

Unit IG2: Risk assessment

Part 1: Background

Learner number: 12345678

Learner name: A. N. Illustration

Include in here the organisation's name* and location* and number of workers. You must then go on to give a description of the main activities/products/services carried out. You must also describe the area to be risk assessed eg, whole site and anything else that you consider relevant (approximately 150 to 200 words):

My organisation is International General Garage Ltd (known as IGG Ltd), which is based in AmadeUPcountry and employs 24 workers.

IGG Ltd is a medium sized garage with offices, vehicle repair shop and paint spray booth. The business does a lot of repairs and maintenance on vans/lorries and body repairs on cars that have been involved in accidents for insurance companies. Servicing is also carried out for members of the public. Typical activities undertaken include moving spare parts from the stores to the workshop, engine repairs, activities relating to servicing, body repair, draining fuel/oil, spray booth activities (including the use of paints that are solvent based). The garage operates from 8am to 6pm on weekdays and is closed at the weekends. Workers are only required to work 7 hours per day so there are staggered start and finish times in place.

The risk assessment will cover the garage and spray booth activities; the office area has a separate risk assessment. The Finance Director (who reports directly to the Managing Director) has direct responsibility for health and safety.

You must now give a brief outline on how you completed the risk assessment (approximately 200 words):

I started by looking to see if the ILO had any Codes of Practice relating to garage work (which there wasn't). The British HSE's website had lots of example. 'Health and safetv motor vehicle repair and associated (HSG261) resources. for in industries' http://www.hse.gov.uk/pubns/priced/hsg261.pdf was a good source of information.

After looking at sources of information, I then went around the workshop and talked to the people who were 'doing the job'. They gave me information that wasn't obvious from just a visual inspection. For example, a lot of the workers didn't know that there were dust masks available or the reasons why these should be worn.

I also checked the accident book to see what types of incidents had occurred over the last 12 months and whether any of these incidents were recurring. I also checked the reasons for sick absence, again, to see if there were any recurring themes for ill-health.



When assessing the control measures, I also referred to some of the HSE's Approved Codes of Practice or Guidance documents. For example, when looking at control measures for dust in the workplace, I referred to '*Dust in the workplace, General principles of protection, Guidance Note EH44 (Fourth edition)*' <u>http://www.hse.gov.uk/pubns/eh44.pdf</u>.

* If you're worried about confidentiality, you can invent a false name and location for your organisation but, all other information provided must be factual.



Part 2: Risk Assessment

Learner number: 12345678

Learner name: A.N. Illustration

5. Risk assessment

Organisation name:IGG LtdDate of assessment:24 July 2019Scope of risk assessment:Workshop and spray booth

| Hazard category and hazard | Who might be harmed and how? | What are you already doing? | What further controls/actions are required? | Timescales for further actions to be completed (within) | Responsible person's job role |
|--|---|---|--|---|---|
| Hazardous substances Dust - high concentrations of process dust. | All workers, customers and others visiting the organisation. High concentrations of process dust are always present from the routine and frequent activities being carried out. Since there is no dust extraction, people breath in hazardous dust which can cause anything from short-term irritation to long-term serious health conditions. People can also get the irritant dust on their skin (which can cause dermatitis), in their eyes (causing eye irritation and damage) or even | Dilution ventilation. Dust masks available but it is not mandatory that these are worn. | Enclosed area to be set up for sanding/grinding operations including that will include a suitable local exhaust ventilation system Purchase of 'on tool' dust extraction systems Use of face masks in conjunction with extraction systems (3a. enforcement of use, 3b. purchase of) Consider RPE if the above do not fully control the hazard Current dilution ventilation system to be inspected and repaired if necessary. Maintenance programme for all ventilation systems. | 6 months 1 month 1 month 1 month To be assessed on completion of the enclosure 1 month 6 months | Workshop Manager (actions 1, 3a, 4, 5, 6, 8, 9, 10, 11, 13, 14 and 15) Finance Director (actions 2, 4, 7, 12, 14, 15 and 16) Stores Manager (actions 3b, 13 and 14) |



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| Hazard category and hazard | Who might be harmed and how? | What are you already doing? | What further controls/actions are required? | Timescales for further actions to be completed (within) | Responsible person's job role |
| | accidentally swallow it (hand-to mouth transfer from contaminated hands). | | 7. Improved housekeeping – purchase at least two suitable vacuum cleaners to keep dust in the general workplace and office areas to a minimum. Safe system of work (SSoW) to be introduced for: 8. Current systems/processes 9. Updated on completion of enclosure Note: the workshop manager must consult with the workforce when producing the safe system of work. Training programme to be set up for all workers undertaking these activities: 10. On best practices for keeping dust levels to a minimum 11. On the safe system of work. | | |
| | | | Improved welfare arrangements and PPE (Actions 13 – 15). 13. Provide separate overalls for those doing sanding/grinding operations and gloves (if appropriate). | 1 month | |



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| | | | 14. Construction of segregated enclosed area of the changing room for removal of dust covered overalls. | 6 months | |
| | | | 15. Improve washing facilities in the changing area (consider installing showers). | 1 month | |
| | | | 16. Look into the possibility of setting up a health surveillance programme for all affected workers. | 6 months | |
| Work equipment Falling vehicles and/or components. | Mechanics could be injured (or there is a possibility of death) should one of the lifts/jacks fail causing a vehicle or component to fall | Some sporadic maintenance of lifting equipment. | 1. Implement a planned inspection programme for all lifting equipment. | 1 month | Finance Director and Workshop Manager |
| | onto them. Workers undertaking | | 2. Inspection and examination of all current lifting equipment. | 1 month | Workshop Manager |
| | maintenance of the equipment if the equipment malfunctions during | | 3. Check that insurance is in place to cover lifting equipment. | 1 month | Finance Director |
| | maintenance. This could cause a range of injuries from bruising to fractures or worst case scenario death. | | 4. Checks need to be made that all lifting equipment is marked with safe working load (SWL) information. Where SWL is not marked on the equipment, or has been rubbed off over time, this information must be marked on the equipment. | 1 month | Workshop Manager |



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|---|--|--|--|---|-------------------------------------|
| Electricity Portable electrical equipment, IT related equipment in the Workshop and Stores Areas and general electric installation for whole site. | Any worker using faulty equipment or electrical installation on site eg, plugging in equipment in faulty socket. The harm most likely to be caused are issues resulting from electric shock such as burns, and fibrillation. Worst case scenario is death (electrocution). | The electrical installation for the garage has recently been checked by a competent electrician. Next check has been diarised for three years (unless there are significant changes in the meantime). The mains switchboard has a built in residual current device. A maintenance programme is in place and annual checks are carried out on all 240V equipment by a certified electrician. All workers have received training to spot defects and are aware of the process should defective equipment by found. Some low voltage tools have been purchased and are used where possible eg, low voltage hand lamps for inspecting vehicles. Trained first aiders are available who can deal with minor electric shock victims. All workers aware of emergency arrangements for electricity related incidents. | Well controlled risk – no further action required at the moment. | N/A | N/A |



