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 service of Cambridge Scientific Abstracts, Bethesda, Maryland, USA.

Blast Furnace No. 5 and Hot Strip Mill Certify ISO-14001. Altos Hornos de Mexico is the first Mexican company to receive ISO-14001 certification in its blast furnace No. 5 and hot rolling mills areas in Jan 1997. The international standard, released in Sept 1996, consists of 17 environmental requirements of an effective management system. AHMSA has reduced existing emissions by 80% since 1991 and has invested US$150 million in direct or indirect environmental issues.
Cited: *Fusión,* Vol 23, March-April 1997, p 2-7 [in Spanish and English]. PHOTOCOPY ORDER NUMBER: 199710-S4-0064.

Health and Safety: COSHH Amendments. In the United Kingdom, Parliament passed a series of amendments to the COSHH Regulations concerning worker health and safety, which came into effect on 10 Jan 1997. The article discusses standards that are of particular significance to iron and steel foundries and steps that foundries should take to ensure compliance with the new maximum exposure limits for ferrous foundry dust and softwood dust.
M. McBarron. Cited: *Foundryman,* Vol 90 (No. 7), July 1997, p 270-271 [in English]. ISSN 0953-6035. PHOTOCOPY ORDER NUMBER: 199710-S3-0298.

Radiation Prospects Bright. Increasing environmental legislation against solvent emissions and improvements in production and product technology are increasing the European market for radiation-cured polymers. A new report from Frost & Sullivan forecasts sales to rise annually by 9.7% from US$465.4 million in 1996 to US$872.3 million by the year 2003. The use of solvent-based products is being reduced by the European Solvents Directive, due to be completely enforced by 1999.
Cited: *Plast. Rubber Wkly.,* Vol 1695, 18 July 1997, p 7 [in English]. ISSN 0032-1168. PHOTOCOPY ORDER NUMBER: 199710-P8-0100.

Coping with Title V Permit Conditions [in the USA]. The new U.S. emissions regulations, how the states plan to enforce them, and how foundry operators can navigate the regulatory maze are discussed. A variety of issues will need to be addressed either by the foundry industry as a whole or at the individual plant level. Those issues include: the state specific process weight rate rules; the estimation of Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) emissions from the pouring, cooling, and shakeout departments; the accuracy and appropriateness of the existing Environmental Protection Agency approved AP-42 emission factors for various processes within the foundry; and the Maximum Available Control Technology (MACT) standards that are due out in the year 2000.
B.K. Petriko. Cited: *Foundry Manage. Technol.,* Vol 125 (No. 5), May 1997, p 26, 28-29 [in English]. ISSN 0360-8999. PHOTOCOPY ORDER NUMBER: 199710-G4-0090.

Risk Assessment: Ecological Techniques for Unique Results. The U.S. and Canada branches of Golder Associates Ltd. have emerged from the complex world of regulation with an effective and applied ecological risk assessment (ERA). It is being used to estimate the magnitude and extent of adverse effects on the ecological health of a particular site. Because ERA is specific and highly analytical, it can satisfy the needs of industry, regulators, and the public. ERA's five-step process keeps toxicologists, environmental scientists, and decision analysts focused on specific goals in relation to the ecosystem in question. The five steps are described, and a hypothetical case study of a proposed gold mine and mill is provided.
S. Swanson. Cited: *Eng. Min. J.,* Vol 198 (No. 4), April 1997, p 30, 32, 34 [in English]. ISSN 0095-8948. PHOTOCOPY ORDER NUMBER: 199710-G4-0089.

[International Regulatory Update]. A review is provided of international regulatory activity and other matters relating to the environmental impact of nickel, including occupational health and hygiene. It covers the European Union, North America, and international agreements.
Cited: *Communique,* Vol 21, April 1997, p 3-7 [in English]. ISSN 1181-7208. PHOTOCOPY ORDER NUMBER: 199710-G4-0086.

Northern Exposure [Recycling Regulations in Canada]. Canadian environmental regulations are compared with those of the United States. Canada does not have a federal governing body such as the United States Environmental Protection Agency that sets environmental standards for the entire country. Instead, its environmental policy is established on a province-by-province basis. Across the board, regulations in Canada are not as harsh as those of the United States. For example, Canada has no groundwater regulations. As a result, Canadian recyclers have not been forced to make significant investments to hard surface their operations or install groundwater protection systems. Of concern to Canadian recyclers is lack of government involvement in the market side of recycling, transboundary exports, and problems related to provincial definitions of what constitutes a hazardous waste.
K. Rundquist. Cited: *Scrap,* Vol 54 (No. 3), May-June 1997, p 57-58, 60, 62, 64 [in English]. ISSN 0898-0756. PHOTOCOPY ORDER NUMBER: 199710-G1-0300.

Photocopies of complete articles are available from the Document Delivery Service at ASM; please call 440/338-5151, ext. 5450, for order and price information.

Furthermore...

Bioscience, an environmental analysis and biotreatment company, has posted a ***Web site*** at http://www.bioscienceinc.com. The site describes the company's wastewater BOD/COD instruments and test kits, as well as microbial additives and equipment. For more information, contact: Bioscience Inc., 1550 Valley Center Pkwy., Ste. 140, Bethlehem, PA 18017; tel: 610/974-9693; fax: 610/691-2170.

The Spring 1997 issue of ***Enviro Update,*** published by **Flint Ink,** discusses an OSHA standard on "Abatement Verification" that requires employers to certify that they have abated any unsafe conditions found during an OSHA inspection. The two-page newsletter also provides a list of 16 environmental Web sites, ranging from a searchable code of Federal Regulations to the California EPA home page. For a copy, contact: Enviro Update, Flint Ink Corp., 33105 Schoolcraft, Livonia, MI 48150.

PPG Industries ***cut hazardous wastes in 1996 by 5% from 1995 levels,*** for a 20% reduction since 1988. Hazardous waste volume decreased 4600 metric tons (5100 tons) to 96,400 metric tons (106,300 tons), as the generation rate per unit of production fell 10%. The company generally classifies materials that are flammable, corrosive, reactive, or toxic as hazardous. For more information, contact: PPG Industries Inc., One PPG Pl., Pittsburgh, PA 15272-0001; web: http://www.ppg.com.

Eurotherm Controls was presented the Brooks McCormick Environmental Award for the TE10S as an ***environmentally safe replacement for mercury contactors.*** The TE10S is a solid-state contactor for industrial applications that performs as a regular contactor when used with standard AC or DC inputs. In addition, the contactor can transmit advanced diagnostics and current monitoring data when used with PDSIO inputs. For more information, contact: Eurotherm Controls Inc., 11485 Sunset Hills Rd., Reston, VA 20190-5286; tel: 703/471-4870; fax: 703/787-3436; e-mail: sales@controls.eurotherm.com; web: http://www.eurotherm.com.

"Intelligence Report: Getting Ready for 42 CFR Part 84" is a brochure from **Mine Safety Appliances** on the National Institute for Occupational Safety and Health's ***updated federal regulations for air-purifying particulate respirators.*** The standard reclassifies filters by specific efficiency ratings and performance characteristics rather than by type of hazard. Mine Safety Appliances Co., P.O. Box 426, Pittsburgh, PA 15230; tel: 412/434-7718; fax: 412/434-7738.

Pollution Practices for the Die Casting Industry, a manual from the **North American Die Casting Association,** offers ways companies can begin pollution prevention planning that will facilitate the process of implementing a pollution prevention program. The manual includes waste minimization options for wastewater and air emissions generated by die casting processes. Waste minimization worksheets assist in evaluating waste generating processes. For a copy ($50, $25 NADCA members), contact: North American Die Casting Association, 9701 W. Higgins Rd., Ste. 880, Rosemont, IL 60018-4721; tel: 847/292-3600; fax: 847/292-3620; e-mail: nadca@diecasting.org.
