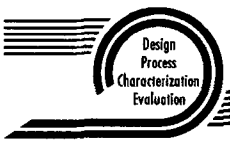

Environment

In the effort to preserve and maintain the fragile ecology of our planet, these recently selected abstracts are represented to help readers of the *Journal of Materials Engineering and Performance* stay current on legislation and compliance with global environment issues and regulations. They are reprinted from Metals Abstracts and Materials Business File with permission from Materials Information, a joint service of ASM International, Materials Park, Ohio, and the Institute of Materials, London, England.

Product Stewardship for Refractory Ceramic Fibers. Supported by the Refractory Ceramic Fibers Coalition (RCFC) member companies, the refractory ceramic fiber (RCF) product stewardship program provides valuable information to end users regarding health study results, regulatory initiatives, handling practices, disposal, and the overall safe management of RCF materials. The development of an effective product stewardship program was referred to by the U.S. Environmental Protection Agency (EPA) as "a significant step toward risk reduction." The discussion briefly summarizes RCF health issues and reviews the development and function of the seven key elements of product stewardship for refractory ceramic fibers.

D.E. Venturin. Cited: *Ceram. Eng. Sci. Proc.*, Vol 16 (No. 1), Jan-Feb 1995, p 203-208 [in English]. ISSN: 0196-6219. PHOTOCOPY ORDER NUMBER: 199507-G1-D-0053.

Safety and the Law. Maintaining a safe workplace is more than just an investment in your company's productivity and your employees' well-being: it's the law! And the penalties for ineffective or inadequate safety programs are severe. Many U.S. metalforming companies are investing an increasing amount of management time in safety-related issues. Management/employee safety committees and self-audits have become popular as the U.S. metalforming industry seeks new ways to address potential safety issues. Many of the building blocks of an effective safety program actually are required by law, most notably employee training, posting of safe work practice information and record keeping. The key is to know what is required, stay updated about regulatory changes, and most important, recognize that your company is a changing environment with constantly changing safety needs.

L. Nakoneczny. Cited: *Met. Form.*, Vol 29 (No. 6), June 1995, p 40-43 [in English]. ISSN: 1040-967X. PHOTOCOPY ORDER NUMBER: 199508-S4-0045.

Engineering a Lockout/Tagout Program. When the original concept of lockout/tagout was devised, in all probability nobody thought about the complexity of the type of machines now being installed in automobile stamping plants. It's no longer as simple as looking at the map and then running over to turn it off at a single energy source as you might with a pressbrake or a small OBI. Today, you can have multiple sources of energy and multiple locations throughout the equipment. Schuler Inc. (Columbus, Ohio, USA) and Ford Motor Co. have teamed up to develop a series of comprehensive lockout/tagout programs including one for a six-slide, four-level transfer press at Ford's Chicago Heights stamping plant. The automotive companies are required by OSHA to lockout and relieve all stored energy sources for each portion of the press where maintenance is being performed.

D.B. Dobbins. Cited: *Met. Form.*, Vol 29 (No. 6), June 1995, p 34-36, 38 [in English]. ISSN: 1040-967X. PHOTOCOPY ORDER NUMBER: 199508-S4-0044.

Thinking Green: Highlights from the AISI General Meeting. "Steel: The Environmental Material of Choice" was the overriding theme of the American Iron and Steel Institute (AISI) General Meeting in mid-May 1995. The message was clear: Steelmakers cannot afford to avoid environmental concerns. They must fine-tune their products and the processes that make the products to be environmentally friendly. Automotive design, U.S. government regulations, and life-cycle analysis are discussed as they relate to the environment.

B. Pollock. Cited: *Iron Steel.*, Vol 22 (No. 7), July 1995, p 37-39 [in English]. ISSN: 0275-8687. PHOTOCOPY ORDER NUMBER: 199508-S4-0041.

SPI Workbook Helps Companies Comply with Clean Air Regulations. The Society of the Plastics Industry has published the Air Permit Workbook to assist plastics companies in complying with the complex U.S. Clean Air Act permitting process. The workbook is intended to help plastics companies understand the air permitting process by explaining the relationship between federal and state permitting programs and outlining the major steps in the process. Specific chapters focus on determining whether a company needs a permit, completing the permit application, preparing a compliance plan, record keeping, public participation, plant modifications, and renewal.

Cited: *Plast. Eng.*, Vol 51 (No. 6), June 1995, p 6 [in English]. ISSN: 0091-9578. PHOTOCOPY ORDER NUMBER: 199508-P4-0059.

Polymer Manufacturers Gain with TSCA Changes. Society of the Plastics Industry-sponsored changes in the Polymer Exemption Rule of the Toxic Substances Control Act (TSCA) will allow the manufacture of new polymers to begin without prior notification to the U.S. Environmental Protection Agency (EPA). The Occupational Health and Environmental Issues Committee (OHEIC) of the SPI worked closely with the EPA for three years crafting the new rule, which broadens the scope of the polymer exemption. The changes, published 29 March 1995, took effect 60 days later.

Cited: *Plast. Eng.*, Vol 51 (No. 6), June 1995, p 6 [in English]. ISSN: 0091-9578. PHOTOCOPY ORDER NUMBER: 199508-P4-0058.

Plastics Processor Ballenger Introduces OSHA Reform Bill. Saying, "It's time to add some common sense to OSHA's regulations," plastics processor and Rep. Cass Ballenger (R-North Carolina), 14 June 1995 introduced the Safety and Health Improvement and Regulatory Reform Act of 1995 in the U.S. House of Representatives. Ballenger and 55 House cosponsors target redirecting half of the federal Occupational Safety and Health Administration's funding for consultation, training, education, and compliance assistance in the measure. Were the bill now in effect, that would translate to approximately $100 million in the current OSHA budget, according to Ballenger's staff chief.

R. King. Cited: *Plast. News (Detroit)*, Vol 7 (No. 16), 19 June 1995, p 50 [in English]. ISSN: 1042-802X. PHOTOCOPY ORDER NUMBER: 199508-P4-0055.

CMA Urges Superfund Law. The Chemical Manufacturers Association favors legislation to assure that the U.S. federal government spends Superfund money exclusively on waste-site cleanup programs. The Washington, D.C.-based group, early in June 1995, released a poll by Charlton Research Co. of San Francisco, noting nearly three-fourths of those questioned agree that Superfund money should not be diverted to deficit reduction or other government programs. The poll was released at a time when the Environmental Protection Agency is considering a proposal to reduce the budget and staff of the Superfund program by $295 million and 1000 employees by 2000.

Cited: *Plast. News (Detroit)*, Vol 7 (No. 15), 12 June 1995, p 35 [in English]. ISSN: 1042-802X. PHOTOCOPY ORDER NUMBER: 199508-P4-0054.

Environmental Evaluations Bolster Compliance Efforts. As environmental regulations have become increasingly complex, more companies are evaluating their environmental practices and are working to integrate

environmental policies into their overall management plans. Three types of environmental evaluations have been developed to assist these companies: environmental site assessments, environmental compliance audits, and management systems assessments. Environmental evaluations provide companies with the information necessary to develop and implement effective, responsible policies and procedures. Evaluations provide managers with valuable information that can help minimize or avoid liability, ensure compliance, and make effective, efficient operational improvements. They also help managers avoid the increasingly stringent regulatory burden and associated fines for noncompliance.

K.L. Coyne. Cited: *Chem. Process.*, Vol 58 (No. 5), May 1995, p 88, 90-91 [in English]. ISSN: 0009-2630. PHOTOCOPY ORDER NUMBER: 199508-P4-0052.

Fugitive Emissions: The Science of Leakage. Complying with [U.S.] HON Rule Dictates. With 1994's passage in the United States of the HON rule, officially known as the "Hazardous Organic NESHAP (National Emission Standard for Hazardous Air Pollutants)," and its corresponding 40 CFR 63, Subpart H, Maximum Achievable Control Technology (MACT) requirements; equipment leak issues have gained an added sense of urgency in the chemical industry. In addition to MACT, other regulations affecting equipment leaks, otherwise known as "fugitive emissions," are also in effect or being formulated. These regulations will cause plant personnel to focus more on leakage from specific processes and methods of leak prevention which, in turn, will lead to greater understanding of equipment leakage. Key among these emerging areas of understanding are leak rates as functions of monitoring results and process variables for connectors, valves, and pumps.

