

# **Development of OECD Test Guidelines and Hazard Assessment Procedures for Terrestrial Effects**

*N. J. Grandy*

Organisation for Economic Co-operation and Development, 2 rue André Pascal,  
75775 Paris, France

The initial step in the management of a chemical (including pesticides) is the identification of its intrinsic properties (i.e. hazard identification) which include its physical/chemical characteristics, its potential to degrade or accumulate and its toxicity to man and the environment. Hazard assessment (or risk characterisation) for chemicals integrates information on toxicity and potential exposure to determine the nature and magnitude of possible adverse effects that might result from their release into the environment.

An increasing number of countries now require, through legislation, that new and existing chemicals (including pesticides) are tested and assessed for potential risks for control purposes (e.g. notification, registration, classification and labelling). The availability of internationally harmonised and agreed testing methods and hazard assessment procedures increases the effectiveness and efficiency of chemicals control procedures and helps to 'share-the-burden' of assessments between countries. As part of its Chemicals Programme, OECD has, for some time, been working on the development of such harmonised methods and procedures with its activities on Test Guidelines and Hazard Assessment.

A particular driving force in the development of Test Guidelines and assessment procedures has been the introduction, in 1992, of the Pesticides Programme to the work of OECD, and these areas are two of the Programme's major activities.

This paper describes the OECD Test Guideline and Hazard Assessment Programmes, focusing particularly on methods and procedures applicable to the terrestrial environment.

## **The OECD Test Guidelines Programme**

The 'OECD Guidelines for Testing of Chemicals' (OECD, 1993a) are internationally-agreed methods. They were first published in 1981 and cover testing in the areas of physical/chemical properties, effects on biotic systems

health effects (toxicity). There are now over 70 OECD Test Guidelines which are available in English and French. The availability of internationally-agreed test methods helps to:

- o establish the validity and increase the international acceptance of data thus avoiding duplication of testing and hence the unnecessary use of laboratory animals;
- o facilitate international trade by avoiding or minimising barriers caused by differences in national legislation and thereby creating a level playing field for chemical industries in Member countries.

## **Mutual Acceptance of Data**

In order to formalise the international acceptance of data, the OECD 'Decision concerning the Mutual Acceptance of Data in the Assessment of Chemicals' (i.e. the MAD Decision) was adopted in 1981. It is legally binding on all Member countries. The MAD Decision states that 'data generated in the testing of chemicals in an OECD Member country in accordance with OECD Test Guidelines and OECD Principles of Good Laboratory Practice shall be accepted in other Member countries for purposes of assessment and other uses relating to the protection of man and the environment'. Data generated in this way therefore have advantages over data generated using any other methods.

## **Development and Revision of OECD Test Guidelines**

The development or revision of an OECD Test Guideline starts with a proposal from a Member country (or countries), the international scientific community (including industry), or the OECD Secretariat itself. It involves extensive peer review by experts (including the possibility for expert meetings or workshops) and the development of consensus in all Member countries.

A key role in Guideline development is played by the National Co-ordinators. Each Member country has a National Co-ordinator, designated by their government, who acts as a focal point for Test Guidelines work in their country. There is also a National Co-ordinator representing the Commission of the European Union (CEU). Each National Co-ordinator maintains an efficient network of technical experts (usually drawn from government, academia and industry) for consultation purposes. National Co-ordinators meet at least once a year to propose the work programme and the priorities and to decide on