Guidance for Worksheet 7 – Identifying Opportunities

The search for pollution prevention opportunities is central to the planning process. As with process mapping, the best way to identify opportunities is to involve a group of individuals most familiar with a given process. Such a group can respond to the singular characteristics of the process as well as the culture of the company. There are many techniques that are useful for generating ideas - from very specific root cause analysis to free-flowing brainstorming sessions. The goal is to identify one or several opportunities applicable to a priority waste stream or product/chemical that can be evaluated later for technical and economic feasibility. One way is to methodically brainstorm a few ideas for each toxics use reduction techniques for each toxic or hazardous waste targeted for reduction. We have a brainstorming worksheet on our website that includes definitions and examples of each technique:

https://dec.vermont.gov/sites/dec/files/ead/documents/Forms/2017P2Plans/TUR%20Brainstorming%20Worksheet.pdf

There are many good sources of information about pollution prevention opportunities that you probably already use, including vendors, trade association articles and various industry magazines, workshops and trade shows or use the resources shown in Appendix C.

Use Worksheet 7 to show any opportunities that will be evaluated during the planning cycle. The overriding concept in evaluating pollution prevention opportunities is that source reduction measures should be looked at first for feasibility, followed by recycling measures. Treatment and disposal management strategies are not considered pollution prevention.

Example Source Reduction Strategies:

- *Process Redesign*: work with customer (if necessary) to eliminate unnecessary cleaning step(s) or clean using hot or ultrapure water only
- Process Modernization: Install high-performance nozzles or applicators to conserve coatings and reduce the number of defects
- *Improved Operation and Maintenance*: adopt written Standard Operating Procedures for cleaning equipment to minimize solvent use, schedule production to reduce equipment cleaning

Material Substitution: switch to water-borne coatings in place of solvent-based ones.

Equipment Upgrade: add hardware to more efficiently apply raw materials in-process.

Product Reformulation: switch to product components that don't require finishing.

Worksheet 7- Opportunities, by Priority

Identify pollution prevention opportunities to be evaluated and the associated process for each. Are the opportunities that will be evaluated better described as source reduction or recycling?

Source Reduction Initiatives:

Recycling Initiatives: