

ATTACHMENT C

VOLUNTARY PRODUCT STEWARDSHIP PROGRAMS

Alkyl (C12-14) Glycidyl Ether (AGE)

- o The Shell Oil Company, Ciba-Geigy Corporation, CVC Specialty Chemicals, Air Products and Chemicals, Inc., and the Callaway Chemical Company, the primary manufacturers of alkyl (C12-14) glycidyl ethers (AGE), and OPPT staff have completed negotiations for a TSCA §4 Enforceable Consent Agreement (ECA) to conduct certain needed health effects tests on alkyl (C12-13) glycidyl ether as it represents the major chemical produced among the other 6 glycidyl ethers with alkyl groups containing 11 carbons or more.
- o The TSCA §4 ECA became effective on March 22, 1996, the date on which it appeared in the *Federal Register* (61 FR 11740). The ECA negotiations were an outgrowth of OPPT's "Open Season" initiative wherein OPPT solicited (57 FR 31714) testing proposals from industry on chemicals for which final TSCA §4 test rules had not yet been issued.
- o The AGE ECA was accompanied by a Memorandum of Understanding (MOU) between EPA and the AGE manufacturers. Under the MOU, which also became effective on March 22, 1996, the signatory companies agreed to initiate a comprehensive AGE Product Stewardship Program that includes the voluntary development and implementation of the following activities:
 - o comprehensive worker/customer communication, feedback, and safety training activities including revisions as needed to MSDS, product labels and literature;
 - o exposure reduction activities; and
 - o submission of periodic progress reports (including TRI-type reports) to EPA.
- o The AGE MOU reflects OPPT's ongoing efforts to expand the use of its TSCA Chemical Testing Program to achieve documentable progress by the industry in important OPPT mission-related activities such as pollution prevention, waste minimization, risk communication, and risk reduction.
- o In signing the MOU, the signatory companies acknowledged that the main doctrines of environmental justice would be upheld during the development/implementation of the AGE Product Stewardship Program.

VOLUNTARY PRODUCT STEWARDSHIP PROGRAMS (cont.)

Diglycidyl Ether of Bisphenol A (DGEBPA)

- o The Shell Chemical Company, the Ciba-Geigy Corporation, and the Dow Chemical Company, the major manufacturers of the diglycidyl ether of bisphenol A (DGEBPA), have signed a TSCA §4 Enforceable Consent Agreement (ECA) to conduct certain needed health effects tests as well as glove permeation tests on DGEBPA.
- o The DGEBPA TSCA §4 ECA became effective on August 1, 1994, the date of publication in the *Federal Register* (59 FR 38917). This ECA resulted from OPPT's "Open Season" initiative wherein EPA solicited (57 FR 31714) testing proposals from industry on chemicals for which final TSCA §4 test rules had not yet been issued.
- o A unique feature of the DGEBPA ECA testing program is that it is accompanied by a Memorandum of Understanding (MOU) between OPPT and the 3 DGEBPA manufacturers. Under the MOU, the companies agreed to initiate a comprehensive DGEBPA Product Stewardship Program that includes the voluntary development and implementation of the following elements:
 - o comprehensive worker/customer communication, feedback, and safety training activities including revisions as needed to MSDSs, product labels and literature;
 - o exposure reduction activities; and
 - o submission of periodic progress reports (including EPCRA TRI-type reports) to the Agency.
- o These elements were essentially developed by OPPT as a counter proposal to a less comprehensive one offered by the 3 DGEBPA manufacturers. The CMA "Responsible CARE" language was used extensively in OPPT's counter offer which formed the basis for the comprehensive DGEBPA Product Stewardship Program that was embodied in the MOU ultimately agreed to by the manufacturers.
- o The DGEBPA MOU, which also became effective on August 1, 1994, is considered by many to be a landmark document that reflects OPPT's ongoing efforts to expand the overall use of its TSCA Chemical Testing Program to achieve documentable progress by the industry in important OPPT mission-related activities such as pollution prevention, waste minimization, risk communication, and risk reduction.
- o In signing the MOU, the companies acknowledged that the main doctrine of environmental justice would be upheld during development/implementation of the DGEBPA Product Stewardship Program.

VOLUNTARY PRODUCT STEWARDSHIP PROGRAMS (cont.)

Glycidyl Methacrylate (GMA)

- o Dow Chemical Company, Air Products and Chemicals, Mitsubishi Gas Chemical America, the San Esters Corporation, and the NOF America Corporation, the major manufacturers of glycidyl methacrylate (GMA), have signed a TSCA §4 Enforceable Consent Agreement (ECA) to conduct certain needed health effects tests on GMA.
- o The TSCA §4 ECA became effective on January 26, 1995, the date of its publication in the *Federal Register* (60 FR 5138). This ECA also resulted from OPPT's "Open Season" initiative wherein EPA solicited (57 FR 31714) testing proposals from industry on chemicals for which final TSCA §4 test rules had not yet been issued.
- o In a letter dated September 15, 1994, the companies informed OPPT that they were developing/implementing a comprehensive voluntary GMA Product Stewardship Program that includes the following major elements:
 - o initiate a comprehensive outreach/communication program (including updating GMA MSDSs and product labels/literature) and training programs based on data obtained via the ECA;
 - o examine and develop recommendations for personal worker protective equipment (e.g., evaluate glove materials and respirator cartridges);
 - o develop, utilize, and share with others an analytical air monitoring methodology for GMA; and
 - o develop in conjunction with the American Industrial Hygiene Association Workplace Environment Exposure Limit (WEEL) Committee an occupational exposure limit value for GMA based on ECA test data.