

**Operational Risk Management Worksheet**

**ATTACHMENT 5**

Operation: Plan Exhibit of very large and heavy collections

Date of Operation: 7/10/2006

Worksheet developed by: Safety Coordinator's name

Operation Description: An exhibit is scheduled that includes canvases that are 12' x 18' and other large sizes coated in massive amount of lead so they weigh hundreds of pounds, and one sculptural piece that weighs 10,000 lb.

Step 1 Identify Hazard	Step 2 Assess Hazard	Step 3 Develop Controls	Residual Risk	Step 4 How/Who to Implement	Step 5 Supervise/Evaluate
Lifting heavy objects causes back injury or other body trauma	RAC 2	Back injury prevention training; sufficient weight handling equipment; sufficient personnel to share load.	RAC 3	Purchase, rent or borrow WHE. Contract movers; SC arranges for training;	Director or designate/SC note if effective, other possible countermeasures
Dropped heavy objects could cause foot injury	RAC 3	Safety Shoes; safety awareness training	RAC 4	Supervisors ensure personnel have and wear safety shoes; use contracted workers	SC/supervisor enforce PPE
Sharp objects or wood splinters on crates could cause hand injury	RAC 3	Leather gloves to prevent splinters, cuts	RAC 4	Supervisors ensure personnel have and wear gloves; use contracted workers	SC/supervisor enforce PPE
Weight exceeds forklift capacity	RAC 2	In planning stage determine weight/lift/space requirements. Limit exhibit to meet present capacities, or contract for necessary equipment	RAC 4	Director determines limitations and resource capabilities and assigns personnel capable of determining weight and size restrictions.	Director or designate/SC note if effective, other possible countermeasures
Weight exceeds elevator capacity	RAC 2	In planning stage determine weight/lift/space requirements (see 8 above)	RAC 4	Same as 8 above	Same as 8 above
Pieces are too large to fit in the elevator	RAC 2	In planning stage determine weight/lift/space requirements (see 8 above)	RAC 4	Same as 8 above	Same as 8 above
Mounting challenges to prevent pieces from falling from wall	RAC 1	In planning stage determine weight/lift/space/mounting requirements; check with previous museum showing exhibit for lessons learned	RAC 3	Employees are trained and provided necessary equipment to install safely	Supervisor/SC insures safe installation operations
Unbalanced pieces could topple	RAC 1	Same as 11 above	RAC 3	Same as 11 above	Same as 11 above
Insufficient space for full exhibit and visitor viewing space	RAC 2	Thorough planning and involvement of OSHM fire and safety personnel to insure sufficient space for exhibit, employees and visitors	RAC 4	Exhibit planners use scale drawings and coordinate with OSHM	Supervisor/SC insures safe installation operations
Sharp protrusions could injure visitors	RAC 2	Same as 13 above	RAC 4	Same as 13 above	Same as 13 above
Exposure to lead dust	RAC 2	Coordinate with qualified OSHM personnel to evaluate exposure hazard.	RAC 4	Once provided factual exposure hazard assessments, Director determines exhibit limitations.	Same as 13 above

Highest residual risk level: LOW (MEDIUM) HIGH EXTREMELY HIGH Accepted by:

Date: