# Recommandations EP

ncidents

# TOTAL

## SAFETY FEEDBACK NOTICE

### **Gratings**

EP/HSE Ref: 01/2014 Date: 24/01/2014



Over the past few weeks, three similar incidents occurred on our installations: fall of operator through opened gratings.



**December 2013:** Following radioinspection, operations were resumed. During a night shift site tour, an operator fell through an opened grating. A beam located 23 cm below the missing grating stopped his fall. Several contusions to his arms and legs (FAC).



January 2014: An operator fell through a hatch left opened by a worker. He grabbed the ladder avoiding falling completely on the suspended platform, 2m below. Contusions to his leg and hand (FAC).



**January 2014:** An operator giving some instructions walked backward and put his left foot in a gap not protected by a grating. Ankle injury (LTI).

### Causes:

- Intentional dismantling of pieces of grating without installation of protective devices: no consciousness of risks potentially induced by gratings.
- Gratings improperly sized / lack of gratings / unsecured.
- No site visit while closing the Permit To Work.

Gratings in poor condition or dismantled may lead to unsafe situation on site. They require a day to day attention and must be maintained. Any damage, failure or removal for operation must be clearly marked and barriers must be in place. Gratings are potentially dangerous during construction and maintenance phases (installation, dismantling, modification, wrong fastening). Over the time, they can deteriorate (corrosion, corroding and/or wrong tightness of fastening clamps):

- Train personnel to gratings risks.
- Launch a campaign to inspect and secure gratings: any opening of gratings / hatches shall be indicated and barriered off by rigid means to prevent risks of fall.
- Gratings should be long and wide enough to rest on their supporting area with no possible movement. Free space between gratings and elements such as structure, hopper, lines,.. should be as narrow as possible to prevent a fall.
- Ensure that gratings are all systematically included in the scope of routine site inspection and maintenance plans.

Gratings must be in good condition, stable, properly fastened on an adequate support. Any opening shall be indicated by rigid barriers.

Everyone must identify and report anomalies. Implementing periodic detection and reporting campaigns increases awareness and improves prevention.