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GP 15-01

Noise Control

Guidance on Practice for

**BP GROUP
ENGINEERING TECHNICAL PRACTICES**

Foreword

This is the first issue of Engineering Technical Practice (ETP) GP 15-01. This document is technically identical to the former GP 14-01 dated 4-November-2005. This Group Practice (GP) is based on parts of heritage documents from the merged BP companies as follows:

Amoco (ACES)

A EN-NC-00-E	Environmental—Noise Control—Engineering Specification
A EN-NC-00-G	Environmental—Noise Control—Guide

ARCO (APCES)

Std 600	Noise Control Standard for Refinery Operating Units
Std 601	Equipment Noise Control

British Petroleum (RPSE)

RP 14-1	Guide to Noise Control.
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1. Scope

This Group Practice is a guide to BP's general requirements for noise control for complete plant and individual items of equipment.

2. Normative references

The following normative documents contain requirements that, through reference in this text, constitute requirements of this technical practice. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this technical practice are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

Engineering Equipment and Materials Users Association (EEMUA)

EEMUA 141

Guide to the Use of Noise Procedure Specification

3. Symbols and abbreviations

For the purpose of this GP, the following symbols and abbreviations apply:

LEP,d	Daily personal noise exposure
L_p	Sound pressure level
L_w	Sound power level
N	Neighbourhood noise limit
p	Instantaneous pressure variation from the ambient pressure
p^2	Mean square pressure variation
p_0	Reference level (20×10^{-6} Pa)
W	Acoustic power of the source
W_0	Reference level (10-12 watts)
TLV	Threshold limit value
TWA	Time weighted average

4. Noise limits

- This guidance should be used in the preparation of a noise specification for new plant or equipment or for any modifications to existing plant or equipment.
- New or modified plant equipment should be designed to operate at acceptable noise levels and eliminate the requirement for retrofitting noise control systems or the ongoing long term costs associated with poor control of noise.
- Exposures over a working lifetime should be kept below 80 dBA LEP,d to provide full protection from hearing loss due to noise at work.

