

April 2017

O&G-19 [rev-4]

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## CODE FOR ELECTRICAL INSTALLATIONS AT OIL AND GAS FACILITIES

**SUBJECT: Section 19 – Classification of Oil and Gas Facilities**

### **General – Retroactive Application of Requirements**

The following is intended as an explanation for code updates which contain more stringent requirements than those contained in a previous code edition, and the impacts of those changes on existing electrical installations.

Upon adoption of a new edition of a Code, an existing installation in compliance with the previous edition of the Code(s) in force at the time of the installation is generally not required to be upgraded to meet the requirements of the newly adopted Code.

There have been instances, however, where an existing installation is deemed to pose an unacceptable risk, despite having met the requirements in force at the time it was constructed. In those cases, new legislation is normally introduced to mandate that the installation be brought to current Code requirements. An example would be the mandating of smoke alarms in the late 1970s to be installed retroactively in all homes, old and new.

However, modifications to an existing installation that introduce changes to the characteristics of the installation would require that the installation be made to comply with the requirements of the current Code in force at the time the modifications are made.

### Drilling Rigs

Because of changes made in the 5<sup>th</sup> edition of the Code for Installations at Oil and Gas Facilities (2015 O&G Code) that affect drilling operations, specifically:

- a) the Zone 1 area classification for 1.5m around the shale shaker, and
- b) the extension of the Zone 2 area classification around the mud tanks from 2m to 3m;

the question is raised as to whether the new requirements apply to drilling rigs manufactured prior to the adoption of the 2015 O&G Code.

In general, drilling rigs manufactured to comply with an earlier version of the O&G Code in force at the time of manufacture are not required to be upgraded retroactively to the requirements in the current O&G Code in force. Owners of drilling rigs are however, encouraged to update their facilities when opportunities present themselves.

Additional background Information:

1. Is the relocation of the drilling rig considered a modification that introduces changes in characteristics of the rig?

*Response:* Although every new location will likely produce fluids of varying characteristics different from other locations, the Oil and Gas Code anticipates this by

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Issue of this STANDATA is authorized by  
the Electrical Administrator

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having a typical area classification that remains static. Therefore, despite the changing characteristics of the process, the characteristics of the rig remain essentially unchanged. Consequently, the rig should not require to be re-classified for every re-location.

2. Are requirements of previously adopted Codes that have been amended in subsequent Codes considered unsafe?

*Response:* It is generally understood that despite the changes made to a Code over time, the previous edition is not considered unsafe, but rather that the newly revised edition introduces requirements that are considered safer. Given that improvements for safer installations are made to a Code over time, older installations are still considered safe. Owners/users of these older installations are however encouraged to look at opportunities for updating their facilities.

3. Is there a safety risk with not having older installations made to comply with current Code in force?

*Response:* All installations, even those that comply with the current codes in force, pose an element of safety risk. Code development and maintenance seek to continually improve the Code to reduce risk and consequently to have new installations pose a lessor risk. Risks associated with older installations, however, continue to be considered acceptable.