Walking Working Surfaces 112

1.0 PURPOSE

1.1 The purpose of this procedure is to provide minimum requirements for Walking Working Surfaces (WWS).

2.0 APPLICABILITY

2.1 This program applies to all Westlake Geismar employees, visitors, vendors and contract employees.

2.2 This policy shall not supersede any governmental regulation which applies more stringent requirements than the minimum requirements set forth in this policy.

3.0 DEFINITIONS

3.1 Anchor Point: A secure point of attachment for lifelines, lanyards or deceleration devices. Anchor points shall be capable of supporting 5,000 pounds.

3.2 Body Harness: Straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.

3.3 Competent Person: An individual who is capable of identifying existing and potential hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

3.4 Deceleration Distance: The additional vertical distance a falling employee travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate.

3.5. Fixed Ladder: A ladder with rails or individual rungs that is permanently attached to a structure, building, or equipment.

3.6. Free Fall Distance: The vertical displacement of the fall arrest attachment point(s) on the employee's body harness between the onset of the fall and just before the system begins to apply force to arrest the fall.

3.7 Hole: A gap or open space in a floor, roof, horizontal walking-working surface, or similar surface that is at least 2 inches (5 cm) in its least dimension.

3.8. Guardrail System: A barrier erected along an unprotected or exposed side, edge, or other area of a walking-working surface to prevent employees from falling to

a lower level.

3.9. Mobile Ladder: A mobile, fixed-height, self-supporting ladder that usually consists of wheels or casters on a rigid base and steps leading to a top step. A mobile ladder stand also may have handrails and is designed for use by one employee at a time.

3.10. Personal Fall Arrest System: A system used to arrest an employee in a fall from Walking- Working Surface. It consists of a body harness, anchorage, and connector. The means of connection may include a lanyard, deceleration device, lifeline, or a suitable combination of these.

3.11. Personal Fall Protection System: A system, including all components, used to provide protection from falling or to safely arrest an employee's fall if one occurs.

3.12. Portable Ladder: A ladder that can readily be moved or carried, and usually consists of side rails joined at intervals by steps, rungs, or cleats.

3.13. Qualified Engineer: An Engineer with a recognized degree or professional certificate who is capable of design, analysis, evaluation and specifications in the subject work, project or product.

3.14. Self-Retracting Lifeline/Lanyard: A deceleration device containing a drum-wound line that can be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.

3.15. Stairway: The use of risers and treads to connect one level with another, and includes any landings and platforms in between those levels.

3.16. Suspended Personnel Platform: Any platform supported by a crane for the purpose of lifting personnel.

3.17. Unprotected Side or Edge: Any side or edge of a walking-working surface (except at entrances and other points of access) where there is no wall, guardrail system, or stair rail system to protect an employee from falling to a lower level.

3.18. Walking Working Surface: Any horizontal or vertical surface on or through which an employee walks, works, or gains access to a work area or workplace location.

4.0 RESPONSIBILITIES

It is the responsibility of the plant manager, or their designee, to fully implement this policy to their site. Further, it is the responsibility of each plant manager, or their designee, to develop and implement site-specific procedures to comply with this policy. The plant manager, or their designee, will be responsible to assure that the site personnel have been trained in the procedures developed and that all required documentation is completed and maintained.

5.0 PROCEDURE

5.1 General

5.1.1 Walking-Working Surfaces shall be evaluated to identify hazards and controls to protect employees.

5.1.2 The three acceptable options to mitigate hazards to employees shall be **employed in the following order:**

- Eliminate the hazard through engineering controls such as installing a permanent platform in lieu of using a portable ladder;
- Application of Administrative Controls such as policies and procedures; or,
- Providing protection through administrative controls such as Personal Protective Equipment.

5.2 Walking Working Surface Conditions

5.2.1 Each unit shall maintain the condition of Walking-Working Surfaces as follows, at a minimum:

- Clean, orderly, and sanitary;
- Dry with adequate drainage, as applicable; and,
- Free of hazards such as sharp or protruding objects, loose boards, corrosion, leaks, spills, snow and ice.

5.2.2 Walking-Working Surface shall be designed to support the maximum intended load for the surface.

5.2.3 Each unit shall ensure each employee uses a safe means of access and egress to and from Walking-Working Surfaces.

5.3 Walking Working Surface Inspections:

5.3.1 The area superintendent for each unit shall be responsible for ensuring a documented inspection shall be performed on all Walking-Working Surfaces at least annually to ensure they are maintained in a safe condition. See attachment #1 of this procedure for the WWS inspection checklist.

5.3.2 Hazardous conditions on Walking-Working Surfaces should be corrected and/or repaired before an employee uses the walking-working surface again. If the correction or repair cannot be made immediately, the hazard must be guarded to prevent employees from using the Walking-Working Surface until the hazard is corrected and/or repaired.

5.4 Guardrail Systems

5.4.1 Guardrail system shall be the primary method used to protect employees from fall hazards.

5.4.2 All guardrail systems shall meet the requirements as outlined in 29 CFR 1910.29(b).

5.4.3 Guardrail systems shall be smooth surfaced to prevent injury from punctures or lacerations, and to prevent snagging of clothing.

5.4.4 If the guardrail system is terminated for the egress opening of a fixed ladder, an OSHA approved pre-fabricated self-closing swinging gate shall be installed in the opening to continue the guardrail system protection.

5.4.5 Wire rope and/or chain shall not be used as part of a guardrail system.

5.5 Stairways

5.5.1 All stairways shall meet the requirements as outlined in 29 CFR 1910.25.

5.5.2 Stair rail systems that meet the requirements as outlined in 29 CFR 1910.29(b) shall be provided on all stairways with at least two treads.

5.5.3 Three-point contact shall be used at all times while ascending and/or descending stairs.

5.6 Ladders (Note: See procedure 105 Ladders for full inspection requirements and check lists)

5.6.1 Ladders shall be used per the guideline of the Geismar HSE policy HSE 105 Ladder procedure.

5.7 Scaffolds (Note: See Geismar scaffolding procedure 104 for detail on inspection requirements)

5.7.1 Scaffolds shall be used per the guidelines of the Geismar HSE policy HSE 104 Scaffold procedure, and corporate HSE policy HSE 71.011: Scaffolds.

5.8 Step Bolts and Manhole Steps

5.8.1 All step Bolts and manhole steps shall meet the requirements as outlined in 29 CFR 1910.24.

5.8.2 Each step bolt installed on or after January 17, 2017 where corrosive environment exist will be constructed or coated with material that protects against corrosion.

5.8.3 Each step bolt is designed, constructed, and maintained to prevent employee's foot from slipping off the end of the step bolt.

5.8.4 Step bolts are uniformly spaced at a vertical distance of not less than 12 inches and not more than 18 inches apart, measured center to center.

5.9 Fall Protection (Note: see fall protection procedure 406 for more detail on inspection)

5.9.1 Fall protection shall be used per the guidelines of the Geismar HSE policy HSE 406 Fall Protection

5.10 Working with Aerial Platform Lift or Suspended Work Platforms

5.10.1 All work from Arial Platform Lifts or Suspended Work Platforms shall be performed per the requirements of Geismar HSE procedure 511, Mobile Equipment in conjunction with the requirements set forth in this procedure.

5.11 Working with Railcars

5.11.1 Each employee that is required to work on top of a railcar shall be protected from falling by an approved Guard Rail System or Personal Fall Arrest System as outlined in this policy.

5.11.2 Employees working on top of railcars shall not traverse from the top of one railcar to another adjoining car regardless of the use of Personal Fall Arrest System.

5.11.3 When employees are working on top of railcars, a derail flag shall be in-place and blue flag displayed to alert others of the railcar work.

5.12 Floor Openings and Holes

5.12.1 Every Hole shall be guarded by a cover. While the cover is not in place, the hole opening shall be constantly attended by someone or shall be identified and protected by a hard barricade.

5.12.2 Every floor opening that is four feet (4') or more above a lower level that an employee can accidentally walk into shall be guarded by either a Guardrail System or a cover of standard strength and construction.

5.12.3 Hole covers located in facility roadways shall be designed to maintain a minimum load of 20,000 pounds.

5.12.4 All floor opening or Hole covers must be secured to prevent the hole cover from being inadvertently moved and shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard to employees.

6.0 TRAINING

6.1 Annual training for all employees assigned to plant operating areas will be completed. Documentation will be maintained by the HSE Department.

6.2 Contractors will be orientated regarding Walking Working Surfaces through the Site-Specific training at the safety council.

6.3 Retraining will be conducted whenever a periodic inspection reveals that employees are not fully aware of, or are not following established procedures, or if regulatory requirements change.

7.0 RECORDKEEPING

7.1 All required formal inspection reports shall be retained by each site for a minimum of one year.

7.2 Each site shall perform a documented review of their written programs regarding working form elevated heights every three (3) years, at a minimum.

8.0 PROCEDURE REVIEWS

8.1 This procedure will be reviewed at least every three years, at a minimum, to ensure compliance objectives are being set per regulatory and industry standard.

9.0 REFERENCES

9.1 Geismar Procedure 104 Scaffolding
9.2 Geismar Procedure 105 ladders
9.3 Geismar Procedure 406 Fall Protection
9.4 Geismar Procedure 511 Mobile Equipment
9.5 29 CFR 1910 subpart D; Walking-Working Surfaces
9.6 29 CFR 1910.140; Personal Fall Protection Systems
9.7 29 CFR 1910.23(c) Fall Protection in General Industry
9.8 29 CFR 1910.23(d) Fixed Ladders
9.9 29 CFR 1910.23(e) Mobile Ladder Stands and Platforms
9.10 29 CFR 1910.24 Step bolts and Manhole Steps
9.11 29 CFR 1910.25. Stairways
9.12 29 CFR 1910 29(b) Guardrail Systems
9.13 Corporate HSE Policy HSE 71.009 Mobile Equipment
9.14 Corporate HSE Policy HSE 71.006 Walking Working Surfaces
9.15 ANSI/ASSP Z359: Fall Protection and Fall Restraint Standards.
9.16 ANSI-ASC A14.5: Ladders – Portable Reinforced Plastic.

10.0 APPENDICES

10.1 Walking Working Surface Annual Inspection Check Sheet

Revision History

Rev	Changes	Approved	Date
0	*New Procedure*	S. Lansing	5/25/2023

Attachment 1

WALKING WORKING SURFACES ANNUAL INSPECTION

Date of Inspection:_____ Name of Inspector:_____

Department:_____ Area:_____

Inspection Team:_____

_____

QUESTION	Compliant (Y/N)	Non-Compliant (Y/N	Comments/WO's/ Actions
I. General			
a. All ladders and walking working surfaces shall be maintained free of hazards such as sharp or proturding objects, loose boards, corrosion, leaks, spills and ice.			
b. Hazardous conditions on walking-working surfaces shall be corrected or repaired before employees use the walking-working surface. If the correction or repair cannot be made immediately the hazard shall be guarded to prevent employees from using the walking-working surface until the hazard is corrected or repaired.			
c. Any ladder with structural or other defects shall be tagged out of service			
d. Personnel are not allowed to carry any object or load that could cause loss of balance and/or fall.			
e. Swing gates shall be installed where there is access to ladder ways.			
f. Extension and step ladders shall be made of fiberglass. Aluminum and wood ladders are prohibited.			
g. Only one person is allowed on a fixed or portable ladder at a time. Two people can use a portable ladder at the same time if so designed.			
h. Where the fall hazard is less than four (4) feet, but above or adjacent to dangerous equipment, materials or operations, a fall protection system shall be provided.			

QUESTION	Compliant (Y/N)	Non-Compliant (Y/N)	Comments/WO's/ Actions
II. Portable Ladders			
a. If performing work off of ladders at heights of four feet or greater, the fall porotection requirements of Safety Standard III-3 (fall Protection) shall be			
b. Extension and portable ladders shall be inspected Semi-annually			
III. Single and Extension Straight Ladders			
a. Ladders shall b securely held or tied off while working on			
b. Ladder shall extend at least three feet above a roof level, pipeline, I-beam, etc. when exit is to be made from the ladder.			
c. Ladders should be kept clean of grease, oils and dirt that may conceal defects or cause it to be slippery.			
d. Ladders that are defective should not be used. If defective, it shall be taken out of service and tagged or marked so it can be repaired or destroyed.			
e. Always face the ladder when ascending or descending the ladder.			
f. Always use both hands on the ladder when ascending or descending the ladder.			
g. After eachuse of a ladder, clean, inspect and properly store it away. If defects are noted, promptly remove it from service for appropriate disposition.			
h. Portable ladders must be inspected before each use and formally inspected once a year. Always inspect a ladder prior to use for loosened, weakened or damaged side rails, rungs, feet, pulley ropes, catch latches, etc..			
i. Do not use the ladder f there is evidence of damage until it has been properly inspected and tested			
j. Ladders should never be set on top of unstable objects such as tables, boards, barrels, etc.			
k. Stepladders should never be used as straight ladders.			

QUESTION	Compliant (Y/N)	Non-Compliant (Y/N)	Comments/WO's/ Actions
l. Stepladders should never be set on top of boxes, barrels or other unstable bases to obtain additional height.			
m. Oil, grease, dirt, etc., should be cleaned from stepladder prior to usage.			
n. Stepladders should always be promptly stored when not being used.			
o. Stepladders should be inpsected before and after use. Damaged or defective ladders should be tagged and removed from service.			
IV. Fixed Ladders			
a. The minimum perpendicular distance from the centerline of the steps, rungs or grab bars or both, to the back of the ladder is 7 inches, except for elevator pit ladders, which have a perpendicular distance of 4.5 inches.			
the climbing side beyond the rungs of the ladder that they serve.			
c. Electric power cords, air hoses or tag lines, welding, oxygen, acetylene lines, ets., shall not be routed inside the ladder cage wells.			
V. Fall Protection and Falling Object Protection			
a. Each walking-working surface with an unprotected side or edge that is 4 feet or more above a lower level is protected from falling by one or more of the following: Guardrail system-safety net system-Personal fall protection system such as fall arrest, travel restraint or positioning system.			
b. If personnel are exposed to falling objects, one or more of the following shall be implanted: Erecting toe boards, screens or guardrail systems- Erecting canopy sturctures- Barricading the area. Keep objects far from edge or opening ot prevent from falling.			

QUESTION	Compliant (Y/N)	Non-Compliant (Y/N)	Comments/WO's/ Actions
c. Each employee in a hoist area shall be protected from falling 4 feet or more to a lower level by using one or more of the following: cover-Guardrail Systems-Travel restraint systems-Personal fall arrest system.			
d. All holes less than 4 feet from a lower level shall be covered or guardrails installed to prevent someone from tripping into or thru the hole.			
VI. Barriers and Varricades			
a. Red barricade tape shall be put up to include but not limited to : Swing radius of crane counterweightr. Where work is conducted overhead where falling objects could injure personnel walking in the area. When scafflods are under constructio. Lift area when lifting equipment with a crane such as personnel basket, pipe etc. WHen required by operatiors of equipment.			
b. Yellow barricade tape shall be put up to include but not limited to: Around areas where there are trip hazards. When required by operators or employees conducting work.			
c. Hard barricades shall be erected to include bt not limited to: Excavations, open holes in floors, When deemed necessary by operations or employees conducting work.			
d. Cones shall be used for the following: Swing radius of counter weight on personnel baskets such as JLG's.			
e. All holes, floor, roof and other openings on walking-working surfaces shall be covered to prevent vehicles and/or personnel from balling through the opening. The cover shall meet the following requirements: Covers on raodways ..			

QUESTION	Compliant (Y/N)	Non-Compliant (Y/N)	Comments/WO's/ Actions
e. (Cont') and where vehicles will travel shall be capable of supporting, without failure, at least twice the maximum axle load of the largest vehicle expected to cross over the cover.			
VII. Grating			
a. Is grating in good condition and secured?			