

POLLUTION PREVENTION WASTE MANAGEMENT WORKSHOP

Save money – Reduce risk – Eliminate waste

Tools and Resources

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Tools and Resources



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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POLLUTION PREVENTION PLANNING

P2 Annual Progress Report

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P2 Planning Resources

P2 Reporting Requirements

Pollution Prevention Waste Management Workshop

Pollution Prevention (P2) Planning

A portal to resources available for the Waste Reduction Policy Act and pollution prevention planning.

P2 PLAN.ORG
The State of Texas Pollution Prevention Program

Annual Progress Report | Online P2 Annual Progress Reporting (STEERS)

Pollution Prevention Workshops | Example P2 Plans | P2 Planning Manual

Documents on this page are in various file formats (Help [downloading files.](#))

WRPA

Background [about the Waste Reduction Policy Act](#), its requirements, and resources to

Hot Topics

NEW STEERS is now open for 2019 Annual Progress Reports

Resources

Reduce Waste and Save Money! Use these links to enhance your P2 efforts!

How are we doing? Take our customer satisfaction survey

www.P2plan.org



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[>> Questions or Comments: p2@tceq.texas.gov](#)

About the Annual Progress Report (APR)

About the Pollution Prevention (P2) Annual Progress Report: its purpose, applicability, requirements, and schedule.

- [Applicability and Requirements](#)
- [Purposes](#)
- [Due Dates](#)
- [Reporting Forms](#)
- [For Help](#)

Applicability and Requirements

The Pollution Prevention (P2) Annual Progress Report is required, for certain facilities, by the [Waste Reduction Policy Act \(WRPA\)](#).

You must submit a P2 Annual Progress Report (APR) if you are a large quantity generator or report on TRI Form R. The report delineates progress towards pollution prevention goals laid out in your P2 Plan. It provides an opportunity to review and update your plan and look for new ways to save money by reducing waste.

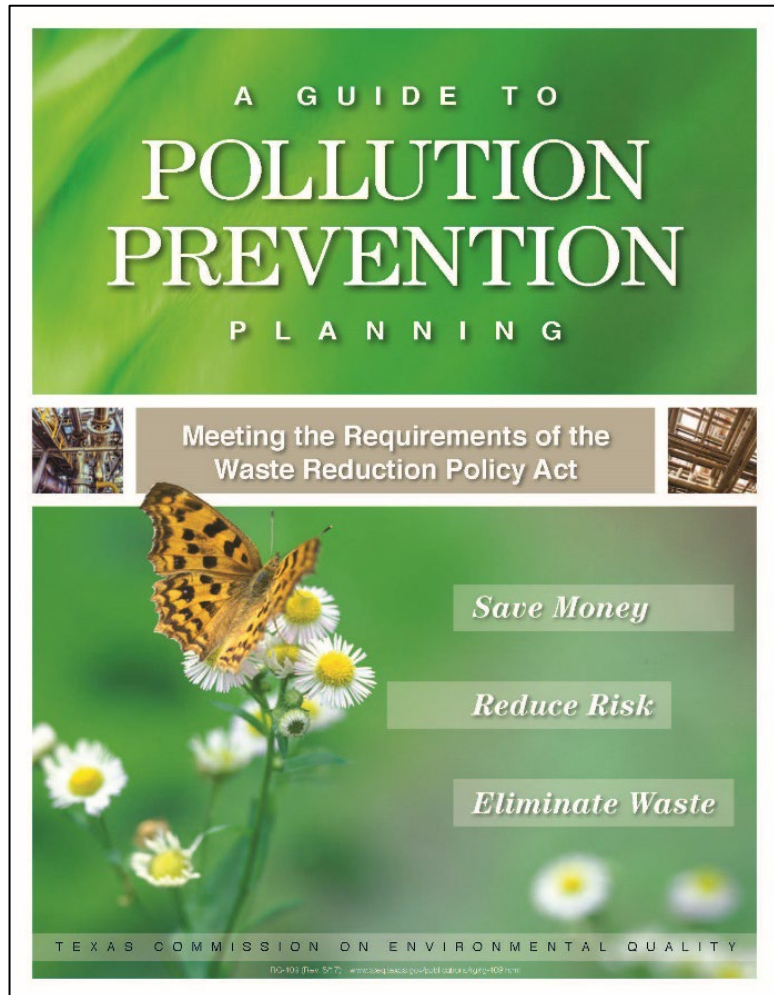
Small quantity generators who **do not** report on the TRI form R are not required to submit a P2 Annual Progress Report, but **must prepare** a P2 Plan and submit the Executive Summary to TCEQ.

The Texas P2 Annual Progress Report is **not** the U.S. Environmental Protection Agency's waste minimization report (Biennial Report Form WM/IC), or the TCEQ [Annual Waste Summary](#).