T.A. Kittleman and B.O. Paul. Cited: *Chem. Process.*, Vol 58 (No. 5), May 1995, p 34-35, 37-38 [in English]. ISSN: 0009-2630. PHOTOCOPY ORDER NUMBER: 199508-P4-0051.

[U.S.] Congressman Aims to Block Gold Mine. The latest attack on a proposed gold mine near Yellowstone National Park came when Rep. Bill Richardson (D-New Mexico) introduced a bill that would withdraw U.S. federal permission for mining in the area. Richardson's legislation, introduced with the intent of blocking the New World gold mine planned by Crown Butte Mines Inc., Missoula, MT, would create a Yellowstone Headwaters National Recreation Area. Crown Butte Mines repeated its assurances that the project would not harm Yellowstone National Park or associated waterways.

B. Schmitt. Cited: *Am. Met. Mark.*, Vol 103 (No. 118), 20 June 1995, p 8 [in English]. ISSN: 0002-9998. PHOTOCOPY ORDER NUMBER: 199508-G4-0080.

ISRI Says "Toxic" is Misleading. Scrap recyclers said the U.S. Environmental Protection Agency would be wrong to extend its best-known toxics monitoring program to include them. The Institute of Scrap Recycling Industries (ISRI), in comments on the EPA's potential expansion of the Toxics Release Inventory (TRI) program, warned that making recyclers report all data about "toxic chemicals" would generate mounds of misleading statistics. The EPA's definition of "toxic chemicals" for purposes of the TRI inventory system includes recyclables such as copper, lead, nickel, chromium, silver, and zinc. Scrap recyclers only change the size, density, and shape of metals, not their chemical composition, ISRI argued.

B. Schmitt. Cited: *Am. Met. Mark.*, Vol 103 (No. 118), 20 June 1995, p 8 [in English]. ISSN: 0002-9998. PHOTOCOPY ORDER NUMBER: 199508-G4-0079.

Final Lead Rules Hold No Shocks. In responding to a U.S. Environmental Protection Agency (EPA) ruling that requires secondary lead smelters to install air-pollution controls, the Association of Battery Recyclers (ABR) said it is in agreement with most of what it knows about the final ruling. The EPA ruling, which will cost the industry $4 million in one-time capital outlays and $2 million/year, was said to be expected, according to an ABR spokesman. Though ABR wished to reserve further comment until the written document is available, it contended the EPA should rethink its views on the public health risks presented by the secondary lead smelter industry.

S. Fineberg. Cited: *Am. Met. Mark.*, Vol 103 (No. 113), 13 June 1995, p 6 [in English]. ISSN: 0002-9998. PHOTOCOPY ORDER NUMBER: 199508-G4-0076.

[U.S.] Clean Air Act Update: Deadlines for Nonattainment Areas. Certain U.S. Clean Air Act (CAA) attainment deadlines for the National Ambient Air Quality Standards (NAAQS) are scheduled over the next several years. One of the closest deadlines, 31 Dec 1995, is for particulate matter (PM) NAAQS attainment in approximately 65 areas (mostly on the West Coast) that were initially designated as nonattainment under the 1990 CAA Amendments. Also, the enhanced monitoring rules scheduled for U.S. Environmental Protection Agency (EPA) promulgation in the last month have been a major concern to the regulated community. On 4 April, the EPA announced that it intends to seek an extension of the 30 April 1995 court deadline for issuance of these rules in order to re-examine its approach.

K. Berry. Cited: *Ceram. Ind.*, Vol 144 (No. 5), May 1995, p 23 [in English], ISSN: 0009-0220. PHOTOCOPY ORDER NUMBER: 199508-C4-0011.

[U.S.] Clean Air Act Update: Exemptions from Nitrogen Oxide Controls. A major change to the U.S. Clean Air Act (CAA) contained in the 1990 CAA Amendments (CAAA) was the requirement of stringent nitrogen oxide (NO_X) emissions control in certain ozone nonattainment areas. The CAAA also included a provision allowing the U.S. Environmental Protection Agency to exempt certain areas from these NO_X requirements if it is proven (usually by the state) that additional reductions of NO_X emissions would not contribute to attainment of the ozone standard. An update on sanctions for operating-permit programs is also given.

K. Berry. Cited: *Ceram. Ind.*, Vol 144 (No. 6), June 1995, p 21 [in English], ISSN: 0009-0220. PHOTOCOPY ORDER NUMBER: 199508-C4-0010.

[U.S.] EPA Eases Dust Rules. In a ruling that riled the USA's leading recycler of electric-arc furnace dust, the U.S. Environmental Protection Agency (EPA) said disposal of the dust at ordinary landfills can take place if the material is properly treated first in the so-called "Super Detox" process. The EPA's de-listing of dust, known as KO61, came in response to a petition filed by Conversion Systems Inc., a subsidiary of EnviroSource Inc. The ruling means the company can use its Super Detox process to stabilize KO61 and transport it to nonhazardous landfills. Horsehead Resource Development Co., Inc., with an estimated 66% of domestic capacity for reclaiming zinc, cadmium, and lead from KO61, fought to keep the EPA ruling from being enacted.

E. Worden. Cited: *Am. Met. Mark.*, Vol 103 (No. 107), 5 June 1995, p 1, 7 [in English], ISSN: 0002-9998. PHOTOCOPY ORDER NUMBER: 199507-S4-0040.

Environmental Legislation and the U.S. Steel Industry. Since the Clean Air Act was passed in 1970 and the Clean Water Act in 1972, as well as the amendments to each, the U.S. steel industry has been required to invest huge sums of money. To meet environmental restrictions and still maintain the steel industry, new technology has been and is being developed that will replace coke, at least partially. These include the injection of pulverized coal into blast furnaces, development of ironmaking processes that use coal rather than coke, transfer of some steelmaking from the basic oxygen process to the electric furnace process, and direct-iron production.

W.T. Hogan. Cited: *Iron Steel Eng.*, Vol 72 (No. 6), June 1995, p 40-42 [in English], ISSN: 0021-1559. PHOTOCOPY ORDER NUMBER: 199507-S4-0039.

[U.S.] EPA Issues Rule for Epoxy Resins and Non-Nylon Polyamides. The U.S. Environmental Protection Agency (EPA) has published a regulation limiting emissions of hazardous air pollutants (HAPs) from epoxy resin and non-nylon polyamides production facilities that use epichlorohydrin as a feedstock. It will affect the manufacture of basic liquid epoxy resin (BLR), a material used to produce a cured resin in adhesive, coatings, and other plastic operations, and wet strength resin (WSR), which is used to increase the tensile strength of paper products. Also, EPA has raised the exemption threshold for Section 5 of the Toxic Substances Control Act (TSCA) governing the Premanufacture Notification (PMN) that companies must provide to EPA before they manufacture or import new chemical substances.

Cited: *Chem. Eng. Prog.*, Vol 91 (No. 5), May 1995, p 30 [in English], ISSN: 0360-7275. PHOTOCOPY ORDER NUMBER: 199507-P4-0047.

What Now Basel? [The Basel Convention and the International Scrap Trade]. The Basel convention and subsequent decisions relating to the dumping of hazardous wastes have led to international confusion over the differences between the various pieces of legislation. Ambiguity about the classification of various secondary metals is at the root of the problem. Unless a solution is found, an unprecedented effect on the international

scrap trade is envisaged and, ironically, environmental problems could increase as merchants resort to landfilling activities.
A. Broad. Cited: *Met. Bull. Mon.*, Vol 293, May 1995, p 84-85, 89 [in English], ISSN: 0373-4064. PHOTOCOPY ORDER NUMBER: 199507-G4-0072.

EPA Official Says Industry Help Will Be Needed as Deadline Nears for Formulating Hazardous Air Pollutant Regulations. An environmental engineer with the U.S. Environmental Protection Agency (EPA) indicated the agency will be seeking the investment casting industry's help in acquiring data on amounts of hazardous air pollutants that are emitted in several industry-specific processes. Concerning EPA's emission data collection, the current information base is inadequate. Some areas that should be considered include emissions in wax heating and injection, wax pattern cleaning and etching, acid leaching of wax, shell making, wax meltout, mold wrapping, burnout and preheating, and knockout. Current EPA regulatory priorities center on two primary goals: determining emission standards for all foundry processes and establishing guidance for identifying major sources.
Cited; *Incast,* Vol 8 (No. 5), June 1995, p 8 [in English], ISSN: 1045-5779. PHOTOCOPY ORDER NUMBER: 199507-G4-0070.

Florida Bill Could Speed Environmental Rulings. The Florida (USA) legislature is reviewing a bill that would expedite the state's environmental review process for plastics and boat manufacturers. If the bill passes, state agencies will have just 90 days to accept or reject a company's proposal to site a plant or expand existing facilities. The bill amends the two-year-old Florida Jobs Siting Act by adding plastics, fabricated metals, and boat manufacturing to a list of industries eligible for the fast-track environmental reviews.
L.S. Neaville. Cited: *Plast. News (Detroit),* Vol 7 (No. 6), 10 April 1995, p 23 [in English], ISSN: 1042-802X. PHOTOCOPY ORDER NUMBER: 199506-P4-0043.

[U.K.] Producers Face Further Fees. U.K. producers of hazardous waste face additional regulatory fees and inspections under proposed regulations issued for consultation by the Department of the Environment. The draft Special Waste Regulations 1995 requires local authority waste regulation officials to inspect the site and its waste consignment records. The new regulations should be implemented by 27 June to comply with the EU Hazardous Waste List, agreed earlier in 1995.
Cited: *Eur. Chem. News,* Vol 63 (No. 1662), 10-16 April 1995, p 21 [in English], ISSN: 0014-2875. PHOTOCOPY ORDER NUMBER: 199506-P4-0042.

Chemical Firms Push for Self-Policing. Germany's stringent environmental laws have taken their toll on the country's chemical firms over the past few years. Now the new government is looking to ease the burden with the introduction of voluntary targets, allowing the chemical sector to exercise a policy of self-control. The new approach is welcomed by corporate Germany, which has spent an estimated DM80 billion ($58.8 billion) in environmental projects and running costs since the early 1970s. The first of what industry hopes will be a string of voluntary agreements with government centers on carbon dioxide emissions.
B. Whitehead. Cited: *Eur. Chem. News,* Vol 63 (No. 1663), 17-23 April 1995, p 28, 30 [in English], ISSN: 0014-2875. PHOTOCOPY ORDER NUMBER: 199506-P4-0040.

What You Need to Know about NO_x Regulations. Nonferrous metal producers using reverberatory melting and other fuel-based heating operations must be aware of regulations requiring tighter emissions controls. Environmental restrictions are a fact of business life today in the United States. Understanding them and how they apply to your business is a good starting point toward minimizing their adverse impact on your profit goals. In many parts of the United States, businesses must be aware of multiple layers of emission regulations to maintain compliance and avoid penalties. The layers of government regulations (federal, state, and local) vary by region.
J. Quiel. Cited: *Met. Prod.,* Vol 33 (No. 4), April 1995, p 3-5 [in English], ISSN: 0149-1210. PHOTOCOPY ORDER NUMBER: 199506-G4-0064.

[U.S.] EPA Easing Battery Recycling Rules. Responding to criticism directed at burdensome federal regulations, the U.S. Environmental Protection Agency said, late in April 1995, it is streamlining rules on the recycling of common items ranging from nickel-cadmium batteries to pesticides. The EPA said many states and industries including battery-operated tools support the new "universal hazardous waste rule." States will be able to have greater flexibility in regulating such wastes and adding new items "without facing an unduly burdensome federal process," the agency said in a press release.
E. Worden. Cited: *Am. Met. Mark.,* Vol 103 (No. 85), 3 May 1995, p 9 [in English], ISSN: 0002-9998. PHOTOCOPY ORDER NUMBER: 199506-G1-0239.

