**Powered Mobile Equipment Procedure**

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| Office of Administrative Responsibility | Agri-Food Discovery Place |
| Approver | Executive Director  |
| Scope | Compliance with this procedure extends to all employees, faculty, students, researchers, clients, contractors, sub-contractors, visitors and suppliers at Agri-Food Discovery Place  |

**Overview**

Health and Safety is an integral part of all our business and research activities at Agri-Food Discovery Place, and we are continually working towards making measureable improvements in the health and safety aspects of our workplace on an ongoing basis.

Alberta’s Occupational Health and Safety Code Part 19 Powered Mobile Equipment is the legislated framework for this procedure.

**Purpose**

The purpose of this procedure is to ensure that power mobile operators are fully trained and qualified to safely operate mobile equipment to reduce the possibility of personal injury or property damage.

Power mobile equipment at AFDP includes electric forklift, internal combustion engine forklift truck, and scissor lift.

**Responsibilities**

**Executive Director**

* Approve the policy content and provide necessary resources to achieve a safe working environment.
* Provide where reasonably practicable, appropriate equipment for lifting, lowering, pushing, pulling, carrying, handling or transporting heavy or awkward loads.
* Ensure proper selection of powered mobile equipment dependent on the tasks to be performed.
* If used equipment is purchased, ensure it is maintained and meets manufacturer’s specifications before it is put into operation.

**Health and Safety Coordinator**

* Review the procedure at least annually, and upon changes to the Alberta Occupational Health and Safety Code.
* Obtain proof of training certificate from workers involved in the task
* Review hazard assessment(s) and ensure necessary controls are in place to prevent workers from being harmed by mobile equipment.
* Audit that pre shift inspections are being conducted prior to use and that records are maintained of all inspections
* Maintain documentation regarding training, equipment maintenance and repairs.

**Supervisors and Project Lead**

* Conduct a hazard assessment to make certain that necessary controls are in place to prevent workers from being harmed by mobile equipment.
* Make certain that Manufacturer’s specifications, including forklift operation manuals and maintenance manuals are followed and available to workers
* Ensure equipment is maintained as per the Manufacturer’s Specifications
* Schedule training for any employee who may be required to operate powered mobile equipment at AFDP
* Ensure that drivers of powered mobile equipment are competent and operate vehicles in a safe and responsible manner and take appropriate action if they do not
* Confirm that pre shift inspections are being conducted prior to use and that records are maintained of all inspections
* Follow up on complaints of unsafe driving

**Employees**

* Abide by this policy
* Attend and pass an accredited forklift training program before operating the mobile equipment
* Provide proof of training on demand
* Operate the equipment safely
* Maintain full control of the equipment at all times
* Use the seat belts and other safety equipment in the powered mobile equipment
* Report to the supervisor of any conditions affecting the safe operation of the equipment.
* Immediately report any incident or property damage that may occur while operating mobile equipment
* Keep the cab, floor and deck of powered mobile equipment free of materials, tools or other objects that could interfere with the operation of the controls or create a tripping or other hazard to the operator or other occupants of the equipment.
* Conduct a daily pre-shift inspection prior to use of any mobile equipment. See attached Schedule “A”
* Conduct a Pre-job Hazard Assessment prior to the task

**Procedure**

**General Requirements**

* Nameplates and markings must be in place and must be maintained in a legible condition
* Modifications and additions which affect capacity and safe operation without the manufacturer’s prior written approval or the approval of a Professional Engineer are prohibited. Capacity, operation, and maintenance instructions, plates, tags or decals must be modified accordingly.

**Hazard Assessment**

Assessing worksite hazards is a requirement under section 7 of the Occupational Health and Safety Code. An equipment hazard assessment (forklift, forklift truck, and scissor lift), is available on the AFDP Shared Drive, and in the inspection binder. A general forklift and scissor lift task hazard assessment is also available on the AFDP Shared Drive and in the inspection binder.

**Training**

An employer must ensure that workers who are assigned to operate powered mobile equipment are competent and qualified to do so.All employees who are authorized to operate powered mobile equipment must attend and pass an accredited training program.

To establish a worker’s competency :

* The worker has been informed of the hazards associated with operating a powered mobile equipment in the particular workplace, including the hazards associated with the load, the design of the workplace, and the environmental condition.
* Knows how to protect him/herself and others from the hazards
* Has demonstrated to a designated skilled and experienced person that the skills and knowledge identified as final outcomes for operator competency have been learned.

