



Emergency Management and Response Information Sharing and Analysis Center (EMR-ISAC)

INFOGRAM 37-08

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***NOTE:** This INFOGRAM will be distributed weekly to provide members of the Emergency Services Sector with information concerning the protection of their critical infrastructures. For further information, contact the Emergency Management and Response- Information Sharing and Analysis Center (EMR-ISAC) at (301) 447-1325 or by e-mail at emr-isac@dhs.gov.*

Copper Thefts Threaten U.S. Critical Infrastructures

According to recent unclassified law enforcement reporting, copper thefts are threatening U.S. critical infrastructures by targeting electrical substations, cellular towers, telephone land lines, railroads, water wells, construction sites, and vacant homes. "Copper thefts from these targets have increased since 2006, and they are currently disrupting the flow of electricity, telecommunications, transportation, water supply, heating, and security and emergency services, and present a risk to both public safety and national security."

Upon reviewing multiple police reports, the Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC) learned that copper thieves are typically individuals or organized groups who operate independently or in loose association with each other and commit thefts in conjunction with fencing activities and the sale of contraband. The thieves exploit the demand for copper and the resulting price surge by stealing and selling the metal for high profits to recyclers across the nation. "Current economic conditions, such as the rising cost of gasoline, food, and consumer goods, the declining housing market, the ease through which copper is exchanged for cash, and the lack of significant deterrent effect, make it likely that copper thefts will remain a lucrative financial resource for criminals."

While researching this growing crime, the EMR-ISAC further ascertained that some countermeasures have been initiated by industry officials. These include the installment of physical and technological security measures, increased collaboration among the various industry sectors, and the development of law enforcement partnerships. "Many states are also taking countermeasures by enacting or enhancing legislation regulating the scrap industry—to include increased recordkeeping and penalties for copper theft and noncompliant scrap dealers."

The EMR-ISAC noted that communities may benefit from closer cooperation between local electrical utilities and first responders regarding cable markings and sizes. Information sharing between the industry and emergency organizations might help combat the copper thefts that occasionally hinder emergency communications and jeopardize critical infrastructures.

Additional information about this crime can be obtained at the following sources:

- http://www.csoonline.com/article/221225/Red_Gold_Rush_The_Copper_Theft_Epidemic?contentId=221225&slug=&.
- http://wwwr.westfieldgrp.com/jsp/business/business_losscontrol_monthlytopic2.jsp.

Protecting the Education Infrastructure

Much effort has been expended to protect the nation's critical infrastructures, including those of the Emergency Services Sector (ESS). However, Department of Education officials concede that educational institutions are not specifically identified as among America's critical infrastructure sectors or key resources, which potentially makes soft targets of schools, colleges, and universities. Accordingly, the National School Safety and Security Service expressed concern that learning facilities are vulnerable to terrorism, because of the high consequence of an attack against children and older students.

The Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC) gleaned from various case studies that the threat to schools may not be detected or prevented by physical security measures alone. Therefore, the EMR-ISAC suggests that ESS leaders can offer encouragement and assistance to educational centers as they conduct emergency planning and develop crisis action plans. For example, it is important that a school's emergency plans are effectively integrated with the emergency response plans of the community in which the teaching establishment resides. Case studies further indicate that municipal authorities and their ESS leaders consider the following activities to improve the overall security of the local education infrastructure:

- Deliver “all-hazards” awareness training for school administrators, staff, and students.
- Train school administrators and staff regarding recommended emergency actions.
- Review and validate all school emergency and crisis management plans.
- Conduct exercises to test and refine school emergency and crisis management plans.
- Guarantee primary and secondary operable communication/cyber systems for each school.
- Implement and test plans to maintain reliable contact with schools and school buses.
- Arrange for a “closed-campus” environment with a single point of access for all personnel.
- Increase police presence on school grounds by ensuring frequent visits as part of patrol routes.

More recommendations to protect the educational infrastructure can be accessed at the following sites:

- <http://www.ed.gov/admins/lead/safety/emergencyplan/index.html>.
- http://www.schoolsecurity.org/terrorist_response.html.

Ethanol Incident Response Training

In their “Ethanol Fixed Facilities: Assessment and Guide,” the International Association of Fire Chiefs (IAFC) reported that the use of ethanol and ethanol-blended fuels in the United States continues to increase substantially. “Ethanol production in the U.S. has grown from approximately 9 billion gallons and is projected to grow to 15 billion gallons by the year 2015 as a result of the federal government’s Renewable Fuel Standard.” To meet demands, production facilities have been established in more than 24 states with product transportation by rail and highway. According to the American Petroleum Institute, ethanol-blended fuels are becoming a substantial component of the U.S. motor fuel market. “Today, nearly 50 percent of all gasoline consumed in the United States now includes ethanol.” (<http://www.api.org/Newsroom/api-efforts-ethanol.cfm>)

The hazards associated with polar solvents such as ethanol differ from the hydrocarbon fuels (i.e., gasoline and diesel) that are well known to members of the Emergency Services Sector (ESS). Traditional methods of fighting hydrocarbon fires have been found to be ineffective against polar-solvent-type (ethanol-blended) fuels. While gasoline tends to float on top of water, the Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC) learned that ethanol fuels are water soluble and tend to blend with water. For this reason, Alcohol-Resistant (AR) foam has been recommended as a means of extinguishing ethanol fires.

While researching this topic, the EMR-ISAC reviewed the newly released training program, “Responding to Ethanol Incidents,” developed by the IAFC through a grant from the U.S. Fire Administration (USFA). Available in CD format at no charge, the two-part training program includes the seven-module instructor guide, participant manual, and PowerPoint presentations for each module. The modules cover fuel emergencies, bulk-storage incidents, firefighting foam principles, storage and dispensing, transportation and transfer, fuel types, and chemical and physical characteristics of the fuels. Part Two, “Ethanol Fixed Facilities: Assessment and Guide,” is a training aid for responders called to emergencies at ethanol production facilities, but also intends to enhance the preparedness of operators and designers of production facilities.

To acquire the course materials, visit <http://www.usfa.dhs.gov/fireservice/subjects/hazmat/ethanol.shtm>. At the web site are links to download the materials from the IAFC web site or to order the materials from the USFA. Users who have previously ordered USFA publications should type in their electronic address and password to sign in as returning customers. First-time customers need to complete the brief registration process. Alternatively, orders for single copies can be faxed to (301) 447-1213.

Continued Hurricane Preparedness

With two months remaining in the current hurricane season, the Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC) encourages continued preparedness actions that bolster critical infrastructure protection and resilience (CIP/CIR).

After reviewing after-action reports from past years, the EMR-ISAC verified that emergency departments and agencies have implemented practical CIP/CIR measures to promote preparedness, protection, and resilience. A few examples of these follow:

- Relocating apparatus and equipment from stations in low-lying and flood prone areas.
- Pre-positioning fuel supplies and replacement parts for essential equipment.
- Upgrading and testing radio systems.
- Establishing a cache of loaner radios and backup satellite phones at the state emergency preparedness office.
- Assigning fire marshal deputies to contact every fire chief and preparedness director in potentially affected areas before the storm to establish a line of communication, reiterate the process to request state assets, and confirm that personnel would be available to check on their status before, during, and after the storm.

For more details about lessons learned, see the following links:

<http://cms.firehouse.com/content/article/article.jsp?sectionID=46&id=61011>.

http://blog.firechief.com/mutual_aid/2008/09/19/ikes-early-lessons/.

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REPORTING NOTICE

The National Infrastructure Coordinating Center (NICC) within the Department of Homeland Security (DHS) Office of Infrastructure Protection is the central point for notifications regarding infrastructure threats, disruptions, intrusions, and suspicious activities. Emergency Services Sector personnel are requested to report any incidents or attacks involving their infrastructures using at least the first and second points of contact seen below:

- 1) NICC - Voice: 202-282-9201, Fax: 703-487-3570, E-Mail: nicc@dhs.gov
- 2) Your local FBI office - Web: <http://www.fbi.gov/contact/fo/fo.htm>
- 3) EMR-ISAC - Voice: 301-447-1325, E-Mail: emr-isac@dhs.gov, fax: 301-447- 1034, Web: www.usfa.dhs.gov/subjects/emr-isac, Mail: J-247, 16825 South Seton Avenue, Emmitsburg, MD 21727