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GP 44-65

Area Classification (IP 15)

Group Practice

**BP GROUP
ENGINEERING TECHNICAL PRACTICES**

Foreword

This revision of Engineering Technical Practice (ETP) GP 44-65 incorporates editorial revisions and will be revised again later following issue of the new EI-15 industry standard to be released in late 2009. This issue of GP 44-65 includes clarifications in sections 3.2.1 and 3.2.2.

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Introduction

- a. This GP for area classification is based on The Institute of Petroleum (IP) Model Code of Safe Practice IP 15, Area Classification Code for Installations Handling Flammable Fluids, 3rd Edition, July, 2005.
- b. Statements of this GP are modifications to IP 15.
- c. Modifications to IP 15 are identified as Add, Modify to Read, or Delete.
- d. Paragraph numbers in this GP correspond to IP 15.
- e. Paragraphs of IP 15 that are not revised remain applicable.



1 Introduction

1.2 Limits of applicability

Add

1.2.2 Legislative regulations, local codes, and standards

- a. If area classification provided by this GP conflicts with local legislative requirements, the legislative requirements shall take precedence.
- b. If area classification local codes and standards conflict with requirements in this GP, the more logical and/or stringent text shall govern.

1.4 Fundamental safety principles

1.4.2 Good standard of design and operation

Modify to Read

The area classification technique described here and the distances recommended assume that the facility to which they are applied is designed, constructed, maintained, and operated generally in accordance with good industry practice. This means that installations

Add

Installations should be designed in accordance with BP GPs or other codes and standards approved by BP as technically acceptable alternatives.

1.5 Hazardous area classification management

Add

- a. Area classification by a third party, such as a contractor or consultant, shall be subject to BP approval.
- b. Responsible person:
 1. The person responsible for area classification shall have sufficient authority and seniority to select a competent team, but there is no requirement for him/her to be involved in the detail work.
 2. Management shall participate in the selection and appointment of the responsible person.

3 The direct example approach for classification of common facilities in open areas

3.1 Scope

3.1.3 Climate variations

Add to Third Paragraph

In other locations, the maximum ambient temperature may be assumed to be that temperature which meteorological records show is unlikely to be exceeded for more than 90 hr/yr.



3.2 Storage tanks

Add to First Paragraph

Class II(1) and III(1) liquids should be considered as Class II(2) and III(2), respectively, if they receive material direct from a process unit or if the storage tanks are heated. Any exceptions shall be subject to BP approval and should be considered only if:

- (a) Unit feed is from other tankage and is tested for flashpoint before storage.
- (b) Process is such that the feed flashpoint cannot be reduced despite potential plant upset or abnormal operation.

3.2.1 Fixed roof tankage - Classes I, II(2) and III(2)

Add

- a. If the bund is less than 15 m from the tank then, the Zone 2 area shall extend beyond the bund at the height of the bund to envelop 15 m from the tank. For, except for tanks of diameter 10 m or less, for which b. applies.
- b. For tanks of diameter 10 m or less, the Zone 2 area shall extend a minimum of at least 7,5 m from the tank.
- c. Tanks with a nitrogen or fuel gas blanket that do not vent to atmosphere (e.g., venting to an incinerator) may be classified as secondary grade release. The area shown as Zone 1 in Figure 3.1(a) may be classified as Zone 2.
- d. Fixed roof tanks with a nitrogen blanket and venting to atmosphere shall be classed as a primary grade source of release.

3.2.2 Floating roof tankage - Classes I, II(2) and III(2)

Add

- a. If the bund is less than 15 m from the tank then, the Zone 2 area shall extend beyond the bund at the height of the bund to envelop 15 m from the tank. , except for tanks of diameter 10 m or less, for which b. applies.
- b. For tanks of diameter 10 m or less, the Zone 2 area shall extend at least 7,5 m from the tank.
- c. Tanks with a nitrogen or fuel gas blanket that do not vent to atmosphere (e.g., venting to an incinerator) may be classified as secondary grade release. The area shown as Zone 1 in Figure 3.1(b) may be classified as Zone 2.
- d. Floating roof tanks with a nitrogen blanket and venting to atmosphere shall be classed as a primary grade source of release.

3.3 Road tanker loading

3.3.5 Top loading of road tankers - Classes I, II and III

3.3.5.1 Classification of loading island and bay area - no vehicle present

Modify Last Three Sentences to Read

- a. Because of the frequency of use, they should be regarded as primary grade releases, and the entire loading island shall be classified as a Zone 1 area.
- b. The resulting Zone 1 should extend vertically from the island base to 2 m above the walkway.

