



Pollution Prevention Project Proposal

Title: ProSolv® Propane Cylinder Recycling System

Benefits at a glance:

- ✓ *Safely removes the valve stem so canister can be recycled as scrap steel-saves you money on solid waste disposal.*
- ✓ *Helps with 40 CFR 261.1 (6) compliance eliminating potential regulatory fines.*
- ✓ *Pays for itself when you recycle just 5 standard propane cylinders.*



Figure 1 Picture of ProSolv® Propane Cylinder Recycling System

Benefits-at-a-Glance

- Eliminates 20 cylinders as hazardous waste per year;
- Saves over \$4000.00 annually from reduced waste and waste cost
- Enables additional metals recycling
- Ensures that no cylinders leaving the department have residual materials or pressure.

Project Title: ProSolv® Propane Cylinder Recycling System

Project Features:

Host Site	Brookhaven National Laboratory
Host PSO	Office of Science
Dept/Div	Collider Accelerator Dept.
Point of Contact	Melvin Van Essendelft, Bldg. 911A, X2905, mvaness@bnl.gov

Benefits

Safely removes the valve stem so canister can be recycled as scrap steel-saves you money on solid waste disposal. Inserts "recyclable" steel certification tag into the cylinder valve (40 tags included). Pays for itself when you recycle just 5 standard propane cylinders. Helps you comply with 40 CFR 261.1 (6) that defines scrap metal.

Project Type	Waste Minimization
Primary Wastes Avoided	Disposal of cylinders as Hazardous Waste
Projected Annual Waste Reduction	20 cylinders (Although there is currently a back-log of cylinders that could be disposed of that would result in a substantial savings)
Projected Useful Life	Annually recurring
Requested Capital Funds	Equipment costs \$ 953.00
Requested Expense Funds	0
TOTAL PROJECT COST	953.00
Projected Annual Savings	Current Waste Disposal Cost: The cost for disposal at an off-site disposal facility as a hazardous waste can range from \$200-350/cyl. due to special incinerator requirements. Annual Cost of Disposal: 20 cylinders X \$200 = 4000.00 SAVINGS [YEARLY]: \$<u>4000.00</u>/year
PAYBACK PERIOD	About 3 months
Non-financial Benefits	
Regulatory Drivers	RCRA Pollution Prevention Requirements, DOE order, "Greening the Government".
Critical Outcomes	
Implementation Schedule	60 days after funding is approved

Potential for Broader Application:

This could be expanded using P2 funds to purchase additional equipment for use across the Laboratory.