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P2 Planning Guide (RG-409)



Worksheets

Assessment Team

Process Flow Diagram

Prioritized List of Wastes

Project Descriptions and Goals

Employee Awareness Training

Cost Accounting

Documentation Requirements

LQG/TRI Form R

SQG only



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Table 4. Minimum Documentation Requirements for Large Quantity Generators or TRI Form R Reporters

P2 Plan	Executive Summary
<ul style="list-style-type: none"> ■ Facility description ■ List of all hazardous waste generating activities ■ List of all TRI release activities ■ Prioritized list of technically and economically feasible P2 projects ■ Explanation of P2 projects to be undertaken with discussion of: <ul style="list-style-type: none"> • technical and economic considerations • environmental and human-health risks ■ Estimate of type and amount of reduction anticipated ■ Implementation schedule for each P2 project ■ Description of measurable P2 goals ■ Explanation of employee awareness and training programs ■ Discussion of projects that may result in the release of a different pollutant or contaminant, or that may shift the release to another medium ■ Signed certification by owner or corporate officer of commitment and ability to authorize company resources for implementation ■ Executive Summary of the P2 Plan 	<ul style="list-style-type: none"> ■ Facility description, including: <ul style="list-style-type: none"> • facility name • mailing and physical addresses • contact, phone numbers, and email • general description of facility • ID numbers: TCEQ Regulated Entity Number (RN), TCEQ Customer Number (CN), TCEQ Solid Waste Registration (SWR), EPA, Pollution Prevention Number (PNumber) and TRI numbers • SIC code and NAICS • time period the five-year plan is in effect ■ List of all hazardous wastes generated and the volume of each ■ List of all reportable TRI releases and the volume of each ■ Prioritized list of pollutants and contaminants to be reduced ■ Statement of measurable reduction goals ■ Explanation of environmental and human-health risks considered in determining reduction goals ■ List of projects with an associated schedule of implementation ■ Implementation schedule for future reduction goals ■ Discussion of projects that may result in the release of a different pollutant or contaminant, or that may shift the release to another medium <p style="text-align: center;">Annual Progress Report</p> <p>Every July 1 an Annual Progress Report must be submitted using TCEQ forms. Forms are available online or in this guide.</p>

P2 Planning Guide (RG-409)



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Table 5. Minimum Document Requirements for Small Quantity Generators That Do Not Report on TRI Form R

P2 Plan	Executive Summary
<ul style="list-style-type: none"> ■ Facility description ■ List of hazardous wastes generated and volume of each ■ Prioritized list of pollutants and contaminants to be reduced ■ Statement of measurable reduction goals ■ Discussion of environmental and human-health risks considered in determining reduction goals ■ List of P2 projects with implementation schedule ■ Implementation schedule for future reduction goals ■ Signed certification by owner, or officer, of commitment and ability to authorize company resources for implementation ■ Executive Summary of the P2 Plan 	<ul style="list-style-type: none"> ■ Facility description, including: <ul style="list-style-type: none"> • facility name • mailing and physical addresses • contact, phone numbers, and email • general description of facility • ID numbers: TCEQ Regulated Entity Number (RN), TCEQ Customer Number (CN), TCEQ Solid Waste Registration (SWR), EPA, and Pollution Prevention Number (PNumber) • SIC code and NAICS • Time period the five-year plan is in effect ■ Prioritized list of pollutants and contaminants to be reduced ■ List of source reduction activities associated with reduction of prioritized wastes identified in the plan

The Resource Exchange Network for Eliminating Waste
Materials EXCHANGE



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What is RENEW



- **A free materials-exchange network established to promote the reuse and recycling of industrial wastes.**
- **RENEW has been a great tool to help reduce wastes**
 - Over 500 successful exchanges:
 - 1 billion pounds of materials recycled or reused
 - \$27 million in disposal costs avoided
 - Over \$15 million from sales of materials



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How RENEW Can Help!

- **Improve your business' bottom line**
 - Lower or Avoid Disposal Costs- RENEW has saved facilities \$27 million
 - Earn Revenue From Sales- RENEW has helped earn over \$15 million
- **Reduce regulatory burdens**
 - Provides users opportunities for waste minimization
- **Environmental Stewardship**
 - RENEW has helped divert more than 1 billion pounds of materials for reuse or recycling



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Types of items on RENEW:

- Electronics
- Organics
- Wood
- Paper
- Oil
- Solvents
- Acids
- Rubber
- Alkali
- Miscellaneous
- Textile and Leather
- Paints and Coatings
- Wax
- Glass
- Metal and metal sludge
- Construction and demolition
- Inorganics



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RENEW Disclaimer

- It is the legal responsibility of each party to determine whether a listed material is a hazardous waste or a hazardous material.
- Hazardous wastes must be managed in accordance with all relevant hazardous waste regulations and laws.
- RENEW is not responsible for the determination of what may constitute a hazardous material or hazardous waste or create a hazardous situation.
- RENEW reserves the right not to list or delist a material.



