|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Subject of risk assessment: | Fires and cooking on fires | | | | |
| Brief description of activity, location, feature, activity and equipment used. | Lighting, maintaining and putting out of small, contained fires. All our fires are contained – that is in some form of (purpose built or re-purposed) container or fireplace.  Cooking of simple meals and heating of water (for drinks, cleaning and science experiments).  This is undertaken with adult and child groups, in school grounds, beaches, local green spaces and woodland.  School children, staff and LtL staff are engaged with all aspects of the fire, from collection of tinder and fuel, to preparation, ignition, maintaining and putting out of fire. School staff and LtL staff are engaged with all aspects of the food cooking, from preparation to heating/cooking, serving and eating. | | | | |
| Type of assessment  (if play design process) | Designer | Provider | | | Post Installation Monitoring |
| Job title and name of person making assessment | Matt Robinson | | Signature of person making assessment |  | |
| Date of Assessment | 12 December 2023 | | Review Date | 1st January 2025 | |
| Name of senior manager: | Carley Sefton | | Signature of senior manager: |  | |
| **Risk Management Statement**  LtL recognises that all risks cannot be reduced to nil, therefore this risk assessment prioritises the significant risks. Significant risks are those which pose risk of serious injury, chronic injury, disability or death, or risks that are overly common in interrupting our staff and clients’ normal work. For all activities, LtL staff will dynamically assesses risks and put in place control measures and record as required, but always within agreed and recorded RBAs.  Concerns, changes in risk management practice or minor injuries that are seen by LtL staff to be significant should be reported to the LtL manager who has signed off this RBA. The correct LtL Incident Report form should be used.  **This RBA should be read in conjunction with LtL’s Health and Safety Policy, other relevant LtL Risk Benefit Assessments and LtL Play Policy (as appropriate).** | | | | | |

|  |  |
| --- | --- |
| Activity or feature: | Carrying of resources such as fire pit(s), fire woks, Kelly kettles, fuel, large logs or branches.  Collecting of fuel and tinder (gathering natural materials or from purchased source).  Preparation of fuel and tinder by snapping, splitting, chopping and sawing down to smaller sizes.  Carrying of flammable materials (natural and imported/purchased) and sources of ignition such as flint & steel or lighter.  Igniting fire with tinder (natural and imported/purchased), building of fire to size and heat able to cook on, maintaining of flame, ashes or heat through adding fuel, slowing fire through damping with natural (earth or sand) materials.  Putting fire out and clearing up of spent fuel and fire pits, Kelly kettles etc.  Preparing of food including pouring, mixing, chopping, slicing and cleaning.  Cooking of the food over hot fire or ashes including heating, frying, baking and boiling.  Eating of the food (both cooked and uncooked) that has been prepared.  Clearing up items used in food preparation such as cutlery, kitchen knives, bowls, cups, plates and waste food. |
| How will participants benefit? | Enjoyment, excitement and spiritual reflection.  In managing a fire, participants will learn risk management, responsibility and organisation.  They will develop a deep connection to nature by participating in one of the most primitive experiences.  In using fire as a (cooking) tool, children learn to respect it and use it wisely.  Participants will learn simple science lessons (fire triangle) including the suitability of materials to ignite and keep a fire going, how to balance the right amount of oxygen and heat loss.  Individuals will also learn about simple food preparation, meals and food types. They will also learn food hygiene basics, in a challenging practical environment.  Putting a fire out, clearing up and taking items away will teach environmental responsibility and personal respect.  In preparing, cooking and eating simple foods on an open fire groups will connect with food production, and enjoy social time.  For many, the simple meals will also show variety of food types available, and signpost healthy food choices. |
| Who will be at risk? | LtL staff.  Group members, adult and child.  Members of the public. |
| Any local factors that may affect risks or controls: | Must be aware of local weather at time of workshop including windspeed.  Use raised pit if ground is peat or particularly dry. |
| Possible hazards and risks: | Burns from the sparks or items placed on the fire or recently removed from the fire (e.g. saucepans or sticks).  Group member falling into fire.  Group member leaning on fire container for any reason, causing it to tip.  Scalds from boiling water and fats used in cooking, following a spill or steam escape.  Some stones are explosive in nature when heated, and flint or similar should not be used as a fire base or exposed to heat.  Uncontrollable spread of fire.  Toxins or poisons contained in scavenged food or rubbed off onto consumed food; illness from dirty water or unclean containers.  Food poisoning or illness from poorly prepared food.  Allergic reactions to foods / ingredients.  Cuts from knife use when preparing food.  Smoke inhalation could trigger asthma or similar conditions or could contain toxins from recycled or poorly dried wood. |
