

Procedure Title:	Manual Lifting	SOP Number:	SOP-100-03-PR-027
Procedure Owner:	Corporate HSE	Issuing Authority:	Chief Safety Officer

MANUAL LIFTING

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1.0 PURPOSE

The purpose of this procedure is to establish the minimum requirements for Manual Lifting for STIS DBA Southeast Texas Industrial Services.

2.0 SCOPE

This procedure applies to all HenSu Holdings employees, contractors, subcontractors and visitors associated with an HenSu Holdings site.

3.0 RESPONSIBILITIES

The following personnel have responsibilities defined in this procedure:

- HenSu Holdings Managers
- HenSu Holdings Supervisors
- HenSu Holdings Employees
- HenSu Holdings Contractors
- HenSu Holdings Subcontractors
- HenSu Holdings Visitors

4.0 PROCEDURE

Each site shall make every attempt to prevent the possibility of incidents and accidents to employees while performing work activities involving manual lifting through compliance with safety regulations, training of employees to properly perform their job activities and through employee involvement in safe work activities.

4.1 General Requirements

- 4.1.1 Prior to performing a manual lift, a hazard assessment shall be completed.
- 4.1.2 Loads that exceed fifty (50) pounds shall require employees to team lift.
- 4.1.3 All injuries shall be investigated and the findings incorporated into work procedures to avoid future injuries.
- 4.1.4 Supervision shall periodically evaluate current work station configurations and employees' work techniques to assess the potential for and prevention of injuries.

4.2 SAFE MANUAL LIFTING TECHNIQUES

- 4.2.1 Workers shall face the load they are trying to lift.
- 4.2.2 The center of gravity shall be determined in order to keep the load balanced.
- 4.2.3 The knees shall be bent with the feet approximately shoulder's width apart, and one foot slightly ahead of the other.
- 4.2.4 The load shall be grasped and control gained before attempting the lift.
- 4.2.5 Care should be taken to watch out for nails or other protrusions that could cause cuts or other types of injuries.
- 4.2.6 The load shall be kept close to the body.
- 4.2.7 The lift shall occur gradually, with most of the force being exerted from the legs, not the back.
- 4.2.8 The load shall not be jerked on or pulled quickly.
- 4.2.9 The path to be taken shall be free of obstructions or slipping hazards.

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4.2.10 Employees shall know their lifting ability and get help with heavy or awkward loads.

4.2.11 When setting a load down, care shall be taken to watch for pinch points.

4.2.12 To put the load down, the steps shall be reversed, lowering with the legs, placing the feet in the proper position and keeping the load close to the body.

4.3 TEAM MANUAL LIFTING TECHNIQUES

4.3.1 Team lifting shall be used when a load is too heavy (exceeding fifty (50) pounds, too bulky, or too long to be moved by one person. Team lifting requires two (2) or more individuals moving a load together.

4.3.1.1 One person gives the orders to lift, turn, and set down. Everyone shall lift and move together. Each lifter shall understand what to do before beginning.

4.3.1.2 Loads shall be lifted and lowered in the same manner. Each lifter shall squat down close to the load, get a firm grip, keep their back straight, and lift slowly using leg power. For setting down, the procedure shall be reversed. Care shall be taken to keep fingers and hands from being caught beneath the load.

4.3.1.3 The load shall be carried without sudden starts or stops. Employees shall move slowly and watch where they step.

4.3.1.4 Stairs shall be avoided whenever possible. An elevator or hoist shall be used to move loads to different floor levels.

4.3.1.5 The load shall be kept level and the weight evenly distributed. Special care shall be taken when going up and down inclines.

4.3.2 When two (2) employees are carrying long, rigid loads, they shall be carried on the same shoulder, and walking in step. However, walking out of step will keep flexible objects from bouncing.

4.3.3 Walking backwards shall be avoided, if possible. If it is necessary to walk backwards, the path shall be clear and someone shall guide the employee.

4.3.4 Things to **avoid** when carrying a load:

4.3.4.1 Twisting the body when lifting or carrying.

4.3.4.2 Lifting from one (1) knee.

4.3.4.3 Changing the grip while holding a load.

4.3.4.4 Stepping over objects when moving.

4.4 LIFTING EQUIPMENT

4.4.1 Manual and powered lifting equipment shall be made available to eliminate as much manual lifting as possible.

4.4.2 The use of dollies or handcarts to transport loads help avoid overexertion injuries. However, this method has its own hazards. Safe lifting techniques shall be used when loading a dolly or hand truck. These steps should be followed to prevent injury:

4.4.2.1 A dolly or handcart should be chosen that is the right size and shape for the object(s) that are being carried.

4.4.2.2 The heaviest objects shall be placed on the bottom.

4.4.2.3 The load shall be positioned over the cart's axles so that the truck, not the handles carry the weight.

4.4.2.4 Bulky, irregular, or fragile items shall be secured to the cart.

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4.4.3 While using a dolly or handcart all possible hazards shall be avoided that may be in the way. To do this, employees shall:

4.4.3.1 Ensure the path is clear

4.4.3.2 Look where they are going.

4.4.3.3 Ensure they can see over the load. If impossible to see over the load, the employee shall refer to team lifting.

4.4.3.4 Avoid pulling the load.

4.4.3.5 Move slowly and cautiously.

4.4.3.6 Avoid walking backwards.

4.4.3.7 Be especially alert to edges of platforms and docks.

4.4.3.8 Watch out for objects on the floor or obstructions in the way.

4.4.3.9 Avoid pedestrians and vehicles.

4.4.3.10 Keep the load ahead of them when going downhill.

4.4.4 Rope and strapping are most commonly used to secure the load to the cart or dolly. Some simple precautions to make work easier and safer are:

4.4.4.1 Rope shall be in good condition before using it. It shall be inspected and tested by pulling on it.

4.4.4.2 The rope shall be kept away from corrosives like acid.

4.4.4.3 To avoid the sharp edges of strapping, gloves shall be worn.

4.4.4.4 Loose strap ends shall be cut off with cutters.

4.4.4.5 The strapping shall be taut around the objects.

4.4.4.6 Loads shall not be lifted by the strap unless it's designed for that purpose.

4.5 Training

4.5.1 All employees shall be trained on proper lifting techniques and the avoidance of musculoskeletal injuries.

4.5.2 Employee's training records shall be maintained on the HenSu One data base.

5.0 REFERENCES

None

6.0 TERMINOLOGY

Site	Any location where HenSu Holdings personnel are involved in work activities.
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7.0 EXHIBITS

None