In the second of the two reports, the authors evaluated several high-temperature processes for the incineration of hazardous wastes: metallurgical furnaces, brick and lime kilns, glass furnaces and sewage sludge combustion. Each process was evaluated in the context of the time/temperature profile, geographical location, product quality considerations, institutional factors and environmental impacts. Promising alternatives were identified.

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Techniques for Industrial Pollution Prevention — A Compendium for Hazardous and Non-Hazardous Waste Municipalities, by M.R. Overcash, Lewis Publishers, Chelsea, MI 48118, U.S.A., 1986, ISBN 0-87371-071-1, 203 pages, $34.95.

The book is a compendium of successful waste elimination schemes utilized in France. Most of the processes deal with wastewater (although a few treat air streams) — most recover valuable by-products from those streams, avoiding both cost of treatment of the liquid and disposal of residue.

Industries discussed (with specific examples, flow sheets and cost given) are:
1. Agriculture and Food
2. Construction Materials
3. Chemical Manufacturing
4. Metallurgy
5. Surface Treatment
6. Textiles
7. Tanneries
8. Wood Products

The changes discussed include: removing of by-products (by use of one or more of the following unit operations of chemical engineering: extraction, centrifugation, crystallization, evaporation, absorption, scrubbers, electrolysis, ultrafiltration, filtration, water recycle, dry processing, stream recovery, stream segregation, process substitution, process modification, regeneration and bath recycle.

In the first chapter, Overcash has written: "Waste elimination is much more a thought process or problem-solving sequence which attempts to go further back into the source of waste and to employ engineering principles which reduce hazardous waste or recover useful materials from such waste." The French report contains 73 good examples of those procedures.

This is an excellent book that should stimulate ideas well beyong the bound of the examples found. I highly recommend it.

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