



Resources for Minnesota Businesses

Minnesota Technical Assistance Program ■ CHECKLIST

The Minnesota Technical Assistance Program (MnTAP) is a nonregulatory program, located at the University of Minnesota, that helps Minnesota businesses develop and implement industry-tailored solutions that prevent pollution at the source, maximize efficient use of resources, and reduce energy use and cost. Our technical staff, industry specialists with backgrounds in science and engineering, can help you develop solutions to reduce waste and maximize efficiency at your facility. The following publications and other resources are available online at <mntap.umn.edu>. Or, call MnTAP for personal assistance.

General Waste Reduction for All Industries

- _Building a Strong Pollution Prevention Team [21]
- _Floor Drain Systems [66]
- _Materials Exchange program information, <mnexchange.org>
- _Membrane Filtration Systems [5]
- _MnTAP Profile; general MnTAP information
- _Questions for Your Supplier when Changing Brands or Products [13]
- _Regulated Waste; Key Practices for Small Businesses [47]
- _Source, MnTAP newsletter

Dry Cleaning

- _Alternative Dry Cleaning Systems [22]
- _Alternatives to Reduce Waste and Emissions; Dry Cleaner [54]

Energy

- _Air Compressor Energy-Saving Tips [82]
- _Motor Energy Saving Tips [123]
- _Rock-Tenn Company Saves \$170,000 by Reducing Energy Losses [IS-04]

Fiber Reinforced Plastics (FRP)

- _Controlled Spraying and Laser Touch in the FRP Industry [89]
- _Fiberglass Fabricators Upgrades Open Mold Processing Equipment [61]
- _FRP Shop Complies with New Air Permit Regulations [83]
- _FRP Shop Implements Light RTM to Produce Parts [41]
- _Reducing Volatile Emissions in the FRP Industry [75]
- _Source Reduction and Recycling Opportunities for a FRP Shop [IS-94]

Food Processing

- _Dairy Industry; Eliminating the Use of Mercury Manometers [IS-95]
- _Dairy Plant Reduces Water Use and BOD Saving Over \$26,000 [IS-99]
- _Food By-products; Livestock Producers Accepting [25]
- _Food Processing By-products; Composting and Landspreading [78]
- _Food Processing By-products; Feeding to Livestock [67]
- _General Mills Saves Over \$27,400 by Reducing Water and Sewer Costs [IS-01]
- _Phosphorus: Reducing Releases from Dairy Processing Facilities [116]
- _Phosphorus: Reducing Releases from Meat Packing Operations [118]
- _Phosphorus: Reducing Releases from Poultry Processing Plants [71]
- _Product Savings and Water Conservation; Schroeder Milk Saves \$400,000 [80]
- _Restaurant Cuts Disposal Costs by Reducing and Recycling Solid Waste [86]
- _Source Reduction and Waste Management Alternatives in Food Processing [76]
- _Southern Minnesota Beet Sugar Co-op Reduces Waste and Saves Over \$500,000 [IS-97]
- _Supermom's Saves \$235,000 Yearly by Reducing Waste [74]
- _Water Conservation; Sparta Foods Saves Nearly \$10,000 [IS-96]

Health Care & Laboratories

- _Dental Office Hazardous Waste [81]
- _Disinfection Best Management Practices [73]
- _Formalin Recovery in Health Care Labs [20]
- _Laboratories; Bemidji State University Reduces Chemistry Lab Waste by Almost 35 Percent [IS-98]
- _Laboratories; Minnesota Department of Agriculture Eliminates Methylene Chloride Use in the Lab [IS-00]
- _Laboratory; Selecting [19]
- _Meeting JCAHO Standards with Pollution Prevention
- _Mercury in Health Care Lab Reagents [92]
- _Mercury in Labs and Pharmacies [10a]
- _Mercury in Nonclinical Health Care Areas [10b]
- _Mercury in Patient Care Areas [10c]
- _Suction Canister Waste Reduction [91]

Metal Working & Finishing

- _Aqueous Parts Washers for Small Operations [29]
- _Coolant Maintenance for Machining Operations [63]
- _Metal Phosphatizing Operations [64]
- _Metal Stamping Company Saves \$26,000 by Eliminating Vapor Degreasing [87]
- _Solvent Recycling; Selecting On-site Stills [62]
- _Technical Plating Saves Over \$45,000 by Reducing Water and Sewer Costs [IS-02]
- _Vapor Degreasers; Reducing Solvent Emissions [70]

Painting & Wood Finishing

- _Liquid Coating Equipment Suppliers [9]
- _Old Paint and Paint-related Materials [69]
- _Paint Filters: Crenlo Saves Nearly \$100,000 by Reducing Paint Filter Waste and Water [IS-03]
- _Paint Stripping: Reducing Waste and Hazardous Materials [56]
- _Reducing Paint Waste and Burnoff; K-Bar Saves Over \$44,000 [IS-02]
- _Reducing Powder Paint Use and Rework; Wenger Corporation Saves Over \$93,000 [IS-00]
- _Resources for Minnesota's Coating Industry [35]
- _Soak Step Reduces Solvent Waste from Cleaning Paint Straining Equipment [84]
- _Solvent Waste Cut with Spray Nozzle Selection when Cleaning Paint Straining Equipment [112]
- _Spray Gun and Equipment Cleaning System Suppliers [79]
- _Spray Painting and Coating Waste Reduction Alternatives [85]
- _Water Conservation; Hoffman Engineering Saves \$32,000 Annually by Reducing Water Use in Painting Pretreatment [IS-96]
- _Wood Finishes; Suppliers of Low-VOC, Low-HAP and Waterborne [7]
- _Wood Finishing; Reducing Waste and Cost Saving Ideas [39]

POTW

- _Concrete Manufacturer Reduces Water Use and Solid Waste [88]
- _Phosphorus: Reducing Releases from Industrial Cleaning and Sanitizing Operations [11]
- _Phosphorus Reduction from Businesses: Using a City-wide Inventory
- _Phosphorus Sources and Reduction Opportunities Walk-through Checklist

Vehicle Maintenance

- _Collision Repair: Reducing Waste and Costs [28]
- _Oil Cleanup [65]
- _Waste Reduction at a Vehicle Maintenance Facility [IS-95]

Other Waste Reduction Case Studies

- _Adhesives; American Converters Eliminates Methylene Chloride [IS-97]
- _Adhesives; Crystal Cabinet Works Eliminates Methylene Chloride [96]

- _Aluminum Foundry Replaces TCA with Waterbased Coatings [93]
- _Cleaning Changes; Marathon Ashland Petroleum to Save \$39,000 [IS-98]
- _Endocardial Solutions Saves \$15,000 [IS-98]
- _Examining Root Causes at X-Cel Optical [IS-96]
- _Hibbing Taconite Company Saves \$260,000 by Reducing Ore Spills [IS-01]
- _Identifying and Segregating Contaminated Materials; Fisher-Rosemount Reduces Hazardous Waste [IS-94]
- _Outsourcing; Bouquet Enterprises Reduces Hazardous Waste and Employee Exposure [IS-97]
- _Petroleum Solvents and Production Changes Replace Chlorinated Cleaning Solvents [95]
- _Reducing Film Scrap; Hood Flexible Packaging Saves \$50,000 [IS-97]
- _Reducing Solvent and Ink Purchases and Waste; Anagram Saves Over \$68,600 [IS-96]
- _Reducing the Use of Supply Materials; Endocardial Solutions to Save \$35,000 [IS-04]
- _Team Efforts and Good Housekeeping Help Plastics Manufacturer Cut Solid Waste [90]

Vendor & Consultant Lists

- _Aqueous and Semi-aqueous Cleaners for Metal Parts Degreasing [8]
- _Aqueous Cleaning Equipment Manufacturers [3]
- _Centrifuge Equipment and Services [2]
- _Coolant Maintenance Equipment and Supplies [4]
- _Emulsified Oil and Water Separating Products [6]
- _Pollution Prevention Consultants [17]
- _Safer Stripping and Cleaning Chemicals for Coatings and Polymers [55]
- _Solvent Degreaser Alternatives [27]
- _Solvent Recycling Equipment [15]
- _Water Use Consultants [16]

Water

- _Lifecore Biomedical Saves Over \$69,000 Annually by Reducing Water and Sewer Costs [IS-02]
- _Printed Circuit Board Manufacturer; Water Conservation Opportunities [IS-94]
- _Water Conservation Tips [119]

Regulatory Contact Information

MnTAP offers suggestions for waste reduction and pollution prevention. We are not a regulatory agency, but our staff help businesses develop pollution prevention solutions to maintain compliance with regulations and reduce costs. Regulatory compliance and pollution prevention information can be found on MnTAP's Web site <mntap.umn.edu/resources/regresources.htm>.