



Pollution Prevention Workgroup

Due to the border's rapid urban and industrial growth, pollution prevention is often a much more cost-effective means of improving the environment and avoiding environmental health problems than spending resources on regulation, treatment, storage, and disposal. An integral vision of environmental management cannot sidestep aspects of pollution prevention. The evolution in managing environmental issues has culminated in a strategy in which optimization of processes for products, the adoption of clean technologies and environmental protection are the focus rather than control and remediation to the expense of natural resources. The mission of the Pollution Prevention Workgroup is to demonstrate and promote the benefits of pollution prevention to protect the environment and promote sustainable development in the border communities. To achieve our mission, one of the Pollution Prevention Workgroup's principal objectives is to coordinate efforts to define and implement pollution prevention projects in the border area. The effort to incorporate pollution prevention is ongoing with a focus to continually improve and build on our successes while keeping in mind the regulatory, socioeconomic, and cultural aspects that are unique to each country and to the border area.

Although, the Pollution Prevention section of the Border XXI document more fully details the goals, objectives, and projects of both countries; this fact sheet will hopefully provide a good overview and spark your interest on how to include pollution prevention in your business or home. Remember, pollution prevention whether directed at industry, state, or local governments or private citizens is a cost-effective means of reducing levels of contamination, improving the quality of life for border residents, and promoting economically and environmentally sustainable development.

If pollution prevention is to be a successful tool for environmental management and optimization of



The Border XXI Program

The Border XXI Program (Border XXI) is an innovative binational effort between the United States and Mexico to protect the natural resources and environment of the border region. The mission of Border XXI is to achieve a clean environment, protect public health and natural resources, and encourage sustainable development along the U.S.-Mexico border.

Border XXI is implemented through nine binational workgroups. The nine workgroups under the Border XXI Program are *1 water, 2 air, 3 hazardous and solid waste, 4 pollution prevention, 5 contingency planning and emergency response, 6 cooperative enforcement and compliance, 7 environmental information resources, 8 natural resources, and 9 environ-*

Fact Sheet

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industrial productivity, the following strategies may be pursued:

- ▣ Establishing a new relationship between industry and the environment in which the environment is considered an indispensable aspect of industrial production. With this understanding, industry can assume basic principles of pollution regulation that ensures industrial accountability and optimizes the use of energy and resources.
- ▣ Rewriting environmental regulation so that it reduces administrative costs and bureaucratic overhead and establishes ways in which industry can increase productivity while protecting the environment.
- ▣ Standardizing international pollution prevention industry specifications to ensure increased marketability and environmental protection.

In this manner, a progressive strategy has been developed to optimize industrial productivity, from an environmental standpoint as well as a competitive and cost saving standpoint.

Pollution Prevention

Pollution prevention is defined as “source reduction” which is any practice that reduces or eliminates any pollutant *prior* to recycling, treatment, or disposal. Also, the U.S. Environmental Protection Agency (EPA) further defines pollution prevention as the use of practices that reduce or eliminate the creation of pollutants through:

- ▣ Increased efficiency in the use of raw materials, energy, water, or other resources
- ▣ Protection of natural resources by conservation

Pollution prevention strategy dictates the following hierarchy of environmental management practices:

1. Pollution Prevention/Source Reduction
2. Recycling
3. Treatment
4. Safe Disposal

HIGHLIGHTS OF THE U.S./MEXICO POLLUTION PREVENTION PROGRAM

Pollution Prevention Workshops

Arizona, Texas, and California have held a variety of workshops along the border in coordination with industry, local, and state governments, municipalities, and academia. The states have worked in coordination with our Mexican counterparts and EPA to present workshops on pollution prevention in industrial sectors such as wood finishing, manufacturing, painting, and metal finishing as well as electronics and textile industries. These workshops include presentations and hands on experience in implementing environmental management practices and pollution prevention/energy efficiency in facilities and municipalities to include cost-saving measures.

