1. **COSHH ASSESSMENT.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Assessment Number** | **GBC01** | **Date** | 14/5/19 | **Likelihood of Harm (L)** | **Insignificant (1)**(Very small injuries) | **Minor (2)**(Small/minor injuries) | **Serious (3)**(Unfit >3 days) | **Major (4)**(Death, major injury) |
| **Task/Substance** | Use of unleaded petrol in IC powered equipment (eg Outboard engine) | **Very Likely (5)**(Expected to occur) |  |  |  |  |
| **Site** | Gairloch Boat Club | **Likely (4)**(Reasonably expected) |  |  |  |  |
| **Location in Site** | Clubhouse, Safety boat, boat park | **Occasional (3)**(Occur infrequently) |  |  |  |  |
| **Assessed by** | A Swift | **Signed** |  | **Unlikely (2)**(Unexpected to occur) |  |  |  |  |
| **Approved by** |  | **Signed** |  | **Negligible (1)**(Not expected to occur) |  |  |  |  |
| **Client (If Required)** |  | **Signed** |  | **Risk Rating (LxC)** | **Low (1-4) Tolerable** | **Medium (5-11) Intolerable** | **High (12-20) Intolerable** |
|  |

**1.1 Substance Hazards (Gross Risk).**

|  |  |  |  |
| --- | --- | --- | --- |
| **Can the Substance be Substituted for Something Safer?** |  **No** | **If YES, Then What?** |  |
| **Note - If a safer substance is available then the safer alternative should be used instead** |
| **Step 1** | **Step 2** | **Step 3** |
| **Identify the substances** | **Note - Remember to take into account the way in which the substance will be used and its dilution when assessing the gross risk** | RISK RATING = Likelihood x Consequence |
| **Substance** | **Physical Nature of Substance i.e. Liquid?** | **How will Substance be Used or Applied?** | Who may be Harmed? | **Route of Contact?****ie Inhalation, Dermal** | **How Long will the Person(s) be Exposed?** | **Initial (Gross) Risk Rating** |
|  | Unleaded petrol | Clear/ yellowish liquid | Used as fuel to power internal combustion powered equipment/ machines. | Operative/3rd parties | Dermal,Eye contactinhalation | 0.1 | **Hours** | Low |  | Med |  | High |  |
|  | Petroleum vapour | Clear pungent vapours | As byproduct of handling/ decanting petrol | Operative/ 3rd parties | Inhalation | 0.1 | **Hours** | **Low** |  | **Med** |  | **High** |  |
| **Note - If the gross risk rating is already “Low” and the hazard controls already in place will be maintained during the task, no additional or temporary controls may be necessary** |

**1.2 Physical Hazards (Gross Risk).**

|  |  |  |
| --- | --- | --- |
| Step 1 | Step 2 | Step 3 |
| HAZARD – Something with the potential to cause harm | Note - Remember to take into account the controls which are already in place when assessing the gross risk | RISK RATING = Likelihood x Consequence |
| Physical Hazards | Who/What Might Be Harmed | How Might They Be Harmed | Initial (Gross) Risk Rating |
|  | Risk of explosion- and fire | Operatives, third parties | Petrol and its associated vapours are extremely volatile and flammable. An explosive mixture of petrol vapour and air is extremely dangerous. | Low |  | Med |  | High |  |
|  | Slips and trips | Operatives and third parties | Musculoskeletal injury through slipping on spilt petrol. | **Low** |  | **Med** |  | **High** |  |
|  | Asphyxiation | Operatives and third parties | Petrol vapours can displace oxygen in poorly ventilated spaces. | **Low** |  | **Med** |  | **High** |  |
| **Note - If the gross risk rating is already “Low” and the hazard controls already in place will be maintained during the task, no additional or temporary controls may be necessary** |

**1.3 Substance Hazards (Net Risk).**

|  |
| --- |
| **Precautions To Further Reduce Risks (As far as reasonably practicable). Substances with the following risk phrases are to have exposure minimised as far as PRACTICABLE - R42, R43, R45, R46 & R49** |
| **Substance** | **Risk Phrase/WEL** | **Control Measures i.e. Enclosure, Ventilation, Dilution etc** | **Health Monitoring?** | **Net Risk (After Implementation of Controls)** |
|  | benzene | R11,R45, R46, R48/23/24/25, R65, R36/381PPM (8 hr TWA) | Store product in a sealed vapour tight container designed specifically for petrol. No more than 60 litres of petrol should be stored on a site .Open , decant and fill in well ventilated areas well away from any sources of ignition. Remove petrol tank from safety boat before filling.Exclude third parties from areaAvoid contact with skin and avoid splashes into eyes .Ensure that all equipment and containers using or containing petrol are inspected for leaks regularly.Ensure that quantity of petrol stored is minimised and that it is stored in a suitable secured container.In the event of spillage allow product to evaporate off and prevent access to downwind areas. Do not allow spillage into water or watercourses.Wash hands immediately after working with petrol product. | NA for infrequent contact | **Low** |  | **Med** |  | **High** |  |
|  | N-hexane | R11, R38, R48/20, R62, R65, R67, R51/5320PPM (8hr TWA) |  | **Low** |  | **Med** |  | **High** |  |
|  | Toluene | R11, R48/20, R65, R48, R38, R67, R6350PPM (8hr TWA) |  | **Low** |  | **Med** |  | **High** |  |
|  | Gasoline | R12, R45, R46, R63, R38, R65, R67, R51/53 |  | **Low** |  | **Med** |  | **High** |  |

