required)
- High (Re-assess)

**Assessment undertaken:**

Signature:  
Name:  
Date:  
Review Date:
### RISK ASSESSMENT – SITE CHECK

<table>
<thead>
<tr>
<th>Additional hazards identified:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrolled risks identified:</td>
<td></td>
</tr>
<tr>
<td>Further action required:</td>
<td>e.g. additional assessments, emergency provisions, change in method of working</td>
</tr>
<tr>
<td>Competent person undertaking check:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
</table>

### BRIEFING RECORD

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
Health and Safety Guidance

<table>
<thead>
<tr>
<th>ALLIGATOR DRAINS</th>
<th>RISK ASSESSMENT USE OF ANGLE GRINDER ADRA07</th>
<th>Page 1 of 2</th>
</tr>
</thead>
</table>

**Location:** Various  
**Work activity:** Use of angle grinder.  

<table>
<thead>
<tr>
<th>Hazard:</th>
<th>Risk (before precautions implemented)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise generated during use of tool: Possible ringing in the ear after daily use.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Noise Sources</th>
<th>Noise Level (LAeq dB)</th>
<th>Exposure-duration (Hours/minutes)</th>
<th>Daily Noise Exposure (LEP,d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains powered angle grinder</td>
<td>&gt;90</td>
<td>2 hours in 8 hour day</td>
<td>84 (Result taken from HSE Noise exposure calculator)</td>
</tr>
</tbody>
</table>

**Action levels exceeded?** Yes  
**Lower exposure action value of 80dB(A), LEP,d with peak sound pressure of 135dB**  
**Upper exposure action value of 85dB(A), LEP,d with peak sound pressure of 137dB**  
**Daily / Weekly personal exposure limit value of 87dB(A), LEP,d with peak sound pressure of 140dB**

**Planning:**  
Management must ensure that equipment is suitable for the task and site conditions and the equipment is used by persons who have received adequate information, instruction and training. If the equipment is hired, instructions on safe use of the equipment must be supplied and be made readily available. The company is to continually review the purchase of equipment to ensure tools with lower rated noise and vibration levels are purchased. Equipment used will be fit for its purpose with regard to voltage, power and environmental conditions. All company owned electrical equipment is subject to planned maintenance and must display an up-to-date inspection tag. 
Physical Controls (user precautions):  
Operators must carry out visual inspections of all work equipment before use and then daily. Equipment found to be defective must not be used and reported to line management immediately. Leads and extension cables must be routed so as to minimise the likelihood of damage and trip hazards. Only equipment operating at 110 volts or less will be permitted for use on sites. Dangerous or specified parts of machinery are to be properly guarded at all times. The guards should be of substantial construction and kept in place at all times when the machinery is in use. It is an offence for an employee to misuse or recklessly interfere with anything provided in the interest of safety. First aiders will be available on site and trained in electric shock treatment. To reduce vibration exposure, take regular breaks, job rotate use of equipment, keep hands warm during cold weather, keep tools in good working order, do not use defective equipment, report any signs of aches and pains in hands and arms immediately to the line manager. All sub-contractors will be made aware of the above policy concerning use of angle grinders.  
Training  
Operatives will be suitably trained in the precautions and safe use of angle grinders with particular regard usage limits due to potential hand / arm vibration problems (information available for the company health and safety officer).  
Personal Protective Equipment:  
Dependent on equipment used and will include: Hard hat, Safety footwear, Hi-visibility jacket, Hand protection, eye protection and hearing protection.

**Additional Control Measures Necessary:**  
Additional assessments will be required for use of electrical equipment in flammable atmospheres.  
Remaining Residual Risk (should be insignificant):  
Insignificant  
Circulation of Risk Assessment:  
Employees † Sub-Contractor † Main Contractor † Site Copy †

**Remaining Residual Risk:**  
Insignificant † Tolerable † Medium (additional measures required) † High (Re-assess) †
BRIEFING RECORD

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.

Assessment undertaken:

Signature: __________________________ Name: __________________________

Date: __________________________ Review Date: __________________________
**Location:** Various

**Work activity:** Use of sharp knives, e.g. Stanley knife, Hook knife

**Persons affected / Damage Anticipated:** Individual;
Serious cuts.

<table>
<thead>
<tr>
<th>Significant Hazards</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury due to incorrect equipment</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to poorly maintained equipment</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to incorrect use</td>
<td>X</td>
</tr>
</tbody>
</table>

**Controls:**

Controls already implemented to reduce risk include Provision and Use of Work Equipment Regulations 1998 (PUWER).

Where practicable, a safer alternative to the use of sharp knives will be implemented by the company. This is to include the purchase and use of knives with retractable blades or those with a snip type operation, e.g. secateurs.

Should the use of a Stanley knife or Hook knife be necessary, all cutting operations must be carried out in a direction away from the body.

As with all hand tools, visual inspections must be undertaken on a daily basis and any defective equipment must be reported to the line manager immediately. Defective equipment must not be used.

Use only sharp blades. Blunt blades require extra force to cut.

As with all work equipment, they must not be interfered with, misused or have any safety devices removed.

When using such tools, hand protection must be worn that meets BSEN 388 (Mechanical Hazards).

Managerial / Supervisory:

Management must review this risk assessment to ensure that it is suitable and sufficient for the proposed work. To amend the assessment if additional hazards exist that requires additional precautions.

**Additional Control Measures Necessary:**

This assessment is to be reviewed by site management on a site-by-site basis to ensure it is suitable and sufficient.