Technology Transfer and Capacity Building

Through EPA, Texas Natural Resource Conservation Commission(TNRCC), Mexico's Attorney General for Environmental Protection(PROFEPA), and the university partners, the U.S./Mexico Pollution Prevention Workgroup has encouraged maquiladoras to participate in voluntary environmental audits. Several site assistance visits (SAVs) have provided technical assistance to maquiladoras in pollution prevention and energy efficiency. Participating maquiladoras have reported annual reductions of 4.5 million gallons of wastewater and over 47,000 tons of nonhazardous waste, and a

combined annual cost savings of over \$5,000,000 as a result of changes implemented following the SAVs.

PROFEPA is committed to promoting pollution prevention concepts in Mexico. PROFEPA is working with the Arizona Department of Environmental Quality (ADEQ) to improve waste management practices at maquiladoras located in the Arizona/Sonora border region. This partnership has evolved into the Arizona-Mexico International Green Organization (AMIGO). Through a nonregulatory partnership, AMIGO encourages industry in the United States and Mexico to adopt pollution prevention techniques. AMIGO provides networking opportunities,

Proposed Projects

Proposed projects include the following:

California-Baja California Regional Pollution Prevention Roundtable: A regional roundtable group will be developed to promote pollution prevention, environmental compliance, and good environmental practices among industry in the California-Baja California region.

Texas/Mexico Border Pollution Prevention Initiative: Training workshops, technical assistance events, and roundtables will be conducted to continue workgroup efforts in promoting pollution prevention through industry and environmental agency participation.

Small Business Border Region Compliance Pollution Prevention Initiative: Site visits and workshops will be conducted to provide technical assistance to Texas companies along the Texas-Mexico border.

technological and information exchanges through workshops, facility tours, and personnel exchanges, and a pollution prevention conference.

Pollution Prevention Outreach for Maquiladoras

Industry outreach through pollution prevention has been recognized as an essential means of encouraging the implementation of pollution prevention strategies in maquiladoras. The concept of establishing roundtable meetings have been initiated to further efforts to include industry and also academia as partners in pollution prevention efforts and in the safe environmental management of our border area. Although existing forums for these meetings are being utilized such as workshops, meetings, and the AMIGO Program; more formal initiatives are being implemented to further include industry in the Border XXI Program. In addition to the AMIGO Program and the other meetings; TNRCC will hold a series of three roundtable meetings for government representatives and maquiladora managers to discuss the progress of pollution prevention initiatives in the U.S./Mexico border region. Project partners also include federal and state representatives from the United States and Mexico, university representatives from the United States and Mexico, Center for Cleaner Technology of Mexico, and maquiladora managers and associations

Pollution Prevention in Industrial Facilities in Mexico and Texas: An INFORM Initiative

Through the Pollution Prevention Workgroup, INFORM, an independent, national nonprofit research organization, encourages change in industrial operations and public policies in the region by providing the public with skills and knowledge in pollution prevention.

This project is intended to encourage the adoption of public policies and grams that will promote pollution prevention and continued environmental improvement in industry. In cooperation with the Texas Center for Policy Studies, INFORM conducted a one-day industrial source reduction training workshop in Matamoros, Mexico on October 19, 1997. Participants included local environmental and community groups and citizens living near one or more of the chemical manufacturing maquiladora plants.

What is capacity building?

Capacity building is the development of community or industry resources within a specific field.

Resources may include teams of environmental specialists who can provide technical assistance, pollution prevention technical information, or public outreach materials. Capacity building raises awareness and provides technical resources for pollution prevention to both industry and border communities.

Workgroup Objectives

The objectives of the Pollution Prevention Workgroup are as follows:

- Increasing the exchange of technical information among all government levels to enhance assistance and outreach to industry
- Increasing technical assistance and outreach to federal, state, and municipal authorities, and to the general public
- Developing an initiative for the management and recycling of solid waste
- Increasing cooperation and coordination with other Border XXI workgroups and other organizations involved in



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