## R-phrases

R11 – Highly flammable.
R12 – Extremely flammable.
R38 – Irritating to skin.
R45 – May cause cancer.
R46 – May cause heritable genetic damage.
R48 – Danger of serious damage to health by prolonged exposure.
R62 – Possible risk of impaired fertility.
R63 – Possible risk of harm to the unborn child.
R65 – Harmful: may cause lung damage if swallowed.
R66 – Repeated exposure may cause skin dryness or cracking.
R67 – Vapours may cause drowsiness and dizziness.
R 36/38 – Irritating to eyes and skin.
R 48/20 – Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R 48/23 – Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R 48/23/25 – Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

**1.4 Physical Hazards (Net Risk).**

|  |
| --- |
| **The controls specified below are to be implemented during the task by the people undertaking it to further reduce the gross risks (As far as is reasonably practicable)** |
| **Physical Hazards** | **Further Control Measures (Precedence to be given to engineering methods)** | **Net Risk (After Implementation of Controls)** |
|  | Risk of explosion- and fire | Ensure that petrol is handled, decanted and filled ONLY in well ventilated space with no sources of ignition. | **Low** |  | **Med** |  | **High** |  |
|  | Slips and trips | Ensure that any spills are marked, isolated and cleared up promptly  | **Low** |  | **Med** |  | **High** |  |
|  | Asphyxiation | Ensure that petrol is only handled, decanted or filled in a well ventilated space. | **Low** |  | **Med** |  | **High** |  |
|  |  |  | **Low** |  | **Med** |  | **High** |  |
|  |
| **PPE, Equipment etc Required to Further Control Residual Risks** |  | **Competence and Supervision** |
| **Substance/Hazards** | **PPE/Equipment Required** | The people carrying out the works must be competent by means of training knowledge and experience to safely carry out all aspects. Supervision of the work is essential to ensure safe working practices have been adopted. If the people carrying out the works are unsure of their ability to safely perform the task in hand or if they encounter unexpected hazards, they must make the area or equipment safe, stop work and seek advice from their line manager before restarting work. |
|  | Petrol- skin contact. | Use disposable Vinyl/ nitrile gloves to BS EN 374 with a minimum breakthrough time of 360 minutes when handling, decanting or filling petrol.Use full leg and arm cover protective clothing. If frequent handling of petrol is likely then a chemical resistant overall or apron should be used. |
|  | Petrol- eye contact | Use eye protection to BS EN 166 when decanting, handling or filling containers with petrol. |
|  |  |  |

|  |
| --- |
| **Note – Remember to attach the substance Manufacturer’s Material Safety Data Sheet (MSDS) to this assessment** |

# 2.0 Method Statement.

|  |  |  |
| --- | --- | --- |
| **Step** | **Safe Sequence of Work** |  |
|  | Store petrol in proprietary flammables storage cupboard and minimise the amount held on site to a basic minimum. **Maximum to be stored on site is 60 litres** |
|  | Only decant into work equipment that is cool – never hot |
|  | Ban all combustibles from the decant area |
|  | Never store petrol adjacent to or on a combustible material |
|  | Only decant petrol outside where these is sufficient ventilation. Minimise the amount of time spent in contact with petrol, never breath fumes |
|  | Where petrol is used or stored always provide a fire extinguisher of the correct type in the immediate vicinity |
|  | Exclude third parties from area while handling petrol. |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# 3.0 First Aid Directions.

|  |  |  |
| --- | --- | --- |
| **No** | **Directions** |  |
|  | Ingestion- Wash mouth out with water. Get medical advice immediately. Do not induce vomiting due to risk of aspiration. |
|  | Skin contact- Wash skin as soon as possible with soap and water. Change contaminated clothing and launder before use. Get medical advice.Any injection of fuel under the skin should be considered an emergency- get medical advice URGENTLY |
|  | Eye contact- Wash out thoroughly with large amounts of water, for at least 15 minutes. If redness and/or irritation continues get medical advice. |
|  | Inhalation – In case of exposure to intense concentrations of vapours, fumes or spray move to fresh air and allow to rest. Seek medical attention immediately |

**4.0 Record of Review.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Review Date** | **Reviewed by** | **Comments/Changes** | **Signed** |
| 09.02.2023 | A Swift | None | A Swift |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |











