

<i>E&B Oilfield Services Inc.</i>	Activity: ALL WORK Fall protection / Ladders		Doc No:	HAZ-ID
			Initial Issue Date	4/1/2015
			Revision Date:	4/1/2016
HAZARD IDENTIFICATION AND ASSESSMENT			Revision No.	1
			Next Revision Date:	4/1/2017
Preparation: Jessica Lee	Authority: Danny Abegglen	Issuing Dept: Safety	Page:	1 of 4

Purpose

- **Fall protection / Ladders**

Key Responsibilities

- Employers must set up the work place to prevent employees from falling off of overhead platforms, elevated work stations or into holes in the floor and walls.
- E&B Management will provide task appropriate fall protection to all employees who will be needing it
- Supervisors / Leads are required to ensure all employees have appropriate fall protection training
- E&B Employees are required to have fall protection when needed for the job.
- Ladders should be maintained on a regular basis

Hazard and Risk Identification

Employees MAY be exposed to dangerous height levels or dangers with ladders during (but is not limited) to the following activities:

- Reclamation Work
- Roustabout Work
- Rig Work
- Shop Work
- Construction
- Pumper's



Risk Assessment

Hazards are classified and ranked based on severity. The program identifies hazards are classified/prioritized and addressed based on the risk associated with the task. (See the risk analysis matrix outlining severity and probability).

Falls are a persistent hazard found in all occupational settings. A fall can occur during the simple acts of walking or climbing a ladder to change a light fixture or as a result of a complex series of events affecting an ironworker 80

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feet above the ground. According to the 2009 data from the Bureau of Labor Statistics, 605 workers were killed and an estimated 212,760 workers were seriously injured by falls to the same or lower level.

E&B OILFIELD SERVICES INC. RISK ASSESSMENT MATRIX – FALL PROTECTION / LADDERS

Severity	CONSEQUENCE				PROBABILITY				
	People	Assets	Environment	Reputation	A	B	C	D	E
					Not Done	Rarely	Once a week	Several Times in a Week	Multiple Times in a Day
0	No health effect	No damage	No effect	No impact					X
1	Slight health effect	Slight damage	Slight effect	Slight impact		X			
2	Minor health effect	Minor damage	Minor effect	Limited impact		X			
3	Major health effect	Localized damage	Localized effect	Considerable impact		X			
4	Single fatality	Major damage	Major effect	National impact	X				
5	Multiple fatalities	Extensive damage	Massive effect	Global impact	X				

Key	Manage for continuous improvement (Low)	Incorporate risk reduction measures (Medium)	Intolerable (High)
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Risk Controls/Methods to Ensure Identified Hazards Are Addressed and Mitigated

The following describes how identified hazards are addressed and mitigated:

- Guard every floor hole into which a worker can accidentally walk (using a railing and toe-board or a floor hole cover).
- Provide a guard rail and toe-board around every elevated open sided platform, floor or runway.
- Regardless of height, if a worker can fall into or onto dangerous machines or equipment (such as a vat or acid or a conveyor belt) employers must provide guardrails and toe-boards to prevent workers from falling and getting injured.
- Other means of fall protection that may be required on certain jobs include safety and harness and line, safety nets, stair railings and hand rails.
- Provide working conditions that are free of known dangers.
- Keep floors in work areas in a clean and, so far as possible, a dry condition.
- Select and provide required personal protective equipment at no cost to workers.
- Train workers about job hazards in a language that they can understand.
- Ladders

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- First, fall protection is not required for portable ladder use in either General Industry or Construction work. Workers should not be tying off to ladders or other objects nearby. Fixed ladders are different because they may or may not have cages or ladder safety devices.
- Housekeeping
 - High traffic areas should be kept free from tools, materials, debris, spilled or leaked liquids. These items can contribute to slips and trips on the same level. OSHA's 1910.22(a) requires a facility to be kept clean, orderly and as dry as possible.
 - For work on a level surface that could pose a slip hazard, you can install slip-resistant floors. Options to increase slip-resistance include materials such as textured, serrated or punched surfaces and steel or metal grating. These types of floor surfaces often can be installed in work areas that are slippery because of wet, oily or dirty operations. Another option is to provide slip-resistant footwear, which also may be useful in reducing slipping hazards.
- Guard rails and Hand rails
 - Falls from an elevation involve falling from one level to another. Examples include falling from a scaffold to the ground below. There are several types of fall prevention systems you can use to stop a fall from an elevated surface:
 - A guardrail is a vertical barrier, normally consisting of an assembly of top rails, mid rails and posts, erected to prevent employees from falling to lower levels. A toe board is a barrier placed to prevent the fall of materials to a lower level, or to keep employees' feet from slipping over an edge. Falling objects also can be hazards, especially tools dropped or kicked from scaffolds or work platforms such as scissor or aerial lifts. A standard railing consists of a top rail, intermediate rail and posts, and has a vertical height of 42 inches from the upper surface of the top rail to floor, platform, and runway or ramp level.
 - The top rail must be smooth-surfaced throughout the length of the railing. There must be an intermediate railing approximately halfway between the top rail and the floor.
 - A standard toe board needs to be 4 inches in vertical height from its top edge to the level of the floor, platform, runway or ramp. It has to be securely fastened in place and with not more than ¼-inch clearance above floor level. The toe board can be made of any substantial material that either is solid or has openings 1 inch or less in size.
 - A handrail is used to assist employees going up or down stairways, ramps or other walking/working surfaces by providing a handhold for support. A stair rail protects employees from falling over the edge of an open-sided stairway. A handrail is mounted directly on a wall or partition by brackets attached to the lower side of the handrail. The height of handrails must be between 30-34 inches from the upper surface of handrail to the surface of stair tread.

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- Personal Fall Arrest Equipment
 - Sometimes fall prevention systems can't be used. In these cases, employers must provide workers with fall protection equipment. These systems often consist of lanyards, harnesses and anchoring devices that may not prevent the fall, but reduce the chance of serious injury or even death if a worker does fall.
 - However, personal fall protection equipment is not adequately addressed in OSHA's General Industry (1910) standards. General Industry employers can consult the Construction standard 1926 Subpart M for fall protection information. But remember, the kind of personal fall protection or arrest system used should match a particular work situation.

JSA Sample

The following describes how identified hazards are addressed and mitigated:

Basic Job Step	Potential Injury or Hazards	Mitigation / Tools
Constructing tank batteries	Falls	Three points contact when climbing, harness

Other Info

