



Document No.	GP 44-34
Applicability	Group
Date	17 March 2009

GP 44-34

Design and Location of Occupied Buildings in Onshore Facilities not covered by GP 44-30, GP 44-31, and GP 44-35

Group Practice

**BP GROUP
ENGINEERING TECHNICAL PRACTICES**

Foreword

This is the first issue of Engineering Technical Practice (ETP) GP 44-34. This Group Practice (GP) supersedes EP-GP 04-30, Annex A, on the topic of well sites, drilling, and well operations onshore.

This GP provides an approach that directly supports the siting of occupied buildings with consideration given to explosion, fire, and toxic hazardous scenarios for onshore facilities outside of the scope of GP 44-30, GP 44-31, and GP 44-35.

Copyright © 2009 BP International Ltd. All rights reserved.

This document and any data or information generated from its use are classified, as a minimum, BP Internal. Distribution is intended for BP authorized recipients only. The information contained in this document is subject to the terms and conditions of the agreement or contract under which this document was supplied to the recipient's organization. None of the information contained in this document shall be disclosed outside the recipient's own organization, unless the terms of such agreement or contract expressly allow, or unless disclosure is required by law.

In the event of a conflict between this document and a relevant law or regulation, the relevant law or regulation shall be followed. If the document creates a higher obligation, it shall be followed as long as this also achieves full compliance with the law or regulation.



Table of Contents

	Page
Foreword	2
1. Scope	4
2. Normative references.....	4
3. Terms and definitions.....	4
4. Symbols and abbreviations.....	5
5. General.....	5
6. Approach	5
7. Integral buildings.....	6
8. Identify and analyse hazardous scenarios for nonintegral buildings	6
9. Identify potential options using risk reduction hierarchy for nonintegral buildings	7
10. Evaluate residual risk and seek management endorsement for nonintegral buildings	7
11. Develop emergency response plans	8
Annex A (Informative) Examples of potential risk reduction approaches	9
Annex B (Informative) Examples of occupied building location endorsement requests	10
Bibliography	12



1. Scope

- a. This GP defines requirements for design and location of onshore occupied buildings (referred to as “buildings”) in locations *other than* refineries, petrochemical and chemical operations, natural gas liquids extraction plants (covered in GP 44-30 and GP 44-31), and stand alone storage and distribution terminals (covered in GP 44-35) subject to blast, fire, and gas hazards.
- b. Exploration, drilling, completion, and workover operations on well sites are included in the scope of this GP.
- c. This GP recognises that some occupied buildings are integral to facility operations and need to be located near these activities.

2. Normative references

The following referenced documents may, to the extent specified in subsequent clauses and normative annexes, be required for full compliance with this GP:

- For dated references, only the edition cited applies.
- For undated references, the latest edition (including any amendments) applies.

BP

GDP 3.1-0001 Assessment, prioritisation and management of risk.

3. Terms and definitions

For the purposes of this GP, the following terms and definitions apply:

Hazard

Condition or practice with the potential to cause harm to people, the environment, property, or BP reputation.

Occupancy

Measure of amount of time personnel spend in a location. This is normally expressed as number of personnel hours per unit of calendar time (e.g., personnel hr/d).

Occupied

Building is considered occupied if its primary purpose is providing workspace or accommodation for personnel, irrespective of occupancy. Typical examples include office buildings, control rooms, laboratories, and gate houses.

If the primary purpose of a building is to house equipment (turbine enclosure, compressor shelters, motor control centre [MCC] rooms, analyser shelters, instrument outstation, process equipment enclosures in regions of severe weather, etc.), it is not considered occupied unless occupancy under normal operational conditions averages at least 2 manhours per 24 hr period.

If building has distinct subbuildings with different primary purposes (e.g., an enclosed office within a storage building or an instrument room/MCC connected to a control room), occupancy of each part of the building may be considered separately.

Permanent building

Building intended to remain in a single location for its design life.