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Successful Exchange Stories

- A biodiesel production company transferred 275 pounds of waste acetone to a company that recycled it for lacquer paint production. The material is typically sent to a hazardous waste disposal site that would have cost the facility \$750. Helps the facility remain a CESQG!
- A company that refines and markets oil and natural gas transferred 7,800,000 pounds of crude oil tank bottoms to a company who was able to reuse it saving them \$236,800.

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EPA Resources www.epa.gov/p2



Environmental Topics

Laws & Regulations

About EPA

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Pollution Prevention (P2)

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Learn about Pollution Prevention

- [What is P2?](#)
- [P2 Laws and Policies](#)
- [P2 Where You Live](#)



[Results of FY 2014 P2 and SRA Grants.](#)

[What are National P2 Emphasis Areas?](#)

Learn About Pollution Prevention

- [Why P2 is important](#)
- [P2 law and policies](#)
- [What EPA is doing](#)
- [P2 calendar of events](#)

Grant Programs for P2

- [Pollution Prevention Grants](#)
- [P2 Information Network Grants](#)
- [Source Reduction Assistance Grants](#)

What You Can Do

- [P2 resources for business](#)
- [Internships in P2](#)
- [Tools and calculators](#)
- [EPA regional and state program information](#)

Additional P2 Resources

- [Pollution Prevention Information Clearinghouse](#)
- [Publications](#)
- [A-Z subject index](#)
- [Greener Products and](#)



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Grants

Measuring P2

Resources for Businesses

Tools and Calculators

What You Can Do

Case Studies

Additional P2 Resources

Pollution Prevention Resources

The links listed below offer access to EPA's information and outreach materials on pollution prevention.

- [Pollution Prevention Information Clearinghouse \(PPIC\)](#)
 - [PPIC Calendar](#)
- [Pollution Prevention Resource Exchange \(P2RX\)](#)
- [Newsletters](#)
- [EPA P2 publications](#)
 - General P2 information
 - P2 technical assistance
- [A-Z subject index](#)
- [Case studies](#)



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Zero Waste Network WWW.zerowastenetwork.Org



The **Zero Waste Network** is a group of environmental professionals dedicated to finding money-saving options for conserving our natural resources. We are a collaborative project of the U.S. Environmental Protection Agency, the University of Texas at Arlington, and regional environmental agencies. Together we work to identify pollution prevention options for large and small businesses as well as consumers.

Our Mission

We are dedicated to protecting the environment by helping companies become more efficient. We supply tools to reduce production costs by lowering environmental impact



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Zero Waste Network P2 Planner

ZWN

HOME

RENEW

P2PLANNER

P2OPTIONS

CASE STUDIES

CONTACT

Welcome Calen Roome!

YOUR INFO

THE POLLUTION PREVENTION PLANNING PROCESS

This planning tool will guide you through a process for pollution prevention planning. In this process you will:

- Identify the **activities** at your facility and the wastes it generates.
- Consider **options** from an extensive list designed specifically for your activities.
- Save the options you plan to implement.
- Prepare and print the **plan** and **executive summary**. Texas facilities may submit the plan and executive summary to meet the requirements of the Waste Reduction Policy Act.

YOUR PLANS

CREATE A NEW PLAN



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Zero Waste Network P2 Options

[HOME](#)[RENEW](#)[P2PLANNER](#)[P2OPTIONS](#)[CASE STUDIES](#)[CONTACT](#)

POLLUTION PREVENTION OPTIONS

Following are a set of pollution prevention options (Best Management Practices) that can be used to save money by reducing waste. Many of the options you will find are submitted by people in the private sector who have found solutions to a variety of problems.

REVIEWED OPTIONS FOR ACTIVITIES

The following activities have options that have been reviewed by specialists in the pollution prevention field. Options may include unreviewed options submitted as part of the P2 Planner project.

- › Automotive - Dealership Maintenance
- › Automotive Services
- › C-22 Column
- › Chemical - Agriculture
- › Chemical - Blending
- › Chemical - Distribution
- › Chemical Manufacturing - Heat Exchangers
- › Chemical Manufacturing - Storage Tanks
- › Chemical Manufacturing reboiler
- › Cleaning and Degreasing Operations
- › Coating - Aerosol Can Management
- › Coating - Employee Training
- › Coating-Clean Up
- › Coating-General



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Zero Waste Network P2 Options

ZWN



REVIEWED P2 OPTIONS for the Chemical - Distribution Process

Following are a set of P2 options you may wish to implement. No option is perfect for everyone, but sometimes options that have worked at one facility can work at yours. They might also serve as inspiration.

Reviewed Chemical - Distribution Options

Following are a list of options that have been reviewed by pollution prevention specialists. These options have worked at other facilities and may work at yours.

Material Handling Training

Emphasize safe material handling practices when moving product from receiving areas, stocking areas, packing areas, and shipping areas to minimize spills. Train employees to identify expiring product or potential damage from handling.



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The best resources of all!!!!!!!

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