

Policy Number: 105.121

Title: Mobile Elevated Work Platforms

Effective Date: 10/1/19

PURPOSE: To provide procedures for safely operating equipment capable of elevating employees to perform work.

APPLICABILITY: All Minnesota correctional facilities with mobile elevated work platforms

DEFINITIONS:

Anchorage – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

<u>Aerial device</u> – a vehicle-mounted device, telescoping or articulating, or both, that is used to position personnel.

<u>Articulating boom platform</u> – an aerial device with two or more hinged boom sections.

<u>Controlled access zone</u> - as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

<u>Extensible boom trucks</u> – a vehicle capable of being self-propelled with a telescopic or extensible boom. This includes: boom lifts, aerial lift trucks, and bucket trucks.

Guardrail system – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

<u>Handrail</u> – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

Lanyard – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

<u>Mobile elevated work platform (MEWP)</u> – any working platform capable of moving under its own power, used to access work areas located at heights. Common examples include: boom trucks (sky lift), lift trucks, scissor lifts, and personnel ups.

<u>Personal fall arrest system</u> – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

<u>Platform</u> – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

Qualified staff – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

<u>Self-retracting lifeline/lanyard</u> – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

Tie-off – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

Toeboard – as defined in Policy 105.116, "Fall Protection for Walking and Working Surfaces."

PROCEDURES:

- A. Staff responsibilities
 - 1. The warden of each facility must ensure:
 - a) Compliance with this policy; and
 - b) All authorized employees receive required training.
 - 2. All authorized employees must:
 - a) Read and understand this policy;
 - b) Attend required training;
 - c) Perform inspection of the equipment and site area prior to operating an aerial device; and
 - d) Understand the work to be performed, to ensure availability of all necessary tools and equipment.
 - 3. The facility safety administrator or designee must:
 - a) Annually review and update the procedure;
 - b) Evaluate and authorize the use of fall protection devices when necessary;
 - c) Conduct job-specific inspections as needed to evaluate worker safety during activities involving work from heights;
 - d) Work with supervisors and staff to develop alternate work practices that may be required in unique situations; and
 - e) When necessary, review fall protection plans prior to the start of work.
 - 4. All facility supervisors of authorized employees must:
 - a) Be familiar with fall protection equipment and procedures that employees in the supervisor's area may need;
 - b) Ensure that all authorized employees are trained and proficient in the use of fall protection equipment;
 - c) Ensure performance of required inspections;
 - d) Ensure that fall protection procedures are followed; and
 - e) Communicate any issues regarding fall protection procedures or equipment to the facility safety administrator, and assist in resolution.
- B. General requirements for all mobile elevated work platforms (MEWPs)
 - 1. Only trained and qualified employees may operate the equipment. Facility staff must supervise offender use of mobile elevated work platforms (MEWPs). The watch commander or designee must approve outdoor use by offenders.
 - 2. Use of planks, ladders, or any other devices to achieve additional height or reach on the platform is prohibited on all lifts.
 - 3. Operating and maintenance manuals must be available for each MEWP located on department property. MEWPs must not be operated if the condition is unsafe. Trained and qualified employees must conduct a visual and functional inspection prior to operation of the lift truck to ensure that all mechanical systems, fluid levels, and safety equipment is securely in place and in operating condition in accordance with the operator's manual.

