RoHS Revisited – This article, printed in the November/December 2007 issue of American Fastener Journal, discusses the aftermath of the RoHS Directive issued in the European Union more than a year ago. The fastener industry has absorbed the effects of this directive quite well; price increases have been nominal. Requests from end users of fasteners for material analyses and compliance certifications have gone down as fasteners are made in conformance with RoHS directives. The U.S. will begin to experience the effects of these directives since California and several New England legislatures plan to issue RoHS directives.

For more information, request TN 4-08 A1.

Correct Paint Selection for a Duplex Coating System – Galvanized steel, like any other type of steel, must be properly prepared prior to painting. Paint must also be chosen that provides good adhesion to the galvanized surface. This article, printed in the 2008 Volume 5 Issue 2 of Hot-Dip Galvanizing Today, discusses various types of paint used to coat galvanized steel. Some of the paint systems discussed include acrylics, chlorinated rubbers, latex-acrylics, vinyls, zinc rich paints and powder coating.

For more information, request TN 4-08 A2.

Problems with Caustics, Nuclear Power, and Inorganic Zinc – This article, printed in the July 2008 issue of Coatings Pro, is a question and answer session about problems with inorganic zinc coatings. Problems discussed include bubbling, low adhesion and porosity when powder coating over zinc. This article also discusses using inorganic zinc silicates at temperatures over the melting point of zinc.

For more information, request TN 4-08 A3.

Welded Wire Reinforcement – Concrete is commonly used in construction because of its strength and formability. One problem with concrete though is it can contract 1/2 inch to 1 inch per 100 feet, and 2/3 inch for every 100 degree drop in temperature. Contraction can cause cracks in concrete. Welded wire reinforcement (WWR) can limit contraction and therefore cracking of concrete. Construction projects in Europe specify WWR in concrete more than 50% of the time, while the U.S. specifies WWR in only 12% of its concrete projects. WWR can be galvanized. This article was printed in the June 2008 issue of Concrete Today.

For more information, request TN 4-08 A4.

Durability of Galvanized Steel Framing for Residential Building – This article is the summary of a study conducted by the National Association of Home Builders and sponsored by the International Zinc Association. The study observed the corrosion rates of galvanized, Galvalume and Galfan plates and C-section studs. Samples were tested for corrosion of the coating at years one, three, five and seven. Test sites included attics, floor systems and walls in various homes throughout the U.S. and Canada.

For more information, request TN 4-08 A5.
Strategy for a Co-Operative Effort to Reduce Zinc Consumption for Galvanizing Reactive Steels – This article, printed in the Volume 5 Issue 2 of Hot-Dip Galvanizing Today, discusses the elements added to steel that affect the galvanizing coating thickness. It then goes on to discuss how steel makers can manipulate the addition of these elements while still meeting their requirements under steel making specifications. This can assist galvanizers in providing a high quality hot-dip galvanized coating by preventing excessively thick galvanized coatings due to reactive steel. For more information, request TN 4-08 P1.

Energy-Efficient, Resource-Sustaining Hot-Dip Galvanizing Facility – This article is a reprint of a submission to the Australian Galvanizers Awards Event. The application discusses how a galvanizing plant has made every step of the galvanizing process more efficient. Making these changes saves this plant hundreds of thousands of dollars every year as well as contributes to the sustainability of natural resources. This article was printed in the Volume 5 Issue 2 of Hot-Dip Galvanizing Today. For more information, request TN 4-08 P2.

The ‘Ins’ and ‘Outs’ of Hydrogen Embrittlement This article discusses the causes and potential cures for hydrogen embrittlement. Some of the cures discussed include using inhibitors during pickling, limiting pickling time and baking the pickled steel. Baking cycle length recommendations are included. Hydrogen embrittlement is often believed to be the contributing factor in high tensile fastener failure. This article was printed in the Volume 5 Issue 2 of Hot-Dip Galvanizing Today.
For more information, request TN 4-08 P3.

Bolting Standards Update – This article discusses recent changes in fastener standards that may affect the steel industry. The specifications discussed include ASTM A 307, A 490 and F 2280. This article also discussed hydrogen embrittlement issues with A 490 bolts and was printed in the June 2008 issue of Modern Steel Construction.
For more information, request TN 4-08 P4.

Chromium-Free Corrosion Solutions – This article discusses the shift in the protective coatings industry from hexavalent to trivalent chromium and chromium-free coatings. It discusses one chromium-free alternative made of ceramic in detail. Unlike most ceramics, this coating is said to be ductile. Tests were conducted to compare trivalent coatings to the new ceramic coating. This article was printed in the June 2008 issue of Metal Finishing.
For more information, request TN 4-08 P5.
Collection of Three Articles on Stormwater – In the July 2008 issue of *CE News* the issue of stormwater is addressed in three articles.

**Stormwater Update** gives an overview of what is happening at the EPA. Websites are given to provide more information on the topic. **How to Choose Better Stormwater BMPs** focuses on the performance of permanent, or post-construction, BMPs that treat or control urban stormwater. The performance of stormwater BMPs is influenced by such factors as design, installation, rainfall patterns and characteristics, soil types, slopes, land use in the drainage area, and age of the system. The article provides information on where to find BMP information. The last article, **Lifecycle of Stormwater Pollution Prevention Plans**, discusses the five stages of a stormwater pollution prevention plan (SWPPP) for construction sites. When implemented, it helps reduce or eliminate pollutants discharged during the construction project.

For more information, ask for TN 4-08 E1.

**Getting to Know the SWPPP** – In the July/August 2008 issue of *Stormwater* the stormwater pollution prevention plan (SWPPP) is discussed. This article focuses on establishing a SWPPP to address the construction general permit requirements. Two websites are given that provide help in preparing a SWPPP. The weakest link in the process of a SWPPP is the sediment and erosion control information.

For more information, ask for TN 4-08 E2.

**Harmonization Converges** – The notice of proposed rulemaking to revise the Hazard Communication Standard is due on October 2008 and is addressed in the July 2008 issue of *Occupational Health & Safety*. The rulemaking will modify the standard to make it consistent with the Globally Harmonized System of Classification and labeling of Chemicals (GHS). This requires changing the criteria for classifying health and physical hazards, adopting standardized labeling requirements, and requiring a standardized order for information listed on Material Safety Data Sheets (MSDS).

For more information, ask for TN 4-08 E3.

**To Every Topic, There is a Season** – In the June 2008 issue of *Occupational Health & Safety* the article discusses the importance of auditing a safety program, specifically the training program. A training program is important in establishing the safety message to the employees. Policy and awareness must be consistent for the training program to succeed. Updating and merging the initiatives of both written policy and training/awareness efforts should be made a priority. Well-documented, often-presented training helps reinforce correct behaviors in the workplace.

For more information, ask for TN 4-08 E4.

**NRRs for Hearing Protectors: A Change is Coming** – NRR or Noise Reduction Rating, the most common criterion for specifying hearing protection devices, is about to change and is discussed in the June 2008 issue of *Occupational Health & Safety*. The most noticeable change is the label on the package from one number to two. The higher number indicates the amount of protection would attain or exceed in one-in-five trained wearers. The lower number indicates the protection would meet or exceed in four-out-of-five trained wearers. This lower value should be used to calculate employee exposures and will probably be used by OSHA to determine whether the protection is adequate. EPA believes these changes will result in improvements in hearing conservation programs and reduction of hearing loss.

For more information, ask for TN 4-08 E5.