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DEPARTMENT OF PUBLIC SAFETY DIVISION OF FIRE SAFETY

MEMORANDUM 006

A17.1 Section 8.6.5.5 Gland Packing and Seals

Date June 17, 2020

To: Elevator Companies, Contractors, Inspectors, and Mechanics.

From: Gus Guadamuz, Deputy Chief Elevator Inspector

The Collection of Oil leakage for Hydraulic Elevators has come into question. In order to clarify the requirements please note the following information below. The purpose of Section 8.6.5.5 is to ensure the safe operation of the hydraulic system, specifically the gland packing and seals. The use of oil recovery systems to return the hydraulic fluid back into the main reservoir by automatic means or by gravity feed prevents proper monitoring of the gland packing and seals. Leakage is to be maintained, monitored and logged per Section 8.6.5.7.

- **8.6.5.5.1 Examination and Maintenance**. Where pressure piping, valves, and cylinders use packing glands or seals, they shall be examined and maintained to prevent excessive loss of fluid. When a cylinder or seal or pressure-piping is replaced, the integrity of the entire hydraulic system shall be verified by operating it at relief-valve pressure for not less than 15 s.
- **8.6.5.5.2 Oil Leakage Collection**. Oil leakage collected from the cylinder packing gland shall not exceed (5 gal) before removal. The container shall be covered and shall not be permitted to overflow.
- **8.6.5.7 Record of Oil Usage**. For systems where the part of cylinder and/or piping is not exposed for visible inspection, a written record shall be kept of the quantity of hydraulic fluid added to the system and emptied from leakage collection containers and pans. The written record shall be kept in the machine room. When the quantity of hydraulic fluid loss cannot be accounted for, the test specified in 8.11.3.2.1 and 8.11.3.2.2 shall be made.

To be clear the use of oil recovery systems may be considered for use as a temporary means of collecting excessive oil leakage until repairs or replacement are made to correct the condition. Overflow prevention of the pit can should be controlled by continual maintenance and monitoring of the oil leakage. Furthermore machine rooms cannot be used as containment areas.

Gus Guadamuz Deputy Chief Elevator Inspector