- 4. The operator notifies the supervisor responsible for vehicle maintenance of any inspection discrepancies. A log of such inspection discrepancies and corrective action must be retained by the supervisor responsible for vehicle maintenance.
- 5. Personal protective equipment (PPE) may be required based on the specific hazards of the job.
- 6. To prevent inadvertent/accidental movement of the MEWP after it has been moved into the final work position, the operator must de-energize (turn off) the control panel. The control panel may only be activated during moving or positioning the MEWP from one work location to the next.
- 7. All MEWP control panels require two points of contact by the operator to activate the directional (horizontal or vertical) controls. The activation mechanism requires continuous physical contact by the operator during MEWP movement.
- 8. The load and its distribution on the MEWP, and any platform extension must be in accordance with the manufacturer's rated capacity for that specific configuration. Rated capacities must not be exceeded when loads are transferred to the MEWP at any height. MEWP's must not be used as a crane (e.g., transport of materials, and hoisting tools and equipment) unless designed for that purpose.
- 9. Operators must lower work platforms to their base position prior to traveling horizontally to different work locations (over ten feet). Horizontal movement of the work platform in the elevated position is only allowed for the final positioning of the lift at the specific work location. All movements performed in congested work locations must be performed with the aid of a spotter.
- 10. The operator must perform an inspection of the work site prior to operating the MEWP. MEWPs must only be driven on level surfaces that are free of pits, holes, and obstructions.
- 11. No MEWP may be operated within 30 feet of overhead energized lines without facility safety administrator approval. Under no conditions may a MEWP be operated within ten feet of energized electrical lines.
- 12. Under all travel conditions, the operator must limit travel speed according to the conditions of ground surface, congestion, visibility, slope, location of personnel, and other factors causing hazards of collision or injury to personnel.
- 13. A qualified mechanic must perform an annual inspection of the MEWP. Any needed repair must be performed prior to operating the equipment. The supervisor responsible for vehicle maintenance retains documentation of the annual inspection and repairs.

C. Scissor lifts/personnel ups/personnel lifts

- 1. Fall arrest equipment is not required to be worn while on scissor lift or personnel lift platforms equipped with appropriate guardrail systems and toeboards.
- 2. In the event the operator's feet leave the floor of the work platform in order to reach higher elevations, the operator must wear a full body harness and a fall arrest lanyard. An individual must attach the protection lanyard to an approved anchorage point located above

the scissors lift. Do not anchor personal fall protection to scissor lift guard rails or other platform support structures unless designated by the manufacturer.

D. Extensible boom trucks

- 1. The following requirements apply while operating any type of extensible boom truck:
 - a) Full body harness with lanyard must be worn and attached to the manufacturer's approved anchorage on the bucket.
 - (1) Tying off to an adjacent pole, facility structure, or equipment while working inside the cage of an aerial boom lift is prohibited.
 - (2) Personnel required to climb out of an elevated boom lift onto an elevated facility structure must utilize 100% tie off procedures during the transition from the boom lift cage to the elevated work location (i.e., personnel must tie off to a fall-rated facility anchorage point prior to disconnecting their lanyards attached to the aerial boom lift cage).
 - b) Any modifications made to critical components of an aerial lift truck must be certified in writing by the manufacturer.
 - c) Personnel must conduct a pre-job survey to locate overhead power lines before starting any work.
 - d) Staff conducting aerial work in areas of pedestrian and vehicle traffic must cordon off the area to establish a controlled access zone. All personnel on the ground within the controlled access zone must also wear hard hats, safety glasses, and high-visibility vests.
 - e) Occupants must stand firmly on the floor when positioned inside the basket. Sitting or climbing on the edge of the basket is not permitted.
 - f) All turning shafts, spindles, gears and devices must be guarded.
 - g) Safety-related work practices must be used to prevent electric shock or other injuries resulting from direct or indirect electrical contacts when work is performed near or on equipment or circuits that are, or may be, energized.
 - h) The user must set the brakes and position outriggers, when used, on pads or a solid surface. Wheel chocks must be installed before using an aerial lift truck on an incline.
 - i) An aerial lift truck may not be moved when the boom is elevated in a working position with personnel in the basket.
 - j) Articulating boom and extensible boom platforms, primarily designed as personnel carriers, have both platform (upper) and lower controls. Upper controls are in or beside the platform within easy reach of the operator. Lower controls provide for overriding the upper controls. Controls must be plainly marked as to their function. Except in case of emergency, lower level controls must not be operated unless permission is obtained from the person in the lift.

- 2. Additional requirements for aerial lift truck
 - a) Staff must not occupy the basket while the truck is in motion.
 - b) Before moving an aerial lift truck, inspect for the proper cradling of booms and ensure that outriggers are in a stowed position.
 - c) During the operation of an aerial lift truck, a trained operator must be on the ground while the boom is elevated. The ground person must assist with maintaining the controlled access zone, alerting the operator of safety or security issues, and providing assistance in the event of an emergency.
- 3. Aerial lifts may be field modified for uses other than those intended by the manufacturer, provided the modification has been certified in writing by the manufacturer or by any other equivalent entity, such as a nationally-recognized testing laboratory, to be in conformity with all applicable provisions of the American National Standards Institute (ANSI) A92.2-1969 and this procedure, and to be at least as safe as the equipment was before modification.
- E. Personal fall arrest systems must comply with the requirements of Policy 105.116, "Fall Protection for Walking and Working Surfaces," Procedure G.

F. Training

- 1. All MEWP operators must successfully complete training in accordance with the manufacturer's operating and maintenance manual, the user's work instructions, and the requirements listed in this policy before operating the MEWP. Only properly trained and authorized personnel are permitted to operate the MEWP.
- 2. Each supervisor must ensure that affected employees are trained by a qualified person regarding:
 - a) Proper operation of MEWP equipment;
 - b) Understanding when fall protection is required;
 - c) Correct procedures for maintaining, using, and inspecting fall protection systems;
 - d) Proper means of controlling the work area around the equipment;
 - e) Purpose and use of manuals;
 - f) Pre-start equipment and site inspection;
 - g) Factors effecting stability; and
 - h) Actual operation of the MEWP under direction of a qualified person.
- 3. Staff supervising offenders who are utilizing any type of MEWP must ensure that all procedures in this policy are followed.
- 4. Employee development maintains a record of all training conducted by outside vendors on MEWP equipment, including the name and other identifying information of the employee trained and the name of the person conducting the training. Training is recorded and retained in the agency approved electronic training management system.
- 5. Retraining is required when:
 - a) Changes in the workplace render previous training obsolete;
 - b) Changes in the type of fall protection safety or equipment render training obsolete;

- c) Inadequacies in the employee's knowledge or use of fall protection equipment indicates that the employee has not retained proper understanding or skill; or
- d) Changes in codes or regulations render previous training obsolete.

G. Program evaluation

The facility safety administrator conducts a periodic review to determine the effectiveness of the program. The evaluation includes a review of reported accidents as well as near misses, to identify areas where additional safety measures are required. This review may include a facility walk-through or interviews with employees to determine whether they are familiar with program requirements and safety practices. The facility safety administrator retains the reviews according to the retention period.

INTERNAL CONTROLS:

- A. Records of vehicle inspection discrepancies and corrective actions are maintained by the supervisor responsible for vehicle maintenance.
- B. Documentation of annual vehicle inspections and repairs are maintained by the supervisor responsible for vehicle maintenance.
- C. Operator training records are maintained in the agency-approved electronic training management system.
- D. Reviews of the MEWP safety protection program are retained by the facility safety administrator.

ACA STANDARDS: None

REFERENCES: Occupational Health and Safety Administration (OSHA) standards 29 CFR

1926.453 (1996) and 29 CFR 1926.452 (1996)

Policy 105.116, "Fall Protection for Walking and Working Surfaces"

Policy 105.113, "Personal Protective Equipment (PPE)"

REPLACES: Division Directive 105.121, "Mobile Elevated Work Platforms," 3/17/15.

All facility policies, memos, or other communications whether verbal, written, or

transmitted by electronic means regarding this topic.

ATTACHMENTS: None

APPROVALS:

Deputy Commissioner, Community Services Deputy Commissioner, Facility Services Assistant Commissioner, Operations Support Assistant Commissioner, Facility Services