Winds of Change (Or Blast of Hot Air?) at [U.S.] EPA. There's been a revolution of sorts at the U.S. Environmental Protection Agency since the Nov 1994 elections, or so it seems. In the past few weeks, EPA has released guidance allowing many facilities to avoid major source designation by limiting potential to emit and has postponed MACT requirements for modifications and new construction until the final version of the applicable rule is published later in 1995. In addition, EPA has indicated that it will withdraw its proposal for minor permit changes, and adopt instead a more streamlined version favored by the states. EPA has made it easier for states to win approval of their Clean Air Act implementation plans.
J. Schweitzer. Cited: *CI Compos.,* April-May 1995, p 8-9, 12 [in English]. PHOTOCOPY ORDER NUMBER: 199506-D4-0008.

U.K. Legislation on Styrene under Review. The United Kingdom's Department of the Environment has stated that recently introduced regulations concerning the use of styrene are under review where they apply to the composite community. The U.K. composite industry was faced with a severe cost penalty from the introduction of the new Environmental Protection Act. Much of the problem had stemmed from a misconception as to the way that styrene is used in processing unsaturated polyester resins. The implicit assumption by legislators had been that all styrene used was subsequently discharged to the environment rather than, in the main, being combined with the matrix during the curing process.
Cited: *Adv. Compos. Bull.,* April 1995, p 9 [in English], ISSN: 0951-953X. PHOTOCOPY ORDER NUMBER: 199506-D4-0007.

Photocopies of complete articles are available from the MI Document Delivery Service at ASM; please call 216/338-5151, ext. 450 for order and price information.

Furthermore...

A "how-to" publication, ***Pollution Prevention in Mining and Mineral Processing: Waste Assessments for Mines and Mills,*** is available from the **U.S. Bureau of Mines.** This report presents a step-by-step process for companies to following designing and implementing a pollution prevention program. It shows managers how to get started, suggests strategies for enlisting total workforce commitment, and discusses ways to enhance ongoing pollution prevention programs. Worksheets are also provided. For a copy, contact Dan Witkowsky, U.S. Bureau of Mines, Denver Federal Center, Building 20, Denver, CO 80225; tel: 303/236-5200; fax: 303/236-4208.

A series of fully interactive multimedia training courses on worker safety and health using CD-ROM technology is available

from **Roy F. Weston, Inc.** The interactive courseware features the ability to customize core safety instructional materials to specific company or site requirements at the price point of more generic courses. The user-specific content is thoroughly integrated throughout the course format. The courses take one to two hours to complete and are divided into manageable modules. For further information, contact Bob Kelly at 601/701-3608.

Three recycling guidelines are available from the **Aluminum Association** covering automotive, contamination, packaging and comingling, and by-products of aluminum melting processes. The automotive guidelines address the control of contaminant and identify the chemical composition of aluminum auto parts. The by-products guidelines define recommended practices for handling, storage, and transportation of by-product materials. The contamination guidelines offer steps to assure scrap quality and information on obtaining maximum revenue from a wide range of recycled scrap. To order, contact the Aluminum Association at 301/645-0756.

Six aluminum recycling companies have become members of the **Aluminum Association** and are: Alchem Aluminum, Inc., Behr Metals, Bermco Aluminum, Roth Brothers Smelting Corp., Spectro Alloys Corp., and U.S. Reduction Co. The new members are former members of the Aluminum Recycling Association, which disbanded earlier this year.

PPG Industries has reported that its ***worldwide total waste generation declined 3350 tons in 1994, a 1% reduction from 1993 despite greater production levels*** and extension of monitoring to additional units. Aggregate reductions since 1988 were at least 100,594 tons, or 22%, including 26,124 fewer tons of hazardous waste, a 20% reduction. For a copy of the 1994 Environment, Health and Safety annual report, contact PPG Industries, Environment, Health & Safety Department, One PPG Place 12 South, Pittsburgh, PA 15272.