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| Hazardous substances | Mechanics who are handling these substances on a daily basis. | Overalls are supplied to all mechanics. | See actions 12, 15 and 16 against dust (welfare arrangements). | | |
| Use of motor oil and fuel. | These substances are known to be sensitisers/ | Overalls are cleaned on a regular basis by an outside contractor. | Source nitrile or vinyl gloves for mechanics use. | 1 month | Stores Manager (actions 1 and |
| | carcinogens so, over time, could cause occupational dermatitis and/or skin | Spill kit available and all workers trained in its use | 2. Set up monitoring system to ensure gloves are being worn at all relevant times. | 2 months | 2) Workshop |
| | cancers. | Specialist contractor used for disposal of waste oil/fuel and used spill kit. | 3. Set up system for disposal of used gloves. | 1 month | Manager (actions 3 and 5) |
| | | | 4. Check whether the same specialist contractor who removes the waste oil will collect/remove used gloves from site. | 2 months | Finance Director (action 4) |
| | | | 5. Training for mechanics on good hygiene practices when handling these substances. | 3 months | |
| Safe movement of people and vehicles. Moving vehicles from the parking bays to the workshop areas (includes losing control of vehicles). | All workers on site (especially mechanics) and customers. Injuries from collisions can be severe and could include fatalities. | Separate parking bays are provided for customers. Pedestrian walkways are clearly marked (these included barriers between the walkway and road). Site speed limit set at 5mph. The workshop and parking areas are well lit. All mechanics and those moving vehicles have a full driving licence. | Revise system for moving vehicles around the workshop and between the workshop and spray booth eg, one person pushes and another is seated at the steering wheel to ensure that vehicle control is not lost. | 1 month | Workshop Manager |



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| | | Sufficient salt held in stock to cover all site areas that may become frozen during the winter months. | | | |
| Noise Excessive noise from workshop activities. | Mainly the mechanics and others who work for long periods in the workshop area. Prolonged uncontrolled exposure to | A noise assessment was last carried out when the workshop was first set up (eight plus years ago). | Install screens/barriers around some of the noisier areas and using sound absorbing materials. Look into the possibility of setting up a | 6 months 6 months | Finance Director (Actions 1 – 3 and 7) |
| | noise at 80+dB will, over time, cause NIHL. The workshop is noisy at | A recent review (May 19) of the personal protection equipment (PPE) in use has been carried out. As part of this old/broken PPE | health surveillance programme for relevant workers3. Purchase a simple noise meter | 1 month | Workshop Manager (Actions 1 and 4 - 7) |
| | certain times as you have to raise your voice/shout when holding a conversation eg, car engines and machinery | (especially hearing protectors) was replaced. Suitable hearing protection has been issued to all relevant workers. All relevant | 4. Arrange noise meter training for the Workshop Manager | 2 months | |
| | running at the same time. | workers have been trained in the correct use of the PPE. | 5. Carry out a simple noise survey | 3 months | |
| | | There is a planned/preventative maintenance programme in place for all equipment. | 6. Use the British HSE's noise calculators to find out exposure levels <u>http://www.hse.gov.uk/noise/calculator.htm</u> | 3 months | |
| | | All workers are trained on induction on the effects that noise can have on individuals. The effects of noise is also covered in tool-box talks at least annually. | 7. Implement additional control measures (if required) following noise survey. | To be confirmed following noise survey | |



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| Slips and trips. Spillages of oil and motor fuel, obstructed | All workers, customers and other visitors to site. Cuts, bruises, muscle strains/sprains, broken | Designated walkways (indicated by yellow paint lines). Designated storage areas; yellow chevrons are used to indicate | Arrange for floors to be degreased at least weekly. System for random housekeeping checks to be bought in. | 1 month 1 month | Workshop Manager for all actions. |
| walkways, trailing cables etc. | bones from tripping over cables or tools/equipment left in walkways, or on wet surfaces (including oil/fuel spills) etc. | areas that must be kept clear at all times. Good housekeeping (mechanics know to store unused equipment etc in the designated areas). Spill kit in place and all workers have been trained in its use. | Check whether additional electrical sockets could be installed to prevent as many trailing cables. | 1 month | |
| Working at height Working in and around the | Anyone working in or around the inspection pit. Likely injuries include bruising, sprains/strains, | When the inspection pit is in use, the area is restricted (by use of barriers) for those working near the area. | Purchase a mobile 'bridge' to allow mechanics to be able to safely access both sides of the inspection pit when working at ground level. | 2 months | Workshop and Stores Managers |
| inspection pit | fractures or more serious injuries eg, head, internal injuries, worst case death. These types of injuries are | Fixed stairs to allow safe access and ingress to the inspection pit. Inspection pit is covered when not | Add the bridge into the maintenance schedule – needs to be inspected at least every six months. | 2 months | |
| | likely to be life changing and involve the worker being in constant considerable pain (eg, the worker may no longer be able to work after such a fall/need to rely on family/friends for constant care) | in use. Lone working is not allowed in the inspection pits (there are always at least two people working in the area). The workshop manager regularly monitors the use of access equipment and work in the inspection pit. | Arrange for all workers to be trained in how to use the bridge safely. | 2 months (following purchase of the bridge) | |



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|--|---|--|---|---|-------------------------------------|
| Hazard category and hazard | Who might be harmed and how? | What are you already doing? | What further controls/actions are required? | Timescales for further actions to be completed (within) | Responsible person's job role |
| Working at height Working on the top of commercial vehicles | Anyone working in the workshop. Likely injuries include bruising, sprains/strains, fractures, or more serious injuries eg, head, internal injuries, depending on severity of the fall (the height fell from). | Access equipment for use when working on top of commercial vehicles is available, is regularly maintained and all necessary workers have been trained in its use. The workshop manager regularly monitors the use of access equipment. | Change to safe system of work to include an assessment of risk to take place before work begins. Assessment of risk to be added to the worksheet tick list. | 1 week | Workshop and Stores Managers |
| Hazardous substances Inhaling paint | Mainly the workers in the spray booth area but other workers could also be affected if they enter the | All spraying is carried out in the enclose spray booth. Competent workers used for | The clearance time from the spray booth is not readable on the main entrance/exit so needs to be repainted. | 1 week | Workshop Manager |
| mist containing isocyanates | booth when spraying operations are taking place. Workers exposed to this | spraying activities. Workers in the air use air-fed masks (masks aren't removed until | Procedures for checking the booth automatic over-pressure shut down every three months. | 1 month | Workshop Manager |
| | type of paint mist could develop occupational asthma. | after the 'clearance time'). Air in-let compressor located away from possible sources of contaminants. Separate well-ventilated area for cleaning spray guns. Insurance company inspections for: The spray booth (every 14 months); and Compressor - breathing air quality (every 3 months) | Consider setting up a surveillance programme for relevant workers (check the legal requirements) | 1 month | Finance Director |



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| | | All spray booth equipment is regularly checked and maintained by competent workers (Workshop Manager checks and maintains records). Entry and exit procedures in place for the spray booth and are followed by all relevant workers. | | | |
| Vibration Sanding and grinding | Workers in the workshop area. Excessive use of or use of | Maintenance programme in place for all hand-held equipment, including vibrating equipment. | Monitoring system to be set up to ensure that vibration tools are not used for an excessive time. | 1 month | Workshop Manager |
| activities | faulty hand-held tools such as disc cutters, sanders and grinders could lead to hand- | All workers are trained in the use of vibration hand-held tools. | Look at rotas to ensure workers are moved between activities. | 1 week | Workshop Manager |
| | arm-vibration (HAV) conditions such as vibration white finger. | (HAV) There is an 'unwritten rule' that | Look into setting up a health surveillance programme for all affected workers. | 6 months | Finance Director |
| | | be purchased. | Tool-box talks to be held at twice a year on the effects of vibration from hand-held tools. | 6 monthly / ongoing | Workshop Manager |
| | | | Formalise the purchase policy to ensure that only suitable equipment is purchased to reduce the risk of HAVs. | 6 months | Finance Director |
| | | | Evaluation of the level of our workers' exposure to vibration should be carried out to ensure that the daily exposure and action values are not being exceeded. | 1 month | Finance Director and Workshop Manager |



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|---|--|--|--|---|-------------------------------------|--|--|
| Hazard category and hazard | Who might be harmed and how? | What are you already doing? | What further controls/actions are required? | Timescales for further actions to be completed (within) | Responsible person's job role | | |
| Health, welfare and work environment (extremes of temperature) Working on air conditioning systems | Mechanics working on vehicle air condition systems. Ill-health conditions likely to be suffered are: Frostbite – caused by skin or eye contact with refrigerant liquid or gas Asphyxiation – if gas escapes in sufficient quantities into a confined working space Exposure to harmful gases – from thermal decomposition of the refrigerant if the gas is exposed to high temperatures. | Use of competent workers. Safe system of work in operation that all workers are trained in and work to; this includes identification of refrigerant before work commences. Suitable PPE issued to all workers involved. Suitable arrangements in place to dispose of waste refrigerant. | Issue each worker with the British HSE's 'Safe working with vehicle air-conditioning systems' guidance leaflet (INDG349) <u>http://www.hse.gov.uk/pubns/indg349.pdf</u> so that they are aware of what could go wrong and how to stop if from going wrong. | 1 week | Workshop Manager | | |
| Fire Workshop activities such as welding and other 'hot work', smoking, arson, faulty electrical equipment, handling fuels and other flammable substances etc. | All workers and other visitors to the site could either suffer burns and/or smoke inhalation injuries. The worst case scenario is death should anyone be trapped in the building and can't be rescued. | There is a detailed fire risk assessment in place that covers all of these issues. Preventative control measures are in place along with control measures to mitigate fire damage should a fire break out. These are regularly tested and maintained. Emergency procedures are tested regularly (last fire drill carried out two weeks ago). | No further action required. | N/A | N/A | | |



Part 3: Prioritise three actions and justification for the selection

Learner number: 12345678

Learner name: A. N Example

You must pick the **three highest priority/most urgent actions** and justify your choice. Your justification **must** include moral, legal and financial arguments (500 to 700 words); consideration of likelihood and probable severity of injury, ill-health and/or harm (150 to 250 words); description of how effective each action is likely to be in controlling the risk (250 to 350 words).

The actions that I am prioritising are:

- 1. Purchase a mobile 'bridge' to allow mechanics to be able to safely access both sides of the inspection pit when working at ground level (hazard category 'work at height').
- 2. Enclosed area to be set up for sanding/grinding operations including that will include a suitable local exhaust ventilation system (hazard category 'hazards substances').
- 3. Purchase of 'on tool' dust extraction systems (hazard category 'hazardous substances').

IGG Ltd has a moral duty to protect all workers. Our workers come to work to earn a wage, not to be put at risk of falling ill, now or in the future, because of the work activities that they carry out now. Some of the ill-health conditions that could be contracted or injuries that could occur, will have a major impact on the lives of the workers and their family/friends. Long term injuries/ill-health and also likely to have a major impact on our workers' mental health. The mental health of other workers could also be affected if they are witness to any serious injuries to other workers.

Financial impacts could be broken down into three categories. Costs associated with:

- injured workers (sick pay, replacement worker wages, medical costs, lost working time etc);
- replacement equipment and/or infrastructure costs for example if control is lost over a vehicle being moved around the work shop and this subsequently crashes through one of the garage walls; and
- costs associated with enforcement actions.

Possible enforcement actions that IGG could receive include being served with prohibition (stopping all work on a particular activity) or improvement (meaning that things must be put right within a certain period of time) notices relating to these activities by the regulator. This would obviously have a massive financial impact on the organisation if these activities could not continue.

There are also specific requirements that IGG need to meet under the ILO Convention C155 and Recommendation (R164). The Convention/Recommendation requires employers to make sure that machines and equipment are safe to use. Specifically, the ILO's CoP 'Safety and



health in the use of machinery; (section 8.5) requires that all lifting equipment and accessories should be maintained, inspected and tested at appropriate intervals. Failure to do so could have serious repercussions, including worker compensation claims.