**Remaining Residual Risk (should be insignificant):**

Insignificant

**Circulation of Risk Assessment:**

Employees  Sub-Contractor  Main Contractor  Site Copy †

**Assessment undertaken:**

Signature:  Name:

Date:  Review Date:
<table>
<thead>
<tr>
<th>RISK ASSESSMENT – SITE CHECK</th>
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<tbody>
<tr>
<td>Additional hazards identified:</td>
</tr>
<tr>
<td>Uncontrolled risks identified:</td>
</tr>
<tr>
<td>Further action required: e.g. additional assessments, emergency provisions, change in method of working</td>
</tr>
<tr>
<td>Competent person undertaking check:</td>
</tr>
<tr>
<td>Signature: Date:</td>
</tr>
</tbody>
</table>

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### Health and Safety Guidance

**ALLIGATOR DRAINS**

**RISK ASSESSMENT**

**USE OF LADDERS**

**ADRA09**

**Location:** Various

**Work activity:** Use of ladders (for access or as a work place for maintenance, electrical work, plumbing, inspections, etc.

**Persons affected / Damage Anticipated:** Operators Other persons in close proximity


<table>
<thead>
<tr>
<th>Significant Hazards</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Injury due to fall from ladder</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to ladder slipping</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to over reaching / over balancing whilst on ladder</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to placing ladder on unsuitable ground conditions</td>
<td>X</td>
</tr>
<tr>
<td>Injury to other persons from objects dropped by ladder user</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to moving / carrying ladder</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to use of poorly maintained equipment</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to lack of knowledge and training</td>
<td>X</td>
</tr>
<tr>
<td>Inclement weather</td>
<td>X</td>
</tr>
<tr>
<td>Injury due to use of ladder in close proximity to overhead power lines</td>
<td>X</td>
</tr>
</tbody>
</table>

**Controls:**

**Planning:**

Before considering the use of a ladder, management must determine that the use of alternative work equipment is not justified. Ladders can only be used for short duration (no longer than 20 minutes at one time), light work and when there are aspects of the site that cannot be changed. The ladder must be of sufficient strength (Class 1 Industrial Rated) and suitable for the purpose of the intended task. Ladders should not be used where they cause a hazard or can be struck or dislodged. All company owned ladders are subject to regular inspections and maintained and marked with unique number. Ladders not marked with the company number must not be used unless they have been specifically hired and display and up-to-date inspection tag. Any damaged ladder must not be used and returned to the workshop for repair or disposal. Management must ensure that any person using a ladder is properly trained in its use or, in the case of not being trained, is supervised at all times by a competent person.

**Physical Controls (user precautions):**

Refer to the attachment.

**Managerial / Supervisory**

Use of ladders will be monitored regularly to ensure that operatives are not over-reaching. Managers / supervisors must check ladders regularly to ensure they are sound. Damaged ladders must not be used and must be removed from the workplace. Managers will monitor work operations regularly to ensure they are used correctly and to ensure ladder stabilisers are used. To review this risk assessment to ensure that it is suitable and sufficient for the proposed work. To amend this assessment if additional hazards exist that require additional precautions.

**Operatives:**

Must follow the safe systems of work detailed in this risk assessment at all times. Where this is not possible/practicable it must be reported to the line manager immediately for them to investigate. Will use ladder devices provided to them in the interest of safety. Will report defective equipment.

**Training**

All operatives must be trained in the safe use of ladders and the hazards to be avoided. They must be specifically instructed in the contents of this risk assessment. This can be undertaken at induction training.

**Personal Protective Equipment:**

Safety footwear and any other relevant PPE in accordance with work being undertaken.

Only when all of the above precautions have been taken can a ladder be used.

**Additional Control Measures Necessary:**

When a ladder is not practicable and if work methods are to change.

**Remaining Residual Risk (should be insignificant):**

**Insufficient**

**Circulation of Risk Assessment:**

Employees † Sub-Contractor † Main Contractor † Site Copy †

**Assessment undertaken:**

Signature: Name: Duncan Williams

Date: Review Date: Annually
Carrying a Ladder
A short ladder may be carried comfortably by having it vertical against the shoulder and holding one of the lower rungs.
Long ladders must be carried horizontally by two people.
Always take care when negotiating corners and obstacles.

<table>
<thead>
<tr>
<th>RISK ASSESSMENT – SITE CHECK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional hazards identified:</td>
</tr>
<tr>
<td>Uncontrolled risks identified:</td>
</tr>
<tr>
<td>Further action required: e.g. additional assessments, emergency provisions, change in method of working</td>
</tr>
<tr>
<td>Competent person undertaking check:</td>
</tr>
<tr>
<td>Signature: Date:</td>
</tr>
</tbody>
</table>

BRIEFING RECORD
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Health and Safety Guidance

ALLIGATOR DRAINS

RISK ASSESSMENT
GENERAL GUIDELINES ON THE SAFE USE OF LADDERS
ADRA09

Page 3 of 3

Work can only be undertaken from a ladder if it is of light nature and short duration. Work is restricted to that which can be carried out using one hand only and must not take longer than 20 minutes at any one time. Where longer periods of work are anticipated and you cannot maintain a safe hand-hold, other forms of access equipment must be considered.

No part of a building should be used to support a ladder unless it is safe to do so and strong enough for the purpose.

1. Ladders should be set on a firm base and there should be no makeshift use of bricks, blocks or timber packaging to gain extra height or to level up the stiles.
2. Ladders should be sited clear of any excavation and in such a position that they are not causing a hazard or placed where they may be struck or dislodged.
3. Ladders must not be taken into the vicinity of overhead power lines unless the power lines have been made safe first. Check with your line manager to ascertain that the overhead cables have been made safe.
4. Ladders should not be placed on or leant against any fragile surface or fitting.
5. Ladders should be set as near as possible to an angle of 75 degrees (1 metre out for every 4 metres up).
6. Do not use ladders when there is a strong breeze or gusts. Do not leave ladders unattended up against structures in windy conditions as they can be easily blown over.
7. Do not place ladders onto damp slippery surfaces.
8. When securing ladders, lashings should be around the stiles and not the rungs.
9. Ladders should, in the interests of safety, be securely fixed or lashed to prevent slipping, either at the top or, if not possible, at the bottom. Company issued ladder stabilizing devices (spurs and/or stays) must be used every time. Research has shown that footing a ladder is not an effective way of stopping it from slipping.
10. Only one person should be on the ladder at any one time.
11. Always face the ladder when climbing or descending.
12. Footwear worn by persons using the ladder must be suitable for maintaining a satisfactory grip.
13. When climbing or descending ensure a good handhold at all times.
14. As far as possible, ladders must be placed so that there is adequate space behind each rung for a proper foothold.
15. Tools and materials should be carried in a shoulder bag on a special belt or hoisted up or lowered afterwards.
16. Tools requiring the use of both hands should not be used.
17. Tools not in use should be hooked or otherwise secured to the ladder.
18. The top of the ladder must not be repositioned by jumping whilst still stood on the ladder.
19. Over-reaching leads to over-balancing. The working position should be not less than five rungs from the top of the ladder.
20. All company owned ladders and associated safety devices are subject to regular inspections and maintenance and marked with a unique number. Ladders and safety devices not marked with company number must not be used unless they have been specifically hired and display an up-to-date inspection tag or label from the hire company. The ladder must be checked before use to ensure it is the correct length and type and not damaged. Any damaged ladders must not be used and returned to the workshop for repair or disposal.
21. Ladders under 3 metres need not be fixed or footed so long as they are securely placed so as to prevent slipping. Ladders over 3 metres must be secured.
22. Ladders must extend at least 1 metre (approximately 5 rungs) above the landing place.

Inspection of ladders and associated safety devices (spurs and/or stays)
Ladder users must ensure pre-use checks are carried out every day. Any identified defects must be reported to line management and the equipment returned for repair. Defective equipment is not to be used.
During inspections attention must be paid to the following points:
- Damaged or worn stiles, particularly at the top or bottom of the ladder
- Broken, missing, loose or worn rungs
- Mud or grease on the rungs
- Movement in the rungs or stiles
- Corrosion of fittings
- Warping, sagging or distortion. The ladder must stand firmly

All company work equipment is subject to formal inspections by the company engineer and must be returned on or before the due inspection date. Refer to the inspection label on the ladder and/or safety device for details of the next inspection due date.
### Health and Safety Guidance

#### Alligator Drains

| Location: | Various |
| Work activity: | Slips and trips |
| Persons affected / Damage Anticipated: | Employees. Other persons affected by work activities. Fractures, Head injuries, Serious cuts and abrasions, Strains and sprains. |

<table>
<thead>
<tr>
<th>Significant Hazards:</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury due to slips and trips</td>
<td>X</td>
</tr>
</tbody>
</table>

### Controls:

**Design:**
All floors, traffic routes and ground surfaces must be free from holes, slopes, uneven surfaces, sudden changes or slippery surfaces.
Doorway areas, where wet weather may be an issue, rubber mats of sufficient size to remove moisture from the feet must be provided.

**Maintenance:**
All floors, traffic routes and ground surface must be free from obstructions that present a hazard or impede access.
Regular checks must be undertaken to ensure that the above areas are free from trip hazards, Where these are identified, the hazard will be cordoned off and repaired, or removed immediately.

**Cleaning:**
Floor and external surfaces must be cleaned regularly. Cleaning must avoid polishing, as this can increase the slipperiness of the surface.

**Spillages:**
All spillages must be reported immediately, cordoned off and signage displayed until spillage is cleared.
In car park areas this will include the provision of absorbent material, i.e. sand for the treatment of fuel and oil spillages.
Employees are instructed to clean up spillages immediately.

Spillages involving hazardous substances are only to be dealt with by reference to the associated safety data sheet which is kept in the company health and safety officer office.

**Signage:**
Where trip hazards cannot be removed they must be clearly highlighted, e.g. barriers, hazard warning tape erected or signage displayed.

**Lighting**
All work areas and traffic routes must be well lit, where possible by natural light. Low level light fittings must be protected by a diffuser and external fittings protected against water ingress.
Emergency lighting must be provided in any area where persons are exposed to danger in the event of failure of artificial light.

**Use and storage of equipment**
All work equipment must be used and stored safely to prevent trip hazards occurring. This includes routing electrical power leads away from pedestrian traffic routes.

**Managerial / Supervisory:**
Management must review this risk assessment to ensure that it is suitable and sufficient for the proposed work. To amend the assessment if additional hazards exist that requires additional precautions.

**Additional Control Measures Necessary:**
This assessment is to be reviewed by site management on a site-by-site basis to ensure it is suitable and sufficient.

### Remaining Residual Risk (should be insignificant):
Insignificant

### Circulation of Risk Assessment:
- Employees
- Sub-Contractor
- Main Contractor
- Site Copy

Assessment undertaken:

**Signature:**

**Date:**

**Name:**

**Review Date:**
| Additional hazards identified: |  |
| Uncontrolled risks identified: |  |
| Further action required: | e.g. additional assessments, emergency provisions, change in method of working |
| Competent person undertaking check: |  |
| Signature: | Date: |

**BRIEFING RECORD**

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
Location: Various

Work activity: Repair or replacement of underground drainage services.


<table>
<thead>
<tr>
<th>Significant Hazards</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Electrical / gas contact</td>
<td>X</td>
</tr>
<tr>
<td>Slips, trips and falls</td>
<td>X</td>
</tr>
<tr>
<td>Fire or explosion</td>
<td>X</td>
</tr>
<tr>
<td>Lifting and handling</td>
<td>X</td>
</tr>
<tr>
<td>Noise and vibration</td>
<td>X</td>
</tr>
<tr>
<td>Physical injury through collapse</td>
<td>X</td>
</tr>
</tbody>
</table>

Controls:

Planning:
Undertake full risk assessment at the site.
On public highways establish the location of underground services using maps and appropriate detection tools.
Mark out the area to be excavated.

Managerial / Supervisory:
Responsible for informing the site operatives of the risks and dangers of undertaking the work to be carried out on site and instructing them of the precautions to be taken. Responsible for ensuring adequate provision of washing and welfare facilities on site. Responsible for the monitoring of site activities to ensure the above safe working practices are followed. To review this risk assessment to ensure that it is suitable and sufficient for the proposed work.

