

- Plume Remediation,
- Documentation.

The foregoing material only takes up one-third (104 pp.) of the book. The latter two-thirds is filled by appendices which include:

- Case Studies —
 - Wurtsmith AFB, MI
 - KC-135 Crash Site, Wurtsmith AFB, MI
 - Site ST-27, Charleston AFB, SC
 - Site ST-14, Carswell AFB, TX
- Overview of Applicable Regulations
- Documenting Natural Attenuation
- Developing Risk-Based Cleanup Goals
- Remediation Time and Cost Estimates and Recommended Pilot Testing
- Recommended References

The emphasis (as the book's title suggests) is cost-effective cleanup based, however, on risk analysis. This cost effectiveness results from utilizing a combination of land-use control, site-specific risk assessment, natural attenuation and focused source reduction technology.

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Pollution Prevention Opportunity Assessments for Research and Development Laboratories, Jill Engel-Cox and Kim Fowler, Battelle Press, Columbus, OH, 1998, US\$29.95, 100 pp., ISBN: 1-57477-070-5

On the first page of the first chapter, entitled "Introduction: Preventing Pollution in the World of Research and Development," the authors outline their whole book with the following advice on how to conduct a P² (Pollution Prevention) laboratory assessment:

- Get Started — Choose a diverse team, including a researcher to lead the assessment.
- Collect Information — Gather data about key waste-generating activities by identifying the material usage, quantifying waste streams, and walking through facilities and laboratory space where activities are being conducted.
- Brainstorm — Brainstorm pollution prevention opportunities.
- Analyze — Research and analyze pollution prevention opportunities for waste reduction, cost savings, and return on investment.
- Make Recommendations — Make recommendations for pollution prevention implementation projects based on the waste and cost analysis.
- Document — Document your work and implement the opportunities.

Indeed, the six steps given above are the six chapter titles of the book.

Their introductory chapter covers "some basic concepts, such as describing pollution prevention, discussing what a pollution prevention opportunity assessment is, noting the

benefits of assessments, and showing how they fit into a pollution prevention program. Each subsequent chapter covers a step in the pollution prevention opportunity assessment process. At the beginning of each chapter is a list of the activities to complete that step. Each chapter also includes an example of how a team of researchers completed that step and the results. A detailed report from the example is included in the appendix.’’

The authors provide copies of five worksheets that they have found to be useful in documenting their pollution prevention opportunity assessment efforts — beginning with a description of the team and its activity (#1) and ending with a final project summary (#5).

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