Pollution Prevention Implementation Plan for Metal Manufacturers

Painting Systems

Most metal manufacturing operations have some type of painting system for rust protection and/or finishing purposes. The selection of a specific coating application method affects the costs of the overall system a firm needs to purchase. Whether a firm chooses high solids paints, waterborne paints or powder coatings, it may require external financing to purchase the necessary paint booth and related items. There are also costs associated with the method of application that the firm selects. The costs for conventional, high-volume low-pressure (HVLP), and air-assisted airless application methods are relatively low, but electrostatic and two component systems will often require outside financing. Powder coating systems are the most expensive application methods on the market and may also require outside financing if selected for implementation.

Painting Equipment Cleaning

The three most common pollution prevention options for painting equipment cleaning are settling and reuse, automatic gun washers, and on-site distillation. Automatic gun washers cost approximately $1,500 and on-site distillation can cost a minimum of $3,000. These will generally be financed internally from operations as the paybacks are under a year, but they can be added to your financing package if your firm is changing its painting and application procedures.

Parts Washing

Most metal manufacturers use parts wash basins containing petroleum-based solvents. Common parts washer basins cost $600 but for less than $1,500 a firm can reduce petroleum-based parts washer solvent waste generation by purchasing a "hybrid" unit. These units purify the circulating solvent and reduce hazardous waste generation and off-site transportation liabilities. Another option is the purchase of an aqueous cleaner that can cost from $3,000 to $4,000. However, if you are not located on city sanitary sewer systems, you will need to spend another $8,000 for an on-site wastewater recycler. Most parts washers will be financed internally but if you do opt for an aqueous cleaner the Small Business Administration's (SBA) low doc program might fit your needs.

Coolant Recycling Equipment

External financing will be needed to install a coolant recycling system as it will generally cost at least $7,500 for a small shop and up to $50,000 for larger shops to purchase and install. Very few firms have sufficient cash flow to internally finance this type of project. By carefully preparing a cost/benefit worksheet as shown in Figures 5-1 and 5-2, a firm can show its commercial lender the value of the capital investment. These types of projects qualify for either SBA "low doc" or 7(a) financing.

FINANCING NEEDS

The first step is to review the firm's monthly cash flow from operations statements. The least expensive way to finance less expensive pollution prevention technologies is to internally finance the capital outlays. However, this may not always be possible for metal manufacturers when purchasing coolant recycling equipment or new painting systems. Therefore, many firms will turn to their financial institution for financing these more expensive projects. Pollution prevention initiatives that do not show quick paybacks, such as coolant recycling equipment replacement projects, may meet with some resistance from the lender. That is where the SBA's financial assistance program can be very useful to the business.

The largest financial assistance program is the SBA. The SBA has several programs that your firm may find useful in financing pollution prevention and/or reduction capital projects. The most common and largest program is the 7(a) loan guaranty program. The 7(a) program allows the SBA to reduce risk to lenders by guaranteeing the major portion of loans made to small businesses.

The eligibility requirements and credit criteria of this program are very broad in order to accommodate a wide range of financing needs. When you have put together the list of equipment that you need to purchase you will fill out an application for a loan with a lending institution. The lender will review the application and decide if it merits a loan on its own or if it requires additional support. Many firms will have little difficulty in obtaining the needed financing for their smaller projects, however, a firm with a significant level of debt already on their balance sheet may need the SBA loan guarantee before the financial institution will extend further credit.

The SBA can guarantee as much as 80 percent on loans of up to $100,000 which will be sufficient for most pollution prevention projects. If the loan is more than $100,000, the guarantee drops to 75 percent up to a maximum guaranty of $750,000 (75 percent of a $1,000,000 loan).

There are no balloon payments, prepayment penalties, application fees or points permitted with 7(a) loans. Repayment plans may be tailored to each individual business.

Most pollution prevention purchases could be financed over a period of 5 to 7 years. Both fixed and variable interest rates are available. Rates are pegged at no more than 2.25 percent over the lowest prime rate as published in the Wall Street Journal on the day the application is received by the SBA. (Loans under $50,000 may have slightly higher rates).

The SBA charges the lender a nominal fee to provide a guaranty and the lender usually passes this charge on to the borrower. The fee is based on the maturity of the loan and the dollar amount that the SBA guarantees. On any loan with a maturity of one year or less, the fee is 0.25 percent of the guaranteed portion of the loan. On loans with maturities of more than one year, where the portion that the SBA guarantees are $80,000 or less, the guaranty fee is 2 percent of the guaranteed portion. The SBA will require that you pledge sufficient assets to adequately secure the loan.

Most pollution prevention projects will typically be less than $100,000 so the Low Documentation Loan (LowDoc) program may be the best alternative to obtain reasonable financing with a minimal amount of paperwork. For firms with established relationships with lenders and those meeting the lender's requirements for credit, LowDoc is a simple one page SBA application form with a rapid turnaround time. Like the 7(a) program, the SBA will guarantee up to 80 percent of the loan amount.

Most lending institution will require a projected cash flow statement, projected income statement and projected balance sheet. Examples are available from your local SBDC office.