With a recycling rate of 65.4% in 1994, the aluminum beverage can remains the most recycled beverage container in the United States, according to the **Aluminum Association.** Americans returned a record 64.7 billion aluminum cans of the 99 billion shipped in 1994, with the industry paying around $1.15 billion to recyclers to get these cans back. In 1993, the recycling rate was 63.1%. The post-consumer recycled content has increased from 51.6% in 1993 to 54.1% in 1994.

Khem Products Inc. has introduced a group of relational database programs, Khem Modules, that can be used collectively as a ***complete Regulatory Compliance System*** or separately as a standalone support system. Each module assists the user in the areas of chemical inventory, waste tracking, and material safety data management. A quick-start training guide is also available that combines EPA regulations and procedures into a simple set of instructions. For further information, contact Bob Diggs, Khem Products Inc., 1217 Bush Road, PO Box 161, Abingdon, MD 21009; tel: 800/560-0065; fax: 410/679-6620.

The Institute of Scrap Recycling Industries, Inc. has joined the Major Appliance Resource Management (MARMA), a coalition consisting also of the American Iron and Steel Institute, the Association of Home Appliance Manufacturers, and the American Plastics Council that is ***addressing the recycling of appliances.*** The objectives of this coalition are: promote the effective collaboration of organizations engaged in material supply, appliance design/manufacturing, and resource management, including recycling; identify and implement projects that will achieve short- and long-term improvements in the management of materials generated by the disposition of appliances, and assure long-term viability of existing and evolving appliance recycling infrastructures; and develop a system so that Alliance members can effectively collect and communicate critical information needed to efficiently manage the materials available on major appliances and serve as a basis for sustainable appliance materials resource conservation policies, regulations, and laws.

Battelle Press has introduced a handbook, ***Recycling and Reuse of Industrial Wastes,*** that outlines specific technologies for recycling and reuse of materials that require remediation at contaminated sites. Case studies within the handbook document applications of these technologies to real-world conditions. Waste types covered include both organic and inorganic contaminants in solid and liquid media, such as organic liquids and petroleum-contaminated soils, polymers, metal-containing soils and slags, among others. To order, call 800/451-3543 or 614/424-6393.

MB Industries has introduced an ***environmentally safe welders anti-spatter product*** that is non-aerosol and reduces weld spatter on hot jobs and allows fast clean-up for the cold ones. When sprayed with MB anti-spatter, molten metal spatter wipes away easily and simply. For further information, contact MB Industries, 11158 Infirmary Road, Wapakoneta, Ohio 45895; tel: 419/738-4769; fax: 419/738-5316.

Columbia National Group, Inc. has formed a new venture called the **CleanUp Company,** which consist of selectively acquired companies which have already established a presence in the business by ***providing a broad range of industrial cleaning, specialized sere and environmental services.*** The new company will provide cost effective solutions to environmental problems ranging from routine sweeping to hazardous waste removal. For further information, contact Philip J. Kennedy, the CleanUp Company, 1854 Scranton Road, Cleveland, OH 44113; tel: 800/676-4002; fax: 216/241-7533.

RFE Industries has announced ***a specialized line of solder pastes in recyclable packages*** that simplifies disposal and meets all EPA standards. Packaged in pure tin tubes, the empty tubes can be added to the solder pot and will rapidly dissolve. No-clean flux technology that eliminates cleaning after reflow without compromising the integrity of the solder joint is another feature that eliminates the need for hazardous cleaning solvents. For further information, contact RFE Industries, 19 Crows Mill Road, Keasby, NJ 08832; tel: 800/327-7938; fax: 908/738-5319.

Airfiltronix Corp. has introduced the BE-1 Balance Enclosure, a workstation ideal for weighing, measuring, pouring, mixing, and performing all the process operations that involve dust, particulates, and fumes. The enclosure is ***designed to filter out particulates or potentially hazardous fumes.*** Face velocity is adjustable to specific needs. This high visibility enclosure includes a HEPA Filter which removes 99.99% of particulates larger than 0.3 microns. For further information, contact Michele Cantwell, Airfiltronix Corp., 154 Huron Avenue, Clifton, NJ 07013; tel: 201/779-5577.