Management must review this risk assessment to ensure that it is suitable and sufficient for the proposed work. The assessment must be amended if further hazards requiring additional precautions exist.

Operatives:
Ensure all equipment is undamaged and fit for purpose.
Follow the precautions identified during the risk assessment.
Shore up sides of excavation if necessary (always if more than 1 metre deep).
Ensure safe storage of spoil.
Adhere to safe working procedures.
Wear PPE as appropriate.
Clean all tools and equipment thoroughly after use.

Training:
All site operatives must have been trained in carrying out the work to be undertaken and have explained to them the information contained within this risk assessment.

Personal Protective Equipment:
Always wear your protective clothing.
This must include barrier cream, safety boots, nitrile gloves, safety helmets, eye protection and overalls.
Special precautions should be taken if water is present within the excavation: risk of leptospirosis and other infectious diseases.

Additional Control Measures Necessary:
This assessment is to be reviewed by site management on a site-by-site basis to ensure it is suitable and sufficient.

Remaining Residual Risk (should be insignificant):
Insignificant

Circulation of Risk Assessment:
Employees ; Sub-Contractor ; Main Contractor ; Site Copy †

Assessment undertaken:

Signature: [Sign]
Name: [Name]
Date: [Date] Review Date: [Review Date]
**RISK ASSESSMENT – SITE CHECK**

<table>
<thead>
<tr>
<th>Additional hazards identified:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrolled risks identified:</td>
<td></td>
</tr>
<tr>
<td>Further action required:</td>
<td>e.g. additional assessments, emergency provisions, change in method of working</td>
</tr>
<tr>
<td>Competent person undertaking check:</td>
<td></td>
</tr>
<tr>
<td>Signature:</td>
<td>Date:</td>
</tr>
</tbody>
</table>

**BRIEFING RECORD**

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
Health and Safety Guidance

### Risk Assessment Working in Enclosed Spaces

**Location:** Various

**Work activity:** Entry into confined spaces to carry out investigation or repair work.


#### Significant Hazards:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive and asphyxiating gases.</td>
<td>X</td>
</tr>
<tr>
<td>Slips and trips.</td>
<td>X</td>
</tr>
<tr>
<td>Water and sewage ingress.</td>
<td>X</td>
</tr>
</tbody>
</table>

#### Controls:

**Planning:**
Work in confined spaces should only be carried out if no alternative way of undertaking the work can be identified – and then only with extreme caution.
Only trained and authorised operatives should work in confined spaces and then only with approval from a senior manager.
Check to ensure the weather is suitable.
Ensure safety barriers are available and erected.
Where appropriate provide additional safety equipment: gas detection equipment, tripod, winch & harness (when applicable), positive pressure breathing apparatus.
At least 2 people must be present during the operation.
There must be a means of communication between the surface and the operative carrying out the work at all times.
Portable lighting and a safety rope must be available for use if required.
Undertake a full risk assessment at the site.

**Managerial / Supervisory:**
Responsible for informing the site operatives of the risks and dangers of undertaking the work to be carried out on site and instructing them of the precautions to be taken. Responsible for ensuring adequate provision of washing and welfare facilities on site. Responsible for the monitoring of site activities to ensure safe working practices are followed.
Management must review this risk assessment to ensure that it is suitable and sufficient for the proposed work. The assessment must be amended if further hazards requiring additional precautions exist.

**Operatives:**
Only suitably trained operatives may work in confined spaces.
Proceeding with extreme caution, only one operative may enter the confined space at any time.
Maintain contact with the surface at all times.
Ensure all appropriate PPE is worn.
Follow the precautions identified during the risk assessment.
Adhere to safe working procedures.
Clean all tools and equipment thoroughly after use.

**Training:**
All site operatives must have been trained in carrying out the work to be undertaken and have explained to them the information contained within this risk assessment.

**Personal Protective Equipment:**
Always wear your protective clothing.
This must include barrier cream, safety helmet, two piece wet suit, gloves, safety boots and eye protection.
Special precautions should be taken if water is present: risk of leptospirosis and other infectious diseases.

#### Additional Control Measures Necessary:
This assessment is to be reviewed by site management on a site-by-site basis to ensure it is suitable and sufficient.

**Remaining Residual Risk (should be insignificant):**
Insignificant

**Circulation of Risk Assessment:**
Employees ; Sub-Contractor ; Main Contractor ; Site Copy †

Assessment undertaken:

**Signature:**  
**Name:**

**Date:**  
**Review Date:**
### RISK ASSESSMENT – SITE CHECK

| Additional hazards identified: |  |
| Uncontrolled risks identified: |  |
| Further action required: | e.g. additional assessments, emergency provisions, change in method of working |
| Competent person undertaking check: |  |

| Signature: | Date: |

### BRIEFING RECORD

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
**Health and Safety Guidance**

### ALLIGATOR DRAINS

#### RISK ASSESSMENT

**CCTV SURVEY**

**ADRA13**

<table>
<thead>
<tr>
<th>Location:</th>
<th>Various</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work activity:</td>
<td>Carrying out CCTV survey of drains.</td>
</tr>
<tr>
<td>Persons affected / Damage Anticipated:</td>
<td>Operatives. Disease (leptospirosis, hepatitis and tetanus), slips and trips, lifting injuries.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Significant Hazards:</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leptospirosis, hepatitis and tetanus.</td>
<td>X</td>
</tr>
<tr>
<td>Slips and trips.</td>
<td>X</td>
</tr>
<tr>
<td>Lifting injuries.</td>
<td>X</td>
</tr>
</tbody>
</table>

### Plans:

- Carry out a full risk assessment at the site.
- Refer to working in a confined space, if appropriate.
- Ensure safety barriers are available and erected around the site.
- Provide portable lighting when required.
- Refer to working safety measures regarding working with electrical equipment.
- Where appropriate provide additional safety equipment: gas detection equipment.
- Lifting tools required for manhole covers.
- Suitable PPE to be provided.

### Controls:

**Managerial / Supervisory:**

- Responsible for informing the site operatives of the risks and dangers of undertaking the work to be carried out on site and instructing them of the precautions to be taken.
- Responsible for ensuring adequate provision of washing and welfare facilities on site.
- Responsible for the monitoring of site activities to ensure safe working practices are followed.
- Management must review this risk assessment to ensure that it is suitable and sufficient for the proposed work. The assessment must be amended if further hazards requiring additional precautions exist.

**Operatives:**

- Only suitably trained operatives may undertake this work.
- Observe manual handling procedures when lifting and moving manhole covers and other heavy items.
- Observe relevant health and safety guidelines when working near sewage, in confined spaces, with electrical equipment and with drain rods.
- Clear all equipment thoroughly after use.
- Wear appropriate PPE.
- See risk assessment regarding working where there is sewage or possibly contaminated water.

**Training:**

- All site operatives must have been trained in carrying out the work to be undertaken and have explained to them the information contained within this risk assessment.

**Personal Protective Equipment:**

- Always wear your protective clothing, as appropriate: barrier cream, gloves, eye protection, overalls, safety boots, safety helmet, two-piece wet suit.

### Additional Control Measures Necessary:

This assessment is to be reviewed by site management on a site-by-site basis to ensure it is suitable and sufficient.

**Remaining Residual Risk (should be insignificant):**

Insignificant

### Circulation of Risk Assessment:

- Employees
- Sub-Contractor
- Main Contractor
- Site Copy

### Assessment undertaken:

**Signature:**

**Name:**

**Date:**

**Review Date:**
### RISK ASSESSMENT – SITE CHECK

<table>
<thead>
<tr>
<th>Additional hazards identified:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Uncontrolled risks identified:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Further action required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. additional assessments, emergency provisions, change in method of working</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competent person undertaking check:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### BRIEFING RECORD

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
**Location:** Various  
**Work activity:** The detection and repair of water leaks.  
**Persons affected / Damage Anticipated:** Operatives.  
Disease (leptospirosis, hepatitis and tetanus), cuts and bruises, trapped fingers, back injuries, electrocution, gassing.

### Significant Hazards:

<table>
<thead>
<tr>
<th>Hazard Description</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Contamination (leptospirosis, hepatitis and tetanus).</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slips and trips</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifting injuries</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity supplies</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas supplies</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Controls:

**Planning:**
- Carry out a full risk assessment at the site.
- Ensure only suitably qualified and experienced operatives are assigned to the work.
- Ensure the work is adequately managed and supervised.
- Locate and mark out the position of main services where present – gas, electric, water, sewer, communication cables.
- Obtain necessary approvals to dig, if appropriate.
- Plan additional measures when working in public places, near or on the highway.
- Ensure safety barriers are available and erected around the site.
- Provide portable lighting when required.
- Refer to working safety measures regarding working with electrical equipment.
- Where appropriate provide additional safety equipment: gas detection equipment.
- Suitable PPE to be provided.
- Managerial / Supervisory:
  - Responsible for informing the site operatives of the risks and dangers of undertaking the work to be carried out on site and instructing them of the precautions to be taken. Responsible for ensuring adequate provision of washing and welfare facilities on site. Responsible for the monitoring of site activities to ensure safe working practices are followed. Management must review this risk assessment to ensure that it is suitable and sufficient for the proposed work. The assessment must be amended if further hazards requiring additional precautions exist.
- Operatives:
  - Only suitably trained operatives may undertake this work.
  - Check all tools and equipment for damage before use.
  - Proceed with extreme caution when working near mains cables and pipes.
  - Refer to working in a confined space risk assessment, if appropriate.
  - Refer to hand dug excavations risk assessment.
  - Clear all equipment thoroughly after use.
  - Wear appropriate PPE.
  - See risk assessment regarding working where there is sewage or possibly contaminated water.
- Training:
  - All site operatives must have been trained in carrying out the work to be undertaken and have explained to them the information contained within this risk assessment.
  - Personal Protective Equipment:
    - Always wear your protective clothing, as appropriate: barrier cream, gloves, eye protection, overalls, safety boots, safety helmet, etc.

### Additional Control Measures Necessary:

This assessment is to be reviewed by site management on a site-by-site basis to ensure it is suitable and sufficient.

### Remaining Residual Risk (should be insignificant):

Insignificant

### Circulation of Risk Assessment:

- Employees
- Sub-Contractor
- Main Contractor
- Site Copy

### Assessment undertaken:

Signature:  
Name:  
Date:  
Review Date:
<table>
<thead>
<tr>
<th>Additional hazards identified:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrolled risks identified:</td>
<td></td>
</tr>
<tr>
<td>Further action required:</td>
<td>e.g. additional assessments, emergency provisions, change in method of working</td>
</tr>
<tr>
<td>Competent person undertaking check:</td>
<td></td>
</tr>
<tr>
<td>Signature:</td>
<td>Date:</td>
</tr>
</tbody>
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**BRIEFING RECORD**

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
**ALLIGATOR DRAINS**

**RISK ASSESSMENT INSTALLATION OF WATER SUPPLY PIPES**

**ADRA15**

| Location: | Various |
| Work activity: | Installation and replacement of water supply pipes. |
| Persons affected / Damage Anticipated: | Operatives. Disease (leptospirosis, hepatitis and tetanus), cuts and bruises, trapped fingers, back injuries, electrocution, gassing. |

### Significant Hazards:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Assessment of risk before precautions taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Contamination (leptospirosis, hepatitis and tetanus).</td>
<td>X</td>
</tr>
<tr>
<td>Slips and trips.</td>
<td>X</td>
</tr>
<tr>
<td>Lifting injuries</td>
<td>X</td>
</tr>
<tr>
<td>Electricity supplies</td>
<td>X</td>
</tr>
<tr>
<td>Gas supplies</td>
<td>X</td>
</tr>
</tbody>
</table>

### Controls:

**Planning:**
- Carry out a full risk assessment at the site.
- Ensure only suitably qualified and experienced operatives are assigned to the work.
- Ensure the work is adequately managed and supervised.
- Locate and mark out the position of main services where present – gas, electric, water, sewer, communication cables.
- Obtain necessary approvals to dig, if appropriate.
- Plan additional measures when working in public places, near or on the highway.
- Ensure safety barriers are available and erected around the site.
- Provide portable lighting when required.
- Refer to working safety measures regarding working with electrical equipment.
- Where appropriate provide additional safety equipment: gas detection equipment.

**Suitable PPE to be provided.**

**Managerial / Supervisory:**
- Responsible for informing the site operatives of the risks and dangers of undertaking the work to be carried out on site and instructing them of the precautions to be taken. Responsible for ensuring adequate provision of washing and welfare facilities on site. Responsible for the monitoring of site activities to ensure safe working practices are followed.
- Management must review this risk assessment to ensure that it is suitable and sufficient for the proposed work. The assessment must be amended if further hazards requiring additional precautions exist.

**Operatives:**
- Only suitably trained operatives may undertake this work.
- Check all tools and equipment for damage before use.
- Proceed with extreme caution when working near mains cables and pipes.
- Refer to working in a confined space risk assessment, if appropriate.
- Refer to hand dug excavations risk assessment.
- Clear all equipment thoroughly after use.
- Wear appropriate PPE.
- See risk assessment regarding working where there is sewage or possibly contaminated water.

**Training:**
- All site operatives must have been trained in carrying out the work to be undertaken and have explained to them the information contained within this risk assessment.

**Personal Protective Equipment:**
- Always wear your protective clothing, as appropriate: barrier cream, gloves, eye protection, overalls, safety boots, safety helmet, etc.

### Additional Control Measures Necessary:

This assessment is to be reviewed by site management on a site-by-site basis to ensure it is suitable and sufficient.

**Remaining Residual Risk (should be insignificant):**
- Insignificant

**Circulation of Risk Assessment:**

- Employees
- Sub-Contractor
- Main Contractor
- Site Copy

**Assessment undertaken:**

- Signature:  
- Name:  
- Date:  
- Review Date:
RISK ASSESSMENT – SITE CHECK

Additional hazards identified:

Uncontrolled risks identified:

Further action required: e.g. additional assessments, emergency provisions, change in method of working

Competent person undertaking check:

Signature: Date:

BRIEFING RECORD

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
# Health and Safety Guidance

**ALLIGATOR Drains Limited**

## RISK ASSESSMENT DISPOSAL OF WASTE MATERIAL

<table>
<thead>
<tr>
<th>HAZARDS IDENTIFIED</th>
<th>ASSOCIATED RISKS</th>
<th>PERSONS AT RISK</th>
<th>Severity</th>
<th>Likelihood</th>
<th>Risk</th>
<th>Residual Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building and demolition waste</td>
<td>Sharps, dust, heavy loads waste</td>
<td>X X X X</td>
<td>3</td>
<td>4</td>
<td>12 MED</td>
<td>LOW</td>
</tr>
<tr>
<td>Handling of waste materials / products</td>
<td>Inhalation of dust, penetration of eyes, musculoskeletal injuries</td>
<td>X X X X</td>
<td>3</td>
<td>4</td>
<td>12 MED</td>
<td>LOW</td>
</tr>
<tr>
<td>Asbestos and asbestos-containing materials</td>
<td>Asbestos</td>
<td>X X X X</td>
<td>5</td>
<td>3</td>
<td>15 MED</td>
<td>LOW</td>
</tr>
<tr>
<td>Flammable materials</td>
<td>Fire</td>
<td>X X X X</td>
<td>5</td>
<td>4</td>
<td>20 HIGH</td>
<td>MED</td>
</tr>
<tr>
<td>Substances hazardous when ingested</td>
<td>Severe health problems</td>
<td>X X X X</td>
<td>5</td>
<td>3</td>
<td>15 MED</td>
<td>LOW</td>
</tr>
<tr>
<td>Lead &amp; lead compounds</td>
<td>Lead poisoning</td>
<td>X X X X</td>
<td>4</td>
<td>2</td>
<td>8 LOW</td>
<td>LOW</td>
</tr>
<tr>
<td>Organic halogen compounds</td>
<td>Poisoning, ongoing health problems</td>
<td>X X X X</td>
<td>4</td>
<td>2</td>
<td>8 LOW</td>
<td>LOW</td>
</tr>
<tr>
<td>Acids and alkalis</td>
<td>Burns, blindness, dermatitis</td>
<td>X X X X</td>
<td>4</td>
<td>3</td>
<td>12 MED</td>
<td>LOW</td>
</tr>
<tr>
<td>Inorganic metallic and non-metallic compounds</td>
<td>Poisoning, ongoing health problems</td>
<td>X X X X</td>
<td>3</td>
<td>4</td>
<td>12 MED</td>
<td>LOW</td>
</tr>
</tbody>
</table>

Emp = Employees; Cont = Contractors; Pub = Public; Vis = Visitors.

Severity ratings:
- 5 = Fatal & multi-fatality
- 4 = Serious injury
- 3 = 3 day injury
- 2 = Injury requiring first aid
- 1 = Injury not requiring first aid

Likelihood ratings:
- 5 = Probable (daily)
- 4 = Regular occurrence (weekly)
- 3 = Occasional (monthly)
- 2 = Possible occurrence (four times per year)
- 1 = Extremely remote (once per year)

Risk rating:
- 1 to 8 = LOW
- 9 to 15 = MEDIUM
- 16 to 25 = HIGH

*Residual Risk* is the assessed risk remaining after the implementation of the control measures listed below.

