

**BROOKHAVEN NATIONAL LABORATORY
FY02 Funded Pollution Prevention Projects**

Rank	Project Name	Directorate, Dept/Div and POC	Cost	Savings	Payback (Years)	Waste Reduction
1	Minimization of Silver Waste from Silver-Staining Electrophoretic Mini-Gels	Life Sciences, Biology (B. Sutherland)	\$1,670	\$30,860	0.05	2200 lbs hazwaste
2	Retrofit of Garbage Truck Hydraulics With Steel-braded Hydraulic Lines and a Vegetable Based Hydraulic Oil	Finance & Admin, Staff Services (K. Mohring)	\$7,500	\$15,000	0.5	400 lbs industrial waste, eliminates potential for oil contaminated run-off
3	Retrofit of Hydraulic Lift Bays in Motor Pool Shop to Vegetable Based Hydraulic Oil	Finance & Admin, Staff Services (K. Mohring)	\$8,000	\$25,000	0.3	0-30 drums industrial waste
4	Sewage Treatment Plant (STP) Drying Shed	Facilitis & Operations, Plant Engineering (G. Olsen, G. Flett)	\$25,000	\$120,000	0.2	One time savings, 96% volume reduction of radioactive waste
5	Evaluation of CO2 Snow Cleaning for NSLS, Instrumentation and CAD applications	NSLS, Instrumentation, and CAD (D. Bauer)	\$5,000	see text	2	Potential to reduce solvent usage (hazwaste), and aqueous cleaning wastes (industrial waste)
6	Replacement of Film-based Autoradiography and other radioisotopic imaging with a Phosphor Imager	Life Sciences, Medical (A. Gifford)	\$25,000	\$22,000	1.1	200 lbs hazwaste, 100 lbs industrail waste
7	Reduction of hazardous, radioactive and industrial waste with a digital imaging system	Life Sciences, Biology (Dax Fu)	\$25,000	\$25,000	1	134 lbs hazwaste, 68 lbs industrail, 80 lbs radwaste
8	Development of a fluorescence-based assay for the DNA-dependent protein kinase (DNA-PKcs) to replace current 32P assay	Life Sciences, Biology (J. Flanagan)	\$22,000	\$30,000	0.7	200 lbs mixed waste
TOTAL INVESTED			\$119,170			
TOTAL SAVINGS				\$267,860		
AVERAGE PAYBACK PERIOD					0.4 Years (~5 months)	