ACTS FACTS

THE MONTHLY NEWSLETTER FROM
ARTS, CRAFTS AND THEATER SAFETY (ACTS)
181 THOMPSON ST., # 23, NEW YORK, NY 10012-2586 PHONE 212/777-0062

January 2000 Vol. 14, No. 01

ACTS wishes you a healthy, happy 2000

PHTHALATES: A PROPOSAL FOR THE NEW YEAR

Editorial

THE BATTLE over phthalate ester plasticizers used in consumer products rages worldwide. The European Union Product Safety Emergencies Committee just banned the use of the phthalate esters in children's toys. France already had banned phthalates in toys.

In the US, Greenpeace is fighting to get the phthalates out of toys, medical equipment, and I.V. tubing while the Consumer Product Safety Commission firmly straddles the fence. They says there is no proof that phthalates cause cancer at the levels to which children are exposed, but they advise mothers how to avoid phthalate-containing products. The primary phthalate defenders are members of the Chemical Manufacturers Association's Phthalate Esters Panel which includes former US Surgeon General Dr. C. Everett Koop.

ACTS CONCERN began in 1994 when we published an article on oven-cured polymer clays. These brightly colored vinyl plastic clays contain about 15 percent phthalates. They transfer greasy phthalate residue to the hands of children and adult users and expose the family to airborne phthalates when the clays are fired in kitchen ovens! Hot glue guns also volatilize phthalates. ACTS proposes:

1. Industry must begin testing chemicals before using them in consumer products. The phthalate debate reflects a bigger problem: chemicals that are untested for chronic hazards abound in products.

2. The whole class of phthalates should not be condemned. This is a large and varied class of chemicals. ACTS suspects that testing will identify phthalates that can be used safely. But until the safe ones are identified, children should not be exposed to them.

3. Tests for chronic effects take years. In the interim, products which contain untested chemicals should no longer be labeled "non-toxic" and warning labels should be on products containing untested chemicals. Most consumer products would require this warning! The labels would show the public how pervasive this problem is and public outrage could finally pressure industry to test.

DIESEL EXHAUST IS "LIKELY" TO CAUSE CANCER

BNA-OSHR, 29(24), 11/17/99, P. 641

In November, the Environmental Protection Agency released a draft report called "Health Assessment Document for Diesel Emissions." The report stated that, in EPA's opinion, exposure to diesel exhaust is "likely" to increase the risk of developing lung cancer. It also said that the magnitude of the risk is too difficult to quantify using the available data.

EPA explains that "diesel exhaust is a complex mixture of particles and gases with hundreds of chemical compounds, including many organic compounds.... Many of the organics present..., though in small quantities, are mutagenic and/or carcinogenic in their own right." Chemicals which can be found in diesel exhaust include arsenic, benzene, beryllium compounds, chlorine, cyanide compounds, dioxins, ethyl benzene, formaldehyde, inorganic lead, mercury compounds, methanol, and toluene. Many of these same chemicals are found in cigarette smoke.

OTHER AGENCIES are also doing research on diesel exhaust. The National Institute for Occupational Safety and Health (NIOSH) and the National Cancer Institute are sponsoring a study on the cancer-causing effect of diesel exhaust on mine workers. And the state of California has taken steps to quantify the risk to the public from breathing diesel particulate matter and is considering cutting allowable levels.

THE COURTS. Litigation is largely awaiting scientific proof of the dangers of diesel fumes. Suits against employers by workers claiming harm from inhaling diesel exhaust are mostly restricted to actions against railroads. This is because railroad workers are not covered by workers' compensation laws. Injured railroad workers' only recourse is to go to court.

A Texas jury recently awarded a railway worker's estate $2 million because she contracted multiple myeloma--a rare form of cancer--allegedly from inhaling diesel exhaust during her employment with Missouri Pacific Railroad Company.

ACTS thinks that common sense dictates that diesel exhaust is a carcinogen. The workers about whom we are particularly concerned are those in indoor arenas and film and TV locations where fuel powered lifts and other diesel equipment are used. While electric lifts can be used to protect these people in some cases, these lifts cannot go much above 60 feet and can't lift over 500 pound loads. The bigger and more powerful lifts are diesel powered.

ACTS agrees with the position of Local 829, United Scenic Artists of the International Alliance of Theatrical and Stage Employees. They insist that employers at all indoor locations either use electric powered equipment or equip the fuel-driven equipment with special exhaust catalytic converters.

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SECOND HAND ROSE & THE NET SELL RECALLS

CPSC Press Release # 00-018, 11/17/99, CPSC Press Release # 00-035, 12/16/99

Each year, the US Consumer Product Safety Commission (CPSC) recalls 250 to 300 hazardous products. Ever wonder where they go? The CPSC did. They found they are sold in thrift stores and on line!

THRIFT STORES. From May through September 1999, CPSC visited 301 randomly selected thrift stores nationwide. They found that 69% were selling at least one hazardous product. Of these stores:

51% sell children's jackets and sweatshirts with drawstrings, presenting a strangulation hazard.

20% sell hair dryers without protection against electrocution.

12% sell cribs that do not meet current federal and voluntary safety standards, presenting risks including entrapment and strangulation.

10% sell recalled halogen torchiere floor lamps without wire or glass guards, presenting a fire hazard.

7% sell recalled play yards and playpens with protruding hardware or collapsible top rails presenting a strangulation hazard.

4% sell recalled car seat carriers with handles that can unexpectedly disengage, causing the seat to flip forward and injure infants.

3% sell recalled toy basketball sets with nets that present a strangulation hazard to children.

~1% sell other products including banned lawn darts, recalled cedar chests and recalled bean bag chairs, all of which present injury and death hazards to children.

ON LINE. The CPSC also just launched Operation SOS--Safety Online Shopping--to find more recalled, illegal, and potentially hazardous products. The SOS operation has already found dangerous products being sold online including:

* Flammable children's sleepwear
* Prescription drugs without child-resistant packaging
* Children's jackets with drawstrings that pose a strangulation hazard
* Mini-hammocks without spreader bars that pose a strangulation hazard
* Cigarette lighters without child-resistant mechanisms

CPSC has prepared a Thrift Store Checklist. Consumers can use the checklist as a guide to be sure they don't purchase dangerous goods. Thrift store owners and managers should use the list to check items before accepting donations, consignments, or purchasing inventory. The CPSC is distributing this checklist through the National Association of Resale and Thrift Shops (NARTS) and other organizations, including the Salvation Army and Goodwill. CPSC also is giving this information to state and local governments for distribution to area stores.

To get a free copy of the checklist, visit CPSC's website at www.cpsc.gov or send a postcard to Thrift Store Checklist, CPSC, Washington DC 20207.

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SAFER, CLEANER PYRO?

Journal of Pyrotechnics, Issue 10, Winter 1999, "High-Nitrogen Fuels for Low-Smoke Pyrotechnics," David E. Chavez, Michael A. Hiskey, and Darren L. Naud, pp. 17-36. e-mailnaud@lanl.gov, hiskey@lanl.gov Los Alamos National Laboratory, Group DX-2, High Explosives Science and Technology, Mail Stop C920, Los Alamos, NM 87545, USA

An article in the *Journal of Pyrotechnics* holds out hope for safer and cleaner pyrotechnics. A group of scientists at Los Alamos National Laboratory have been working to find ways to utilize high nitrogen compounds (e.g. 3,6-dihydrazino-s-tetrazine) as pyrotechnic fuels. They believe they have:

> *...made progress in reducing smoke and the metal content in pyrotechnic formulations without sacrificing flame color. This work is an offshoot of our high-nitrogen synthesis program to synthesize high-nitrogen compounds for use as explosives and gas generants. It is our hope that this technology will alleviate the exposure of crew and audiences to potentially harmful smoke.*

The article did not address the possibility that nitrogen dioxide and other nitrogen oxides might be produced in the reaction. It would not make sense to trade airborne particulates and carbon monoxide for the much more toxic nitrogen dioxide gas. In this regard, I e-mailed one of the researchers, Darren Naud.

Darren Naud replied that he and his colleagues think that the nitrogen is converted mostly to nitrogen gas rather than to nitrogen oxides. He also said that the people present at the demonstration did not notice the odor of nitrogen dioxide, which is distinctive at rather low levels. However, he agreed that there would have to be actual measurements on decomposition products if the pyrotechnic product is to be commercially developed. The amount of metal fume released from colorants also must be quantified.

We should not expect to see the new products soon since all new pyrotechnic chemicals must got through rigorous Department of Transportation testing before they can receive shipping classifications. The group needs funding in order to proceed to the next phase of development.

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ACTS FACTS sources: the *Federal Register* (*FR*), the *Bureau of National Affairs Occupational Safety & Health Reporter* (*BNA-OSHR*), the *Mortality and Morbidity Weekly Report* (*MMWR*), and many technical, health, art, and theater publications. Call for information about sources.
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February 2000 Vol. 14, No. 02

VERMICULITE: A 20-YEAR SAGA

44 *FR* 60056-60061, Oct 17, 1979, *NY Times*, Dec 25, 1999, p. A28 Seattle, Dec 24 (AP), & *Seattle Post-Intelligencer*, Andrew Schneider, Senior National Correspondent, Tuesday Jan 18, 2000.

Vermiculite is back in the news. The story actually begins in 1979 when the US Consumer Product Safety Commission published a list of consumer products contaminated with asbestos. Included on the list was vermiculite potting soil.

The major source of vermiculite at that time were mines in Libby, Montana. The mines were operated first by the Zonolite Company and then by W.R. Grace Company. Dust from Libby vermiculite was contaminated with tremolite asbestos in amounts sometimes as high as 5 percent. Tremolite is not a common form of asbestos, but many experts consider it even more toxic than the other forms.

MANY USES. Potting soil was only one of many uses for vermiculite. The brownish, fluffy, mica-like mineral was also used as blown-in wall insulation called "Zonolite" and as packing material in shipping and mailing containers.

In the arts, vermiculite was used as ceramic and glass kiln insulation, to mix with clay or plaster for texture, and as packing for shipping ceramic cones and other breakables. Many art magazines and curriculum guides for children suggested projects in which vermiculite was used.

IN THEATER, FILM AND TV production, vermiculite was used in large amounts in strange ways. For example, in 1986 performers on the set of "As The World Turns" called me. Actors and crew members reported having respiratory problems from heavy dust in the studio from fake sand used in desert scenes. The sand was actually W.R. Grace vermiculite. I sent data on the asbestos in vermiculite and the "World" stop turning while they cleaned up the studio.

WORKERS MOST AT RISK from asbestos-tainted vermiculite, were those mining it and those working in the 60 or more plants across US, Canada, and Puerto Rico where it was processed and packaged.

Senior Reporter, Andrew Schnieder of the *Seattle Post-Intelligencer* writes that the vermiculite mine in Libby has killed at least 192 people around the country in the last 40 years. Most had developed asbestosis, lung cancer or mesothelioma, a cancer of the lung lining. And at least 375 other workers have been diagnosed with ailments that were probably caused by the asbestos. Sixty-seven of the 187 asbestos-related lawsuits filed against Grace have been resolved either by the company settling out of court or being found liable and ordered to pay damages.

EFFECTS TODAY. Some asbestos cancers can be latent for 40 years or more. For this reason, health experts say asbestos-related diseases caused by vermiculite will continue to affect people, especially the processing plant workers. But this work force is transient and it might never be known how many workers have died.

Other workers may be exposed even now. Vermiculite is still present