Guidance for Worksheet 6 – Process Description

*Understanding how your current processes work is crucial to pollution prevention.* Use Worksheet 6 to describe each process listed on Worksheets 4 and 5. Be sure to identify all individual processes where toxics are used and/or that generate hazardous waste. Include raw material inputs and process losses. A good description of the process should identify all losses, including air emissions, chemical constituents in a wastewater discharge, and non-hazardous solid wastes as well as those regulated as hazardous wastes. It should include information about process equipment, including date of installation, maintenance requirements insofar as it relates to the generation of hazardous waste, and the presence of existing pollution control technology. It is also often beneficial to identify recycling or disposal methods for each hazardous waste that is generated. Attach another sheet if necessary.

Probably the best way to see the relationships between work steps is through process mapping. A process map is a schematic description of a process. It can show a key process of your facility, such as parts manufacturing, or an ancillary or intermittent process, such as cleaning tanks. In a large facility you may need several sets of process maps to cover all the activities. Creation of the best process maps involve input from more than one person, perhaps someone from engineering, maintenance, environmental and others. Interaction within a group allows you to create a better process map and helps to ensure that your assessments are objective. Mapping provides structure to how you seek data, how you turn it into information, and how you can use it to reach conclusions about pollution prevention. It leads to a better understanding of the *functionality* of each process.

A process map uses lines and boxes to depict the series of steps through which input materials must pass in the course of transformation into product, and then to further identify inputs and losses from those steps. An example for a commercial printing operation is provided following Worksheet 6. Please call us at EAO if you would like more information on how to do process mapping.

Worksheet 6 - Process Description

Use a separate sheet for each process if you would like. Also, please attach any process maps.

**Process Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Process Description**:

*Enter text here*

Process Mapping Examples

**Example 1: Process Map – Offset Lithographic Printing Operation**

**Press**

**2**

**Postpress**

**3**

**Prepress**

**1**

**Binding/Finishing**

**3.2**

**Cutting/Folding**

**3.1**

**Printing**

**(Non-heat Sheet-fed)**

**2.2**

**Press Make-Ready**

**Preparation**

**2.1**

**Plate Processing**

**1.3.2**

**Exposure to Light**

**1.3.1**

**Washing**

**1.2.4**

**Fixing**

**1.2.3**

**Drying**

**1.2.5**

**Art/Copy Assembly & Design Production**

**1.1**

**Planographic Platemaking**

**1.3**

**Graphic Arts Photography/Image Processing**

**1.2**

**Exposure**

**1.2.1**

**Developer**

**1.2.2**

**Process Map 2 – Input/Loss Detail Map for Prepress Process**

**Art/Copy Assembly & Design Production**

**1.1**

**Planographic**

**Platemaking**

**1.3**

**Graphic Arts Photography/Image Processing**

**1.2**

VOCs

Waste Paper

Developer

Fixer

Used Film Rinse Water

Spent Developer and Fixer, Silver, VOCs

Dirty Rags, Empty Containers

Plates

Developer, Gum Arabic

Used Plates

Rinse Water

Spent Developer

Paper

Glue Spray

Film Wash Water

Cleaning solution, Chemical storage containers

Water