# Guidelines for incidents involving fire, flood or other significant exposure to water, vandalism, impact or lightning strike defined by O.Reg 36.(3)

## 1.0 Issue:

The following interpretation, policy, and procedures are intended to provide clarity and consistency in regards to:

- The appropriate level of sign off received from the contractor on repairs and replacement of affected component.
- Incident reporting requirements, and
- TSSA standard order text as a result of an incident defined in section 36.(3)

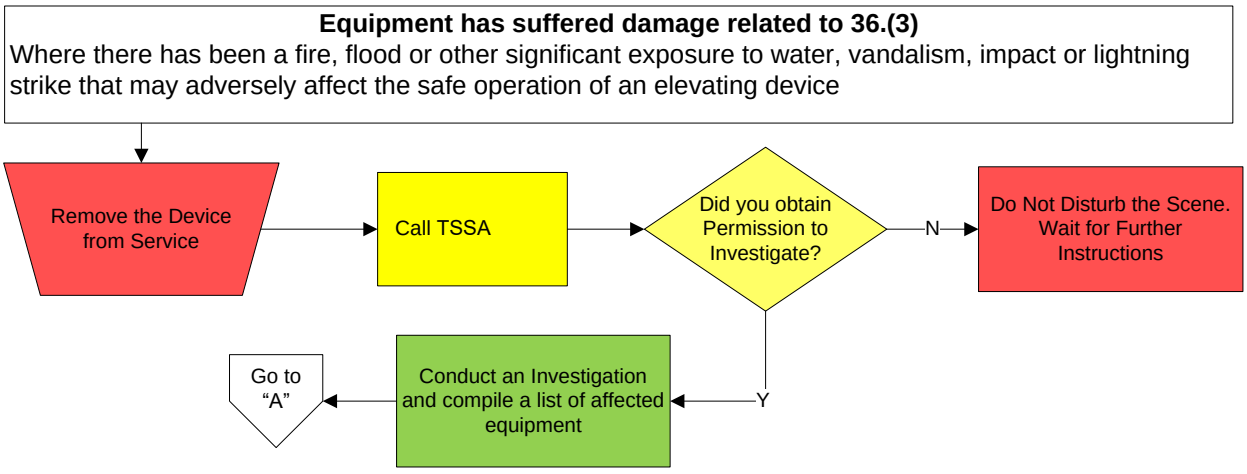
## 2.0 Incident Reporting Requirement from 36.(3):

36.(3) Where there has been a fire, flood or other significant exposure to water, vandalism, impact or lightning strike that may adversely affect the safe operation of an elevating device, the owner and the contractor maintaining the device shall,

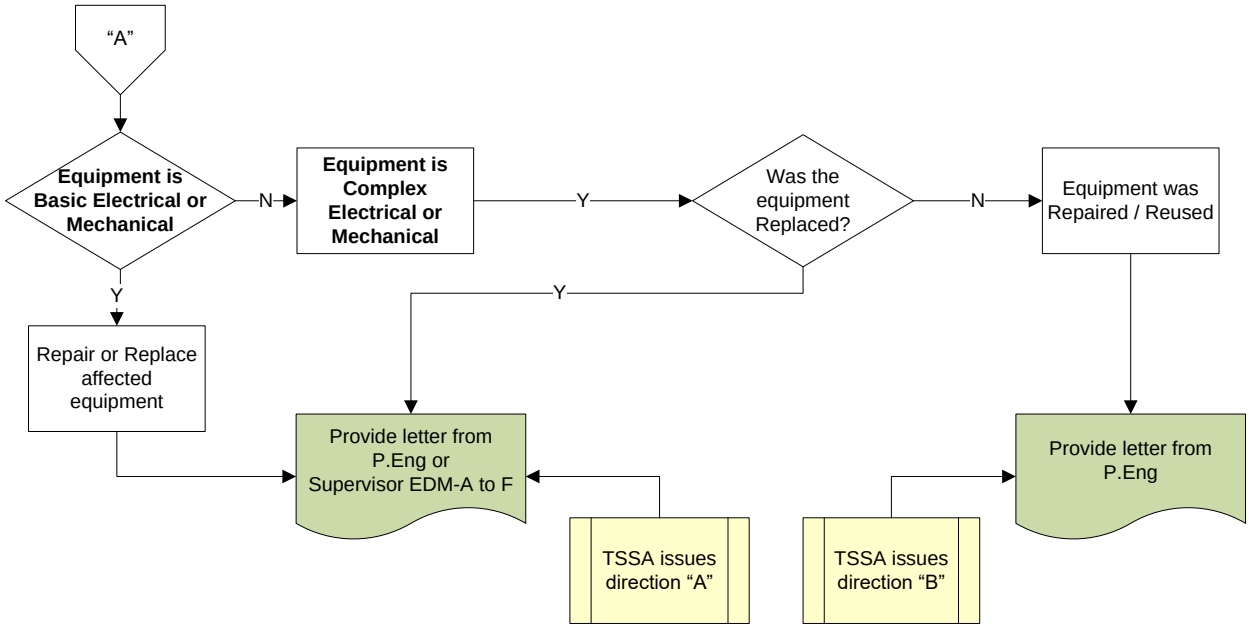
(a) notify the director by telephone or other means within 24 hours of first becoming aware of the condition that may adversely affect the safe operation of the device;

(b) each submit to the director, in the form provided by the designated administrative authority, a written report giving full particulars within seven days of first becoming aware of the condition. O. Reg. 252/08, s. 21.

## 3.0 Reporting and Return to Service Workflow Diagram:



# Guidelines for incidents involving fire, flood or other significant exposure to water, vandalism, impact or lightning strike defined by O.Reg 36.(3)




## TSSA Order Text 'A'

*Pursuant to section 21 of the Technical Standards and Safety Act, 2000, the maintaining contractor shall provide written confirmation by a Professional Engineer, or Supervisor who holds an EDM-F or greater designation that the listed equipment exposed to an incident described by 36.(3) of the Elevating Devices Regulation 209/01, has been replaced or otherwise maintained and attests that the safety of the device has been restored as related to the incident and any affected components as per section 18.(1)(b) of the Technical Standard and Safety Act, 2000.*

## TSSA Order Text 'B'

*Pursuant to section 21 of the Technical Standards and Safety Act, 2000, the maintaining contractor shall provide written confirmation by a Professional Engineer that the listed equipment exposed to an incident described by 36. (3) of the Elevating Devices Regulation 209/01, has been repaired or otherwise maintained and attests that the safety of the device has been restored as related to the incident and any affected components as per section 18.(1)(b) of the Technical Standard and Safety Act, 2000.*

## Guideline for BASIC versus COMPLEX Equipment

## Guidelines for incidents involving fire, flood or other significant exposure to water, vandalism, impact or lightning strike defined by O.Reg 36.(3)

| BASIC equipment includes by not limited to | |
|---|---|
| **MECHANICAL equipment** | **ELECTRICAL equipment** |
| • Oil buffers if water has contaminated the oil<br>• Idler sheaves<br>• Landing door sills, rails, brackets, and tracks<br>• Landing and car door interlocks or lock and contacts<br>• Compensation, suspension, and governor rope systems<br>• Car and counterweight safeties<br>• Escalator and moving walk step, or pallet drives, or chains<br>• Escalator and moving walk handrail drives, or chains<br>• Escalator and moving walk step or pallet, wheel, and bearings | • Rubberized travelling cable with a repaired section exposed to water<br>• Any wiring, lighting, fire alarm initiating devices, or receptacles located in the pit<br>• Simple mechanically actuated electrical protective switches (governor tension switch, pit switch) |

| COMPLEX equipment includes by not limited to | |
|---|---|
| **MECHANICAL equipment** | **ELECTRICAL equipment** |
| • Machines, generators, rectifiers, transformers<br>• Traction sheaves<br>• Cylinder plunger device<br>• Service, or emergency brakes | • Controllers<br>• Any component that contains a circuit board<br>• Any relay type enclosed or not<br>• Any position or levelling type device<br>• Traveling cable if of the cloth type |

### 4.0 NOTIFICATIONS Requirements in order to comply with the Regulations

The contractor must call within 24 hours in both basic and complex equipment exposure. We may elect to complete an investigation upon receipt of the call.

## Guidelines for incidents involving fire, flood or other significant exposure to water, vandalism, impact or lightning strike defined by O.Reg 36.(3)

For Basic equipment exposure to damage, the contractor must have the letter of attestation with a list of the affected equipment from a professional engineer, or a supervisor with an EDM-F, or greater prior to requesting to return the device to service. The TSSA incident report shall also be submitted within 7 days, but we may permit the device to operate with an Inspection Supervisors* permission, or we may elect to inspect prior to returning the device to service.

For Complex equipment exposure to damage that was repaired, or reused, the contractor must have the letter of attestation from a professional engineer with a list of the affected equipment prior to requesting to return the device to service. The TSSA incident report shall also be submitted within 7 days, or prior to requesting to returning the device to service.

In any case, the signed document attesting that the safety of the device has been restored, must be received and approved by an Inspection Supervisor prior to returning the device to service.

It should be remembered that at any time TSSA may elect to dispatch an inspector to conduct an investigation, as the director considers necessary under the circumstances. However, typically incidents resulting in floods can be resolved through the collection of documentation, and an inspection prior to, or shortly thereafter returning the device to service.

***Inspection Supervisor means: Regional Supervisor, Incident Management Specialist or Investigator**

### TSSA Order Text

> *Pursuant to section 21 of the Technical Standards and Safety Act, 2000 no person shall return an elevating device to service until the cause of the incident or condition is identified, the safety of the device restored and an inspector gives permission to return the device to service as per section 36 (8) of the Ontario Regulations 209/01.*

As defined, any equipment exposed or damaged by water, vandalism, impact or lightning strike as outlined in section 36 (3) of the regulations, the device shall be deemed removed from service until permitted by an Inspection Supervisor*. It does not mean until an inspector arrives on site, places an inspector's tag on the main disconnect, or issue orders to be removed from service. It is the obligation of the owner and the contractor to ensure the device is immediately removed from service until further instructions are received from an Inspection Supervisor*.

All work performed on an elevating device other than work performed as maintenance, repair, or replacement is an alteration. Part 8, Section 8.6 of B44-10 as amended in CAD 261/13 deals with "Maintenance, Repairs, Replacements and Testing", while Section 8.7 as amended in CAD 261/13 deals with "Alterations".

## Guidelines for incidents involving fire, flood or other significant exposure to water, vandalism, impact or lightning strike defined by O.Reg 36.(3)

All alterations shall be submitted to this authority in accordance to section 8.7 of the B44-10 as detailed in section 3.4 of the CAD 261/13.

All inspection, examination, tests, repairs, and replacements shall be recorded in the logbook as per section 8.6.1.4.1 of the B44-10.

### 5.0 Sample Incident Scenarios

**Example:**

The sprinkler adjacent to the elevator has burst and water has breached the hoistway enclosure. The affected elevator equipment was the hoistway door locks, landing doors, and the top of car door operator. The elevator was removed from service, and assessed by the route mechanic. After further review, the landing door components and door locks were dried, and the car door operator circuit board was replaced, inspected, and tested.

Action by the contractor:

- Remove the elevator from service
- Report the incident within 24 hours to TSSA's Customer Contact Centre (formerly the Spills Action Centre - SAC) at 1-877-682-8772. Select #1 to be redirected to the TSSA Incident Desk available 24 hours a day, seven days a week. Obtain further instructions from the Inspection Supervisor*
- Submit the letter of attestation prior to request to return to service by a Professional Engineer, or a Supervisor who holds a current EDM-F or greater designation, and the TSSA incident report within 7 days giving full particulars.

**Example:**

The recent heavy rain has flooded the pit with water to a level just below the bottom final limit switch. However, the travelling cable, and the car safeties were submersed in the water every time the car descended to the bottom landing. The elevator was removed from service, and assessed by the route mechanic. After further review, the car safeties were dried and lubricated, and no further action was required on the travelling cable.

Action by the contractor:

- Remove the elevator from service

## Guidelines for incidents involving fire, flood or other significant exposure to water, vandalism, impact or lightning strike defined by O.Reg 36.(3)

- Report the incident within 24 hours to TSSA's Customer Contact Centre (formerly the Spills Action Centre - SAC) at 1-877-682-8772. Select #1 to be redirected to the TSSA Incident Desk available 24 hours a day, seven days a week. Obtain further instructions from the Inspection Supervisor*
- Submit the letter of attestation prior to request to return to service by a Professional Engineer, or a Supervisor who holds a current EDM-F or greater designation, and the TSSA incident report within 7 days giving full particulars.
- If the travelling cable is of the cloth type, and was reused, then the letter will have to be completed by an engineer.
- A copy of the logbook showing the safety test maybe requested by the incident management specialist.

**Example:**

The roof membrane at the top of the hoistway has failed and leaked water onto top of the car, forming a puddle in the centre of the car roof. The water dripped into the car via a hole in the ceiling, as well as running into the pit down the entire length of the hoistway wall from the ceiling to the drain. No other equipment was affected by the water exposure. Therefore, the elevator was removed from service, and assessed by the route mechanic, until the source of the water leak was eliminated.

Action by the contractor:

- No further action required.
- The water exposure did not negatively impact the elevating device to the extent that safe operation is questionable as a result of the exposure. The water ran down the hoistway wall and car top without affecting any simple or complex components. Therefore, there is no need to report this incident, but the source of the water should be fixed prior to the contractor returning the device to service.

**Example:**

A severe thunderstorm has swept across the Province causing flooding in most parts of the city. The storm drains could not accommodate the excess water and flooded the basement level of an office building with 3 feet of water. The bottom of the escalator wells were completely submerged and the escalator was not removed from service in time, causing the steps to lap the water up to the upper levels

## Guidelines for incidents involving fire, flood or other significant exposure to water, vandalism, impact or lightning strike defined by O.Reg 36.(3)

of the escalator truss and upper well area. The extent of water exposure was limited to step and handrail drives, steps, simple electrical protective switches, and the brake.

Action by the contractor:

- Remove the escalator from service
- Report the incident within 24 hours to TSSA's Customer Contact Centre (formerly the Spills Action Centre - SAC) at 1-877-682-8772. Select #1 to be redirected to the TSSA Incident Desk available 24 hours a day, seven days a week. Obtain further instructions from the Inspection Supervisor*
- The contractor had elected to replace all electric protective devices, lubricate and clean the step and handrail rollers, chains, and drives. As well, as perform an annual brake test and clean down of the device.
- As a result of the brake exposure to water, the sign off has to be escalated to an Engineer's assessment of the affected components, and a statement attesting that the device is safe to return to service will be required.
- Submit a TSSA incident report within 7 days giving full particulars.
- Call TSSA's Customer Contact Centre at 1-877-682-8772. and obtain further instructions from the Inspection Supervisor*.

**Example:**

The roof of a local shopping mall has failed and has leaked water onto the floor adjacent to the two food court escalators, forming a puddle, which drained into the top escalator well. The water has run down the escalator well onto the ceiling of the lower floor causing severe cosmetic damage to the ceiling. Upon further investigation by the contractor, no escalator components were affected and the escalator truss system and the wells were not exposed. No other equipment was affected by the water exposure. However, the escalator was removed from service, and assessed by the route mechanic, until the source of the water leak was eliminated.

Action by the contractor:

- No further action required.
- The water exposure did not negatively impact the escalator to the extent that safe operation is questionable as a result of the exposure. The water ran down the top well wall and the ceiling of

the floor below without affecting any simple or complex components. Therefore, there is no need to report this incident, but the source of the water should be fixed prior to the contractor returning the device to service.