Training may be conducted by a certified external trainer or may be done in house by an adequately qualified trainer who is current on legislation, and any changes to the equipment or the environment

All training must be documented and maintained in such a manner that records are current and readily accessible

**Refresher training must be given to operators when**:

* + The operator has been observed operating the power ed mobile equipment in an unsafe manner
	+ The operator has been involved in an incident
	+ The operator received an evaluation that indicates he or she has operated the powered mobile equipment unsafely
	+ The operator is assigned a different type or class of forklift
	+ Environmental conditions in the workplace change, which may affect the safe operation of the forklift (introduction of a flammable environment, physical changes to the workplace, addition of other pieces of mobile equipment, etc.)

**Pre-Operation Inspection and maintenance**Before operating powered mobile equipment, the operator must complete a visual inspection( See Appendix A) of the equipment and the surrounding area to ensure that the powered mobile equipment is in safe operating condition and that no worker, including the operator, is endangered when the equipment is started up. Upon an operator discovering any concerns, immediately notify your supervisor, who will ensure repairs are completed.

Any conditions that could affect the safe operation of the power mobile equipment should be identified on the inspection checklist and the power mobile equipment shall be removed from service and tagged “ out of service” using a lockout tag, until the proper repairs or concerns are addressed.

Periodic Maintenance on powered mobile equipment must be performed by a competent operator, and follow requirements in the operator’s manual.

Records of the inspection and maintenance performed on powered mobile equipment must be kept at the work site. These records must be available to the equipment operator so that the operator is aware of the equipment’s condition.

**Function Test for Genie Scissor Lift**

A Function test must be performed after repairs are completed and prior each use.

The operator must follow the step-by-step instructions to test all machine functions in the Operator’s manual, page 16 to 20.

**Unattended equipment**

Powered mobile equipment can pose a serious risk of injury to workers and damage to property if it is not properly secured against unexpected movement. Unexpected movement could be caused by any number of factors such as sloping ground, changes in air or hydraulic pressure, slippery ground conditions, equipment parked incorrectly, etc.

Operators must not leave the controls of powered mobile equipment unattended unless the equipment is secured against unintentional movement by an effective method of immobilizing the equipment. An example of immobilizing the equipment includes, engaging any movement safety device and placing the transmission in “Park” position. Where necessary, the wheels of the equipment should be blocked with wheel chocks.

Operator must not leave the controls of powered mobile equipment unattended unless a suspended or elevated part of the powered mobile equipment is either landed, secured in a safe position, or both.

**Pedestrian Traffic**

* The mobile equipment operator is responsible for the safety of other workers in the vicinity of the operating equipment.
* The operator must slow down when taking corners or backing up the power mobile equipment to avoid running into pedestrians.
* Workers in the vicinity of powered mobile equipment must be aware of the equipment’s path of travel and avoid contact with the powered mobile equipment at all times.

**Battery Handling and Charging**

Powered mobile equipment should only be charged at its designated area. The forklift charging area is at the service area, by stairs. The scissor lift charging area is at the corridor in front of the maintenance shop.

When operators encounter a battery problem or a leak, maintenance personnel must be notified and a work request needs to be submitted.

**Propane Tank Changing and Handling**

* Always wear gloves when connecting or disconnecting the gas line to a propane tank.
	+ Liquefied propane is extremely cold and frostbite may occur if it comes in contact with your skin.
* Before disconnecting the gas line to a propane tank:
	+ Shut off the forklift truck engine, then
	+ Close the service valve. Use slight hand pressure only; never over tighten as it may damage the valve.
* Disconnect the gas line from the tank by turning the fitting counter clockwise.
* Release the tank retaining straps and swing straps away from tank.
* Exchange empty tank with the full tank in the store.
	+ **Always place the tank in an upright position in the vehicle and secure the tank.**
	+ **Ensure the valve is closed.**
	+ **Smoking while transporting propane tanks can be extremely dangerous.**
	+ **Never leave the propane tank in vehicle unattended.**
* Connect the gas line to the tank by lining up the gas line fitting with the service valve outlet and turning clockwise. Hand tightens only.
* After having connected the gas line to the tank, slowing turn the service valve to the fully on position. Perform leak test on the connection.
	+ Leak test can be done by applying soap and water on the connection; bubbles will appear on where there is leak.
	+ If there is a leak, close the service valve immediately and check connection. If connection is O.K, fill out a work request for gas line fitting repair to maintenance department. Ensure the faulty tank is clearly identified that it needs repair.
* If the forklift truck will not be used for a certain length of time, (e.g.: over a weekend, overnight etc.) close the service valve of the tank.

**Appendix A**

**Forklift Pre-operation Checklist**

**INSTRUCTIONS: Forklift operators must complete this Checklist each day before operating the equipment.**

Clark Forklift Date of inspection:

|  |  |  |
| --- | --- | --- |
| **Check off the applicable box****Items to Check** | **Acceptable** | **Maintenance Required** |
| Forklift’s appearance in good condition and clean |  |  |
| Tire/Wheels: wear, damage, nuts tight |  |  |
| Gauges/Instruments: damage, operation |  |  |
| Warning Decal/Operator’s Manual: missing, not readable |  |  |
| Data Plate: not readable, missing |  |  |
| Forks: bent, worn  |  |  |
| Horn: operational |  |  |
| Lift/lower/rotate/side shift: loose/binding, excessive drift, chatters, leaks |  |  |
| Controls: loose/binding, freely return to neutral |  |  |
| Directional Control: loose/binding, finding neutral OK |  |  |
| Battery gauge: at adequate level |  |  |
| Emergency Stop button: functional  |  |  |

**Hour meter reading:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| Performed By: | Signature  | Date |
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**Appendix A**

**Forklift Truck Pre-operation Checklist**

**INSTRUCTIONS: Forklift truck operators must complete this Checklist each day before operating the equipment.**

Hyster 70 Forklift Truck Date of inspection:

|  |  |  |
| --- | --- | --- |
| **Check off the applicable box****Items to Check** | **Acceptable** | **Maintenance Required** |
| Forklift’s appearance in good condition and clean |  |  |
| Tire/Wheels: wear, damage, nuts tight |  |  |
| Head/Tail/Work Lights: damage, mounting, operation |  |  |
| Gauges/Instruments: damage, operation |  |  |
| Operator Restraint: verify proper readings after engine started |  |  |
| Warning Decal/Operator’s Manual: missing, not readable |  |  |
| Data Plate: not readable, missing |  |  |
| Cab/overhead Guard: bent, damaged, cracked |  |  |
| Load Back Rest: bent, cracked, missing |  |  |
| Forks: bent, worn  |  |  |
| Engine oil: level, dirty, leaks |  |  |
| Hydraulic oil: level, dirty, leaks |  |  |
| Radiator: level, dirty, leaks |  |  |
| Fuel: level, leaks |  |  |
| Engine: runs rough, leaks |  |  |
| Steering: loose/binding, leaks operation |  |  |
| Service Brake: linkage loose/binding, stops OK, grab |  |  |
| Park Brake: loose/binding, operation, adjustment |  |  |
| Horn: operational |  |  |
| Back-up alarm: mounting, operation |  |  |
| Lift/lower/rotate/side shift: loose/binding, excessive drift, chatters, leaks |  |  |
| Controls: loose/binding, freely return to neutral |  |  |
| Directional Control: loose/binding, finding neutral OK |  |  |

**Hour meter reading:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| Performed By: | Signature  | Date |
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**Appendix A**

**Scissor Lift Pre-Operation Checklist**

**INSTRUCTIONS: Scissor lift operators must complete this Checklist each day before operating the equipment.**

Date of inspection:

|  |  |  |
| --- | --- | --- |
| **Check off the applicable box****Items to Check** | **Acceptable** | **Maintenance Required** |
| Operator’s manual, safety and responsibilities manual are complete, legible and in the storage container located on the platform |  |  |
| All decals are legible and in place |  |  |
| There is no hydraulic oil leak and oil level is at the proper level |  |  |
| There is no leak from the battery and fluid is at the proper level |  |  |
| **Check the following components for damage, improperly installed or missing parts and unauthorized modifications:** |
| Electrical components, wiring and electrical cables |  |  |
| Hydraulic power unit, tank, hoses, fitting, cylinder and manifolds |  |  |
| Battery pack and connections |  |  |
| Drive motors |  |  |
| Tires and wheels |  |  |
| Limit switches, alarms and horn |  |  |
| Platform entry chain and gate |  |  |
| Platform extension ( check )  |  |  |
| Scissor pins and retaining fasteners |  |  |
| Platform control joystick |  |  |
| **Check entire machine for :** |
| Cracks in welds or structural components |  |  |
| Dents or damage to machine |  |  |
| Excessive rust, corrosion or oxidation |  |  |
| There is no loose pins and bolts |  |  |

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| Performed By: | Signature  | Date |
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**DEFINITIONS**

Any definitions listed in the following table apply to this document only with no implied or intended institution-wide use

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| Powered Mobile Equipment | Forklifts, articulating lifts or any other piece of mobile equipment  |
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**References:**

Government of Alberta Forklift Health & Safety Best Practices Guideline

Alberta Occupational Health and Safety Code Part 2 Hazard Assessment, Elimination and Control

Alberta Occupational Health and Safety Code Part 19 Powered Mobile Equipment

Alberta Occupational Health and Safety Code Part 14 Lifting and Handling Loads

Hyster 70 Forklift Truck Operation Manual

Genie Scissor Lift Operator’s Manual

REVISION HISTORY

| **Version**  | **Effective Date** | **Summary of Change** |
| --- | --- | --- |
| 01 | August 27, 2012 | New document |
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**Approval:**

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Executive Director Date

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Chair WHSC Date