| Precautions and control measures to reduce the risk severity or likelihood: | Good group control and suitable activities (i.e. not running around) are the foundation of our fire safety. Consider the right group size and adult to child ratio.  Hair, long clothing or hats should be kept away from flames, especially when tending a fire. Tie hair up, tuck in dangly strings.  Fires should be in containers, restricting sizes of fire, and allowing stable placing of pans and cooking implements. Careful choice of container in size, stability and overall suitability.  Areas around fires should be marked and restricted as an exclusion area, according to age and number in group. Seating should be the normal posture around a fire, unless working on or with it, in which case a ‘safe position’ for working can be adopted, again suitable to the groups. Implements, such as sticks will be used where appropriate to group to keep further back from fire when cooking or heating.  Do not allow individuals to stay constantly within the smoke direction – move as needed due to wind or smoke direction.  Only use untreated wood, avoiding excessive use of any recycled wood.  Fires should always be put out before leaving the site, and sufficient water should be carried or available in the event of having to put a fire out suddenly. LtL staff should be confident that the fire has not spread to ground, and sand, rocks or logs may be used to space containers off the floor if needed on peaty or rooted soils.  Hot cooking items should be kept within the marked fire area. Cooking fats should be used with care.  Hot water should be poured carefully, with hands kept away from cups or other containers. Bungs or whistles should not be used with any Kelly/Ghillie/Storm kettles, or any other vessel used for heating water.  A set of gloves (or similar) will be carried with fire resources to facilitate lifting hot items.  Great awareness of atmospheric and environmental conditions, such as dry summer, high winds or peat based soils, and choosing when not to have a fire. Use of sand base, rocks or similar to be considered. Local weather or advisory warnings or similar will always be adhered to.  Staff to apply food hygiene controls in line with Food Standards Agency guidance and good practice outdoors. This will include:   * awareness of allergies for all group and staff; provisions made for allergies; * hand and personal hygiene of a good standard; * clean implements and containers, * working on mats or tarpaulins below containers or chopping boards to prevent contamination; * clear working areas with no walking through, covering food before, during and after cooking when not being consumed; * avoidance of foods that ‘spoil’ before cooking. This means that we will not cook meats unless dried and preserved, * ensuring dairy products are fresh and consideration given to preserving them on hot days. * All foods will be in-date and stored appropriately to prevent spoiling or contamination, both long term and when outside. * Simple clean up measures to prevent re-use of implements or bowls where needed * Good washing up technique, likely back in a kitchen or using dishwasher.   Food preparation also involves use of knives and/or sharp sticks, both sharp and cutlery. All implements will be managed well, with a limited number available and good storage so that knives or firelighting items are not left lying around. LtL staff will make judgements as to the competence of the group cooking and employ suitable group management or reduced tasks as appropriate.  All LtL staff leading sessions or courses will hold a relevant emergency first aid qualification, appropriate to the training being led, and carry a first aid kit. |
| Precedents or comparisons: | The Forest School Association has good protocols and proven history of using fire with a wide variety of groups, including pre-school. It also asserts qualifications are not needed.  The Play Safety Forum highlights that fire is a play tool and learning tool, in their publication ‘Managing Risk in Play Provision’.  Education Scotland highlights fire as a suitable context for learning many things, and they have advice and videos on the subject.  GfL and LtL have for many years used fire in schools, rural and urban settings with children as a learning tool. |
| Judgement: | Fire does have some challenges, due to small incidents having potentially unacceptable consequences. However, good group management and vigilance can reduce the likelihood of these risks to an acceptable level.  Cooking on an open fire requires good skills and responsibility and can be a life-long memory and skill.  The positive benefits outweigh the serious risks, considering reduced likelihood. |