PRODUCT STEWARDSHIP

Monsanto products and intermediates will not present an unreasonable risk of harm to human life or health, or to the environment when they are properly handled, transported, used or disposed. Stakeholders will be provided information regarding handling, storage, use and disposal of Monsanto products.

INTRODUCTION

Employees, customers and the community are all important stakeholders that are directly affected by Monsanto's product stewardship programs. Inherent in these programs is the responsibility for assessing, managing, and communicating the risks associated with the products and intermediates Monsanto manufactures or markets or plans to manufacture or market.

Product safety evaluations are at the heart of the assessment process and involve judgments by specialists about the level of risk borne by stakeholders as a result of manufacture, processing, distribution, use and disposal of a product. They integrate data on effects, such as toxicology, epidemiology, and medical observations, with exposure information, such as industrial hygiene monitoring, environmental monitoring, and environmental fate. For each Monsanto product or intermediate, we need enough data or information to reach a supportable conclusion that under reasonably anticipated conditions of handling and use, the product does not pose an unreasonable risk to those who may be exposed or the environment. We must recognize that our stakeholders have a voice in this decision process. It is our responsibility to provide stakeholders with information such as labels and Material Safety Data Sheets, which will permit them to have knowledgeable input into the process. Our risk management actions must reflect stakeholder input.

PROGRAM

1. All new product candidates and new process intermediate candidates will be assessed and managed as detailed below. Note: Articles are exempt from the program.
   a) All local, national and international product regulatory requirements will be satisfied in a timely fashion during project development.
   b) R&D materials utilized in the laboratory will be handled according to Prudent Laboratory Practices (e.g., National Research Council Guidance, Monsanto Research Center Policies and Procedures, or similar).
   c) New R&D products and process intermediates that are either;
      i) shipped to customers or non-laboratory facilities or,
      ii) produced in significant quantities (e.g., U.S. law defines significant quantities as "quantities in excess of 100Kg/year") or
      iii) manufactured or handled in non-laboratory facilities, will have a completed product safety review (ER-200, EC-201, pilot plant safety audit or equivalent), an appropriate label, and a research and development Material Safety Data Sheet.
   d) A product safety evaluation (EC-202 or equivalent), a Material Safety Data Sheet and a shipping classification (TF-837 or equivalent) if appropriate, will be completed before new products, new process intermediates, or significant new uses for existing products are commercialized.
   e) Material Safety Data Sheets generated for R&D products and process intermediates will be provided or made available to all persons having a substantial likelihood of exposure to these materials.
2. All commercial products and process intermediates or related product families will have ongoing product safety evaluation, management and communication activities.

a) Material Safety Data Sheets will be developed and distributed to stakeholders for all products and isolated process intermediates. All issued Material Safety Data Sheets will be reviewed when significant new information becomes available, or approximately every three years, and updated as appropriate. A plan will be developed to provide Material Safety Data Sheets in a language appropriate for the country of use. Records of MSDS recipients will be maintained, where practical. Material Safety Data Sheets will be obtained and, where necessary, developed for raw materials, supplies and other materials with which Monsanto employees may come in contact.

b) Product files for all products or related product families will be maintained. The product file may include the following:

- Appropriate Material Safety Data Sheets, references to relevant literature or internal reports, relevant information on composition, physical properties, manufacturing processes, principal by-products and exposure information.
- A critical review of health and environmental effects and exposure information, such as: EC-201, EC-202, Monsanto Work-Place Permissible Exposure Guideline (MWPEG) Reviews, Health Effect Reviews and Toxicology Reviews.

c) Information contained in product files will be used for business decisions, government interactions, public communications and other product management activities.

3. Product Stewardship is the responsibility of the business units. Each operating company, free-standing division or world area will assign an individual(s) the responsibility for assuring that this Guideline program is met.

   Guideline oversight is the responsibility of the Corporate Environmental Policy Staff.

   Units of the corporate staff (Environmental Policy Staff, Safety and Environmental Health, and others) and business units are jointly responsible for developing information needed for product safety evaluations. This includes regular periodic reevaluation of data available in light of new information relevant to the product.

STATUS AND OBSERVATIONS

- The guideline has been expanded to include stakeholder communications about the health, safety and environmental aspects of Monsanto products and process intermediates.
- The guideline program has been broadened in several areas to more accurately reflect changing societal concerns and governmental actions.

  a) Assessment, management and communications of new product risks in our R&D laboratories have been formalized. Procedures are now in place which will ensure that employees, customers and others with a substantial likelihood of exposure to R&D products will be informed about appropriate handling use and disposal of these materials.

  b) The high quality of Monsanto's Material Safety Data Sheets will be maintained. This will be accomplished by reviewing the sheets approximately every three years, and more often if new information becomes available. The sheets will be revised and reissued, if required as a result of the review.

  c) Material Safety Data Sheets are rapidly becoming the worldwide standard for communicating the hazards and appropriate handling practices for chemicals. Monsanto Agricultural Company and Monsanto Europe/Africa have taken the lead on translating the sheets into multiple languages. Several hundred sheets are now available in up to ten different languages. A plan will be developed to take the program worldwide.

  d) The right-to-know movement demands disclosure of information on the health, safety and environmental aspects of our products. Monsanto product files are a storehouse of such information. They must be organized in such a fashion that they are not only useful for internal decision making, but can be utilized by Monsanto for governmental oversight and public involvement. A key element of public involvement that we must come to grip with is risk communication. Several Monsanto

programs are underway as part of the Superfund Title I and Title III requirements, which deal with risk communication.

- Major elements of the guideline remain unchanged and have been, for the most part, institutionalized into the Monsanto culture.

  a) The review process for new chemicals (EC-201/202) continues to serve Monsanto well. A streamlined process (ER-200) for R&D products has been effectively implemented.

  b) Monsanto now has over 1,500 Material Safety Data Sheets for products and process intermediates. Thousands of individual sheets have been distributed to stakeholders worldwide. The sheets are recognized by customers and peers as industry leaders in terms of content and quality.

  c) Numerous Monsanto products are coming under scrutiny by government, public interest groups and local community groups. At no time in Monsanto's history has more health, safety and environmental information about our products been provided to government and the public, than in recent times. Product files, as outlined in the guideline, have been an invaluable tool to help satisfy the thirst for information that is being driven by the right-to-know movement.

- Biotechnology is receiving special attention via oversight by the Corporate Biotechnology Steering Committee, via public information by the Corporate Biotechnology Strategy Committee and an expanded role for the Institutional Biosafety Committee.

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