

# RELEASE AND POLLUTION PREVENTION REPORT

## APPENDIX E POLLUTION PREVENTION METHODS<sup>1</sup> (adapted from USEPA Form R Instructions<sup>2</sup>)

### Good Operating Practices

- W13 Improved maintenance scheduling, recordkeeping, or procedures
- W14 Changed production schedule to minimize equipment and feedstock changeovers
- W19 Other changes in operating practices

### Inventory Control

- W21 Instituted procedures to ensure that materials do not stay in inventory beyond shelf life
- W22 Began to test outdated material - continue to use if still effective
- W23 Eliminated shelf-life requirements for stable materials
- W24 Instituted better labeling procedures
- W25 Instituted clearinghouse to exchange materials that would otherwise be discarded
- W29 Other changes in inventory control

### Spill and Leak Prevention

- W31 Improved storage or stacking procedures
- W32 Improved procedures for loading, unloading, and transfer operations
- W33 Installed overflow alarms or automatic shut-off valves
- W35 Installed vapor recovery systems
- W36 Implemented inspection or monitoring program of potential spill or leak sources
- W39 Other changes made in spill and leak prevention

### Raw Material Modifications

- W41 Increased purity of raw materials
- W42 Substituted raw materials not on the TRI list
- W49 Other raw material modifications

### Process Modifications

- W51 Instituted recirculation within a process
- W52 Modified equipment, layout, or piping
- W53 Use of a different process catalyst
- W54 Instituted better controls on operating bulk containers to minimize discarding of empty containers
- W55 Changed from small volume containers to bulk containers to minimize discarding of empty containers
- W58 Other process modifications

### Cleaning and Degreasing

- W59 Modified stripping/cleaning equipment
- W60 Changed to mechanical stripping/cleaning devices (from solvents or other materials)
- W61 Changed to aqueous cleaners (from solvents or other materials)
- W63 Modified containment procedures for cleaning units
- W64 Improved draining procedures
- W65 Redesigned parts racks to reduce dragout
- W66 Modified or installed rinse systems
- W67 Improved rinse equipment design
- W68 Improved rinse equipment operation
- W71 Other cleaning and degreasing modifications

### Surface Preparation and Finishing

- W72 Modified spray systems or equipment
- W73 Substituted coating materials used
- W74 Improved application techniques
- W75 Changed from spray to other system
- W78 Other surface preparation and finishing modifications

### Product Modifications

- W81 Changed product specifications
- W82 Modified design or composition of products
- W83 Modified packaging
- W89 Other product modifications

### On-Site Recycling Processes

NOTE: On-Site Recycling is considered pollution prevention ONLY IF THE RECYCLING OCCURS IN-PROCESS (See N.J.A.C. 7:1K-1.5).

- R11 Solvents/organic recovery - batch still distillation
- R12 Solvents/organic recovery - thin-film evaporation
- R13 Solvents/organic recovery - fractionation
- R14 Solvents/organic recovery - solvent extraction
- R19 Solvents/organic recovery - other
- R21 Metals recovery - electrolytic
- R22 Metals recovery - ion exchange
- R23 Metals recovery - acid leaching
- R24 Metals recovery - reverse osmosis
- R26 Metals recovery - solvent extraction
- R27 Metals recovery - high temperature
- R28 Metals recovery - retorting
- R29 Metals recovery - secondary smelting
- R30 Metals recovery - other
- R40 Acid regeneration
- R99 Other reuse or recovery

1 For use in reporting on 2004 RPPR Section D, questions 4.1 and 4.2.

2 Revised 2004 Instructions, Appendix B, pages B-3 and B-4.

Should you have further questions regarding completion of the RPPR, contact the DEP's Office of Pollution Prevention and Right To Know at (609) 777-0518.