The Illinois Sustainable Technology Center (ISTC) has developed a technical assistance program to improve adoption of pollution prevention technologies in the metal forming and machining sectors. The Accelerated Diffusion of Pollution Prevention Technologies Program (ADOP²T) is a process of identifying best practices and executing brief demonstrations and extended pilot trials of pollution prevention practices and technologies in actual industrial facilities. These pilot trials will provide the site specific information required to influence companies decisions to adopt these technologies where economically and technically feasible.

ISTC will work with a variety of chemical suppliers and end-users to conduct dozens of individual projects at Illinois industrial facilities. Project engineers will develop and execute projects including demonstrations and pilot trials of innovative pollution prevention processes and technologies at these "mentor" sites. Results of this effort will be used to promote the adoption of the technologies and practices with other chemical suppliers and industrial facilities.

With the help of metal forming and machining companies and their chemical vendors, a list of pollution prevention practices will be developed and prioritized into project opportunities for technology demonstrations, pilot trials and basic research. Below is a summary of a number of potential project opportunities.

Potential Project Opportunities

- Membrane Filtration of coolants and cleaners
- Centrifugation
- Pasteurization
- Air flotation
- Electrochemical control of microbes
- Ultraviolet light treatment
- Chemical/Process management programs
- Microbial cleaner evaluation

The ADOP²T pilot trials will be conducted at volunteer metal forming and machining shops over a two-year period. Evaluation of the various technologies' advantages, complexities and compatibilities will be addressed during the projects. Particular emphasis will be placed on the technical and economical feasibility of the evaluated technologies. ISTC will coordinate demonstrations of the technologies adopted by the trial shops, as well as existing innovative technologies on-site. Companies that are favorably impressed by the demonstrations will be encouraged to pursue a pilot trial of the technology in their own facility.

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