

 <b>Marathon Petroleum Company LP</b>	<b>RULES &amp; STANDING INSTRUCTIONS</b>				<b>RSI-08-27-C</b>	
MARTINEZ	Aerial Lifts				Page 1 of 6	
<b>RESPONSIBLE DEPT.</b>	<b>CONTENT STEWARD</b>			<b>APPROVED BY</b>		
Health and Safety	Carla Mancera Strachan			Mark Bennett		
<b>ORIGINAL ISSUE:</b>	09/26/2016	<b>LATEST REVISION:</b>	09/24/2020	<b>NEXT REVIEW:</b>	09/24/2023	

## Purpose

To establish guidelines for controlling and ensuring safe practices regarding various types of personnel-lifting devices used at Martinez Refinery.

## Scope

This standard provides a system which shall govern the use of various aerial lift platforms with the exception of crane suspended personnel baskets.

## Code

- OSHA Regulations: #1926.522, 1926.556, 1926.451- 453, 1910.28, 1910.67
- Cal OSHA Title 8 CCR Section # 3636 Elevating Work Platforms and Aerial Devices
- Cal OSHA Title 8 CCR Section 3620 Mobile Ladders Stands and Scaffolds
- R&SI 08-12, Use of Warning/Barricade Tape
- R&SI 08-29, Road Closures
- R&SI 08-36, Vehicle Safety
- ANSI 92.6 Self Propelled Elevating Work Platforms
- R&SI 8-1 Permit To Work System

## Definitions

**Aerial Lift Platforms** - Any device used at Martinez Refinery to lift or extend personnel, and which are built in accordance with OSHA and ANSI standards. This may include but is not limited to the following devices:

- Extensible Boom Platform
- Articulating Boom Platform
- Elevating Work Platform
- Hoists
- “Scissor” lifts

 <b>Marathon Petroleum Company LP</b>	<b>RULES &amp; STANDARD INSTRUCTIONS</b>	<b>RSI-08-27-C</b>
MARTINEZ	Aerial Lifts	Page 2 of 6

**Safety Factor** - This refers to the rated capacity of the device multiplied by a given number. For example, a safety factor of five means it must be capable of lifting five times the maximum permitted load.

**Aerial Device** - Any vehicle-mounted or self-propelled device which is primarily designed to position personnel

**Extensible Boom Platform** - An aerial device with an extendable or telescopic boom attached to a personnel platform and mounted on a mobile vehicle to elevate personnel.

**Articulating Boom Platform** - An aerial device with two or more hinged boom sections that are attached to a mobile vehicle designed to vertically elevate a personnel platform.

**Elevating Work Platform** - A device designed to elevate a platform in a vertical axis.

**Hoist**

- An engineered enclosure designed to lift and lower personnel
- A crane function, such as, lowering, lifting swinging, booming in and out or up and down, or suspending a personnel platform.

**Mobile Scaffold** - A powered, or unpowered, portable, caster or wheel-mounted supported scaffold

**100% Tie-Off** - A requirement for all employees, to be tied-off at all times (whether stationary or in transition) when utilizing fall protection equipment.

**Training**

- Employees and Contractors shall be trained and instructed in the proper use of the mechanical aerial lifts in accordance with the manufacturer’s operating instructions.
- Employee training will be maintained in the site’s Learning Management System.
- Contractor training shall be documented and records shall be made available upon request.
- Only authorized persons shall operate such equipment.

**General Requirements**

**A. Extensible and Articulating Boom Platforms**

1. Personnel using equipment must be trained and qualified. The training must be documented.
2. A pre-trip inspection shall be performed on the equipment to ensure that it’s safe to operate.
3. When elevated or traveling, 100% tie-off is required at all times. A self-retracting lanyard must be attached to a designated anchorage point located within the platform (per manufacturer design), and not to structures or equipment located outside the elevated platform. Guardrails must not be used as tie-off points.

 <b>Marathon Petroleum Company LP</b>	<b>RULES &amp; STANDARD INSTRUCTIONS</b>	<b>RSI-08-27-C</b>
MARTINEZ	Aerial Lifts	Page 3 of 6

4. Never exceed the maximum rated capacity of an extensible or articulating boom platform and always follow manufacturer's recommendation.
5. Personnel using extensible and articulating boom platforms must keep their feet planted on the floor and may not sit or climb on the guardrail.
6. Personnel using extensible and articulating boom platforms should never position their body beyond the guardrail system in such a manner that would create a fall hazard.
7. Never use decking, planks, ladders or boxes to gain additional height while working on an extensible or articulating boom platform.
8. All extensible and articulating boom platforms must have lower controls in the event the apparatus has to be operated from the ground. The lower controls must be capable of overriding platform controls in the case of an emergency. The lower controls should never be operated during routine activities without the permission of the person on the platform.
9. The platform must be positioned over solid ground or surface. Wheel chocks must be set when using Extensible Boom Platforms on inclines. Articulating Boom Platforms are NOT to be elevated or operated on an incline (refer to manufacturer recommendation).
10. Platform must not be supported by adjacent structures when in use.
11. When platforms are used on designated roads, thoroughfares, or near moving traffic at night, barricades with hazard warning lights must be in place to warn oncoming traffic. In addition, the platform and surrounding work area must be properly illuminated to provide for safe operation of equipment.

**Employees and contractors shall not exit an elevated boom or scissor lift, except where elevated work areas are otherwise inaccessible or hazardous to reach.**

**Personnel may only exit the platform when it is the safest and last practical alternative.**

**Exiting the platform must only be executed with the knowledge and consent of the Safe Work Permit writer. When personnel exit to unguarded work areas, a fall protection plan must be in place and personal fall arrest must be used.**

**B. Elevated Work Platforms and Mobile Scaffolds - Scissor Lifts**

All hoists used at Martinez to lift personnel must be certified for personnel lifting and must have such certification clearly labeled.

1. Personnel using equipment must be trained and qualified. The training must be documented.
2. A pre-trip inspection shall be performed on the equipment to ensure that it's safe to operate.



3. Never exceed the maximum rated capacity of an elevated work platform. Always follow manufacturer recommendations when using elevated work platforms, mobile scaffolds and scissor lifts.
4. Personnel using elevated work platforms, mobile scaffolds or scissor lifts must keep their feet planted on the floor and may not sit or climb on the guardrail.
5. Personnel using elevated work platforms, mobile scaffolds or scissor lifts should never position their body beyond the guardrail system in such a manner that would create a fall hazard.
6. Never use decking, planks, ladders, or boxes to gain additional height while working on elevated work platforms, mobile scaffolds or scissor lifts.
7. Prior to moving the scissor lift, occupants must exit the platform unless the surface on which the lift is being moved is within 3 degrees of level and free of pits, holes, and other obstructions.
8. Prior to moving, the scissor lift must be lowered to its lowest level unless specifically approved by the manufacturer due to a design that meets ANSI 92.6 stability requirements
9. When platforms are used on designated roads, thoroughfares, or near moving traffic at night, barricades with hazard warning lights must be in place to warn oncoming traffic. In addition, the platform and surrounding work area must be properly illuminated to provide for safe operation of equipment.
10. Personnel operating elevated platforms, scissor lifts, or mobile scaffolds must use caution when working around energized equipment. Every task must be risk assessed for potential exposure to electrical hazards.
11. When working in close proximity of overhead lines, follow the minimum clearance distances listed in the following table:

<u>Voltage (nominal, kV, alternating current)</u>	<u>Minimum clearance distance (feet)</u>
<u>up to 50</u>	<u>10</u>
<u>over 50 to 175</u>	<u>15</u>
<u>over 175 to 350</u>	<u>20</u>
<u>over 350 to 550</u>	<u>27</u>
<u>over 550 to 1,000</u>	<u>45</u>
<u>over 1,000</u>	<u>(as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution).</u>

**ATTENTION:** Printed copies should be used with caution.

The user of this document must ensure the current approved version of the document is being used.

 <b>Marathon Petroleum Company LP</b>	<b>RULES &amp; STANDARD INSTRUCTIONS</b>	<b>RSI-08-27-C</b>
MARTINEZ	Aerial Lifts	Page 5 of 6

## **MINIMUM CLEARANCE DISTANCES**

### **C. Using an Aerial Lift Platforms to Access Elevated Areas**

1. Exiting and accessing an elevated platform is permissible only when it is determined to be the safest means of access to an elevated work area. Approval by Craft Supervision is required.
2. When authorized, the following minimum procedures will be used to access or exit an elevated platform.
  - a. The platform must be attended at all times by a lift operator while any personnel are exiting or accessing an elevated platform:
  - b. 100% fall protection must be maintained while exiting or entering the platform. The employee shall secure a second shock arresting lanyard to an anchorage point outside the basket before disconnecting their shock arresting lanyard from the lift and exiting
  - c. To ensure 100% tie-off requirements are met, a dual shock arresting lanyard is required when transitioning from the elevated work platform to an elevated work area.
3. Shut down the engine and hydraulics to eliminate the potential of inadvertent movement of the platform during the transition.
4. At no time may employees exit or enter over the lift controls.
5. Access gates are to be utilized to exit or enter the elevated platform.
6. If the manufacturer prohibits egress and access of an elevated lifting platform, such practices are prohibited unless written approval is obtained from the manufacturer.
7. If the aerial lift is positioned on a roadway, ensure that proper barricading is in place.
8. Ensure that the "Aerial Lift Exiting Procedure and Authorization" form is completed. See Appendix A.

**ATTENTION:** Printed copies should be used with caution.

The user of this document must ensure the current approved version of the document is being used.

 <b>Marathon Petroleum Company LP</b>	<b>RULES &amp; STANDARD INSTRUCTIONS</b>	<b>RSI-08-27-C</b>
MARTINEZ	Aerial Lifts	Page 6 of 6

**Appendix A**  
**AERIAL LIFT EXITING PROCEDURE AND AUTHORIZATION FORM**

**Equipment Needed:**

1. Full Body Harness.
2. Two (2) Shock Arresting Lanyards.
3. Lanyard Extension Devices if needed.

**Authorization Form:**

1. Must be obtained daily and for each separate transfer task.
2. Must be approved by the employee's supervisor and displayed on the machine base.
3. All individuals authorized to transfer must sign the authorization form. The signature indicates that the individuals understands and will comply with safe work procedures for exiting and entering the basket while it is in the air.

**Safe Work Procedure:**

1. Inspect personal fall protection equipment and the aerial lift before starting work.
2. If the aerial lift is positioned on a roadway, ensure that it's properly barricaded.
3. Upon entering the basket, secure lanyard to the basket attachment point.
4. Position the basket such that exiting will be onto a secure surface, basket is stable, and a suitable anchorage point is available.
5. Shut down the engine and hydraulics to eliminate the potential of inadvertent movement of the platform during the transition.
6. Secure the second lanyard to the structure's anchorage point. The anchorage point should be selected such that the maximum free fall distance is 4 feet or less.
7. Exit the basket.
8. When on the elevated surface, detach the lanyard from the basket. To reduce the risk of injury, minimize the time connected to both the basket and structure.
9. The procedure for re-entry to the basket is the reverse order of exiting the basket.

**Aerial Device Exiting Authorization Form**

**The persons identified below are authorized to exit the basket to perform the task(s) identified. The procedures described above are to be followed.**

**Date:** \_\_\_\_\_ **Approval:** \_\_\_\_\_

**Authorized personnel:** \_\_\_\_\_  
\_\_\_\_\_

**Task Permitted:** \_\_\_\_\_

This permit is issued in recognition that exiting the basket is the least hazardous means to perform the task.