### Compliance required with the following legislation:
- Management of Health and Safety at Work Regulations 1999
- Control of Substances Hazardous to Health Regs 2001 as amended 2003
- COSHH 2007
- Environmental Protection Act 1990
- Control of Asbestos Regulations 2006
- Hazardous Waste Regulations 2005

### Relevance guidance publications:

### Training / Information requirements:
- Induction training; Health and awareness training; Manual handling training.
- Operatives must be conversant with the hazards associated with removal techniques, use of PPE and hygiene requirements.
- Contractors carrying out asbestos removal must be licenced. Relevant operations to be undertaken subject to separate risk assessment.

### Personal Protective Equipment to be provided:
- Overalls, safety shoes, eye protection, dust masks and gloves to be provided and utilized as required.
- PPE for handling of toxic materials to be defined by separate risk assessment and method statement.

### Supervision and monitoring:
- Regular inspections to be undertaken by supervisor to ensure operatives are complying with the provisions of the relevant risk assessment, COSHH assessments and safe working practices. Any plant or equipment to be used to be checked regularly to ensure it has received requisite periodic examinations and is safe for use. Supervisor to be competent in the work to be undertaken to oversee operations.

### Assessment undertaken:

**Signature:**

**Name:**

**Date:**

**Review Date:**

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Other Assessments that MUST be taken into account:
Relevant COSHH, Manual Handling and PPE assessments

Significant control measures:
Only suitably trained and competent operatives to be deployed.
Areas designated as waste storage areas to be clearly marked, secure and segregated from site activities.
Waste material must be removed to designated waste storage areas as soon as practicable – they must not be allowed to accumulate.
The nature of waste material MUST be determined prior to it being moved by personnel to establish its potential TOXICITY and risk of exposure to operatives.
Ensure operatives adopt appropriate manual handling techniques and, where possible, use mechanical assistance.
Skips and containers must be clearly marked to indicate restrictions on the disposal of particular kinds of waste.
Transfer notes must be filled out as to the contents of waste containers.
Collection and disposal of waste materials must be conducted only by authorized and registered carriers.
Ensure that the appropriate safe working practices are complied with concerning vehicles transporting waste materials.
Ensure that operatives comply with manual handling guidelines.
Ensure that environmental and weather conditions do not amplify risk – consider underfoot, visibility and buffeting winds, etc.
Ensure that all areas are well lit.
Ensure that vehicles employed in waste transport are evenly loaded.
Ensure appropriate personal protective equipment is provided and used by operatives.
Good welfare facilities to be provided, particularly with respect to washing, showering and changing clothes.
Ensure that appropriate safe working practices are complied with in relation to fire prevention, detection and fighting.

RISK ASSESSMENT – SITE CHECK

Additional hazards identified:

Uncontrolled risks identified:

Further action required: e.g. additional assessments, emergency provisions, change in method of working

Competent person undertaking check:

Signature: Date:

BRIEFING RECORD

The responsible manager or supervisor MUST ensure that personnel to which the above assessment relates are properly briefed in its contents and the control measures that are defined to ensure their health and safety.

A record of such briefings is to be maintained at head office.
5. Accident Reports

The following procedures must be followed and report forms completed in the event of an accident or near miss or to report the contraction of a disease. These procedures must be followed in entirety by Alligator Drains personnel and its sub-contractors when carrying out works on behalf of customers / clients.
# ACCIDENT / INCIDENT INVESTIGATION REPORT FORM

For the reporting and investigation of all injuries, near misses and reported diseases

Please print all information clearly

1. Location of accident / incident:

2. Was anyone injured? YES / NO / n/a  
   Was injury: Minor / Serious / Fatal / n/a

3. Was there any damage to Premises or Plant? YES / NO / n/a (if YES, ensure extent of damage is detailed within report)

4. If no injury, is incident being reported as: a) Near miss or b) Dangerous occurrence? (Highlight as applicable)

5. Injured person. Note: (If near miss / dangerous occurrence, provide details of person reporting):
   
   Full name:  
   Age:  
   Gender: M / F  
   
   Address:  
   Post Code:  
   Home Telephone No:  
   Employed / Sub-contractor / Third Party  
   Injury:  

6. Was the person working on an authorized task? YES / NO

7. Lost time. Was any time lost? YES / NO. If YES, number of days:

8. Description of events:

9. Has accident been recorded in the accident book? YES / NO / n/a

9.1 Has accident been recorded in the site accident book? YES / NO / n/a

10. Did a first aider render assistance? YES / NO / n/a

   If yes, provide name and address:

11. Witnesses: Has a brief statement been taken of what they saw or heard? YES / NO / n/a

   Name:  
   Address:
<table>
<thead>
<tr>
<th>ALLIGATOR DRAINS</th>
<th>ACCIDENT / INCIDENT INVESTIGATION REPORT FORM ADRF01</th>
<th>Page 1 of 4</th>
</tr>
</thead>
</table>

12. Provide details of plant and equipment involved (if applicable):
   - Type: 
   - Hire or Own: 
   - Serial Number: 
   - Model: 

13. Actions Taken: 

14. Actions Required: 

15: In the event of a defined Major Injury / Dangerous Occurrence, was the HSE informed immediately? YES / NO / n/a (refer to attached for definitions)
   - If not, what action was taken? 

16. Form completed by:
   - Name: 
   - Signature: 
   - Position: 
   - Date: 

17. Office use only:
   - Date form received 
   - Incident Ref No: 
   - RIDDOR Reportable: Yes / NO / n/a 
   - If YES, date reported 
   - Reported as: Major / Over 3 days / Dangerous Occurrence / Disease (Delete as applicable)
# Health and Safety Guidance

## Accident / Incident Investigation Report Form

For the reporting and investigation of all injuries, near misses and reported diseases.

Details of Reportable Major Injuries, Over 3 Day Injuries and Dangerous Occurrences as defined by RIDDOR.

### (1) Major Injuries

To be reported to the HSE ASAP by telephone or fax then followed by written report on Form F2508 to HSE within 10 days.

- i). Any fracture, other than to the fingers, thumbs or toes.
- ii). Any amputation.
- iii). Dislocation of the shoulder, hip, knee or spine.
- iv). Loss of sight (whether temporary or permanent).
- v). A chemical or hot metal burn to the eye or any penetrating injury to the eye.
- vi). Any injury resulting from electric shock or electrical burn (including any electrical burn caused by arcing or arcing products) leading to unconsciousness or requiring resuscitation or admittance to hospital for more than 24 hours.
- vii). Any other injury:
  - a). leading to hypothermia, heat induced illness or to unconsciousness;
  - b). requiring resuscitation;
  - c). requiring admittance to hospital for more than 24 hours.
- viii). Loss of consciousness caused by asphyxia or by exposure to a harmful substance or biological agent.
- ix). Either of the following conditions which result from the absorption of any substance by inhalation, ingestion or through the skin:
  - a). acute illness requiring medical treatment; or
  - b). loss of consciousness.
- x). Acute illness which requires medical treatment where there is a reason to believe that this resulted from exposure to a biological agent or its toxins or infected material.

To persons not at work, e.g. a member of the public:

If a person suffers an injury in connection with your work and they have to be taken to hospital, this is reportable as a major injury.

### (2) Over 3 Day Injuries

To be reported to the HSE ASAP by telephone or fax then followed by written report on Form F2508 to HSE within 10 days.

Injuries resulting from accidents to people who are at work which are not reportable as a major injury (see list above) but result in a person being unable to do their normal work for more than 3 consecutive days not counting the day of the accident. If the three days go over a weekend and the person would have been unable to work on those days due to the injury then you must include these days.

### (3) Dangerous Occurrences

To be reported to the HSE ASAP by telephone or fax then followed by written report on Form F2508 to HSE within 10 days.

If an incident occurs from the list below and no-one is injured, it is reportable as a dangerous occurrence. If an injury does occur and it is from either category (1) or (2) above then it must be reported in that category not as a dangerous occurrence.

The items listed below are the most dangerous occurrences associated with the work the company undertakes. The list is not exclusive. Refer to the company health and safety officer for additional occurrences.

**Lifting Machinery, etc**

The collapse of, the overhang of, or the failure of any load bearing part of any:

- a). Lift or hoist;
- b). Crane or derrick;
- c). Mobile powered access platform;
- d). Access cradle or window cleaning cradle;
- e). Excavator;
- f). Pile driving frame or rig having an overall height, when operating, of more than 7 metres;
- g). Fork lift truck

**Pressure systems**

The failure of any closed vessel (including boiler or boiler tube) or of any associated pipework in which the internal pressure was above or below atmospheric pressure, where the failure has the potential to cause the death of any person.

**Overhead Electric Lines**

An unintentional incident in which plant or equipment either:

- a). comes into contact with an uninsulated overhead electric line in which the voltage exceeds 200 volts;
- b). causes an electric discharge from such an electric line by coming into close proximity to it.
ACCIDENT / INCIDENT INVESTIGATION REPORT FORM

For the reporting and investigation of all injuries, near misses and reported diseases

Electrical short circuit
Electrical short circuit or overload attended by fire or explosion which results in the stoppage of the plant involved for more than 24 hours or which has the potential to cause the death of any person.

Breathing apparatus
1. Any incident in which breathing apparatus malfunctions:
   a). while in use; or
   b). during testing immediately prior to use in such a way that had the malfunction occurred while the apparatus was in use it would have posed a danger to the health and safety of the user.
2. This paragraph shall not apply to breathing apparatus while it is being:
   a). used in a mine; or
   b). maintained or tested as part of a routine maintenance procedure.

Collapse of scaffolding
The complete or partial collapse of:
   a). any scaffold which is:
      i). more than 5 metres in height which results in a substantial part of the scaffolding falling or overturning; or
      ii). Erected over or adjacent to water in circumstances such that there would be a risk of drowning to a person falling from the scaffold into the water; or
   b). the suspension arrangements (including any outrigger) of any slung or suspended scaffold which causes a working platform or cradle to fall.

Collapse of building or structure
Any unintended collapse or partial collapse of:
   a). any building or structure (whether above or below ground) under construction, reconstruction, alteration or demolition which involves a fall of more than 5 tonnes of material;
   b). any floor or wall of any building (whether above or below ground) used as a place of work; or
   c). any false work.

Explosion or Fire
Any explosion or fire occurring in any plant or premises which results in the stoppage of that plant or, as the case may be, the suspension of normal work in those premises for more than 24 hours, where the explosion or fire was due to the ignition of any material.

Escape of Substances
The accidental release or escape of any substance in a quantity to cause death, major injury or any other damage to the health of any person: e.g. Asbestos.

(4) Report of a dangerous gas fitting
The HSE are to be notified immediately of any death or major injury arising from the use of gas that involves persons whilst at work. Use form F2508.

The HSE are to be informed of any gas appliances and/or installations using either natural gas or liquefied petroleum gas (LPG) that have been examined or tested and regarded to be dangerous, but not caused injury. To be regarded as dangerous there must be a serious fault in either the design or construction of the gas fitting (including any flueing or ventilation provided for appliance), or in the way the initial installation was carried out or later serviced or modified. The fault must be serious enough that people are likely to suffer death or major injury from the acute effects of carbon monoxide poisoning or the effects of fires or explosions following gas escapes. Form F2508G1 is to be completed to report actual incidents that have led to death or major injury to gas consumers from the use of faulty installations. Form F2508G2 must be used to report dangerous gas fittings.

(5) Reporting of cases of disease
Some specified diseases are reportable to the HSE. Refer to the company health and safety officer for details of which disease are reportable. The disease is reportable to the HSE once a written statement has been received from a registered medical practitioner diagnosing the disease as one of those specified within the regulations.