The ILO's Convention C155 and Recommendation (R164) requires employers to make sure that processes are reasonably safe. The ILO code of practice (CoP) 'Safety in the use of chemicals at work' gives specific advice on the appropriate measures that employers must make to protect workers against the risks identified by an assessment of risk. The ILO's Code of Practice 'Recording and notification of occupational accidents and diseases' requires employers to report cases of occupational asthma to our country's health and safety regulator.

The organisation could also find that civil claims from workers made ill by these work activities could be made. Some of these claims may be made some years after the worker has left IGG Ltd's employment. The likely amount of compensation payable for civil claims can be substantial; in addition to this legal fees (solicitors, courts etc) would also be likely to be very high. I would also point out that many of these costs would not recoverably from the insurance company.

If something goes catastrophically wrong, IGG's reputation could take a serious hit which could result in loss of contracts (especially the insurance work).

Likelihood and severity:

- 1 The likelihood of injuries occurring from working in and around the inspection pit is quite high. This is due to the inspection pit being in regular daily use and most mechanics carry out work in this area. The severity of the risk occurring could be fairly serious. Injuries are likely to range from minor injuries such as bruising, sprains/strains, slightly more serious injuries such as fractures, or very serious injuries such as head or internal injuries. The severity will depend on what height the worker falls from eg, from the top of the pit (over an eight foot drop) or fall from the access steps.
- 2 and 3 With hazardous substances it is more likely that workers will become ill through inhaling the hazardous substance. The likelihood of ill-health occurring is quite high for dust inhalation. Most of the workforce and the general public are currently exposed to dust as these operations are not carried out in an enclosed area. Inhalation of dust could cause occupational asthma; breathing in dust over a prolonged period could also cause occupational cancers.

Controlling the risk

- 1. The bridge will improve working practices in the area of the inspection pit. At the moment, workers tend to jump from one side of the pit to the other which has obvious risks associated with it. I have given a timescale of two months as this is a specialised piece of equipment that nobody in the business has used before. The business will need to source a supplier and then arrange a delivery date. It is hoped that this project will be completed well within the two month timeline.
- 2. The dust enclosure will have a major impact on the amount of dust in the work area. It will stop the dust from spreading across all work areas. I have given a timescale of six months for this to be completed as plans will need to be drawn up and the budget for the project will also need to be agreed with the Managing Director. I would hope that this will be the maximum amount of time that this project will need to be completed.



3. This action will also have a major impact on the majority of the workforce. I have given a timescale of within one month for the on tool extraction systems due to the immediate impact this will have on reducing the amount of dust in the area. The budget for the purchase of the systems needs to be agreed with the Managing Director.



Part 4: Review, check and communicate

Learner number: 12345678

Learner name: A. N Example

You must now give a review date for your risk assessment and say why you have chosen this date (10 to 50 words).

Company policy is to review risk assessments at least every 12 months. I therefore set the review date for 12 months' time - 23 July 2020.

You must now indicate how the risk assessment findings will be communicated (including who needs to know the information) (100 to 150 words).

I will arrange a meeting with the Finance Director to go through and agree the actions in the risk assessment. I will then provide a summary of the findings and actions for the Workshop and Stores Manager (these will be emailed initially with follow-up meetings if required). The findings of the risk assessment will be included in the next available tool-box talk where I will also advise the workers on the actions that are to be taken. A summary of the risk assessment and actions to be taken will also be posted on the company intranet that all workers have access to.

You must now indicate how you will follow-up on the risk assessment to check that the actions have been carried out (100 to 150 words).

I will set diary reminders for roughly 10 days before the action is due to be completed. I will speak to the responsible person for each of the actions to find out the progress against each action. Should the action not be on target for completion, I will find out the reasons why, eg, is it down to finance or other resource issues such as worker time to complete actions. If any actions look like they are not going to be completed on time I will speak to the Finance Director to see if additional resource is available for the action. Actions that are very overdue (ie completion is more than six months late) will be referred to the Managing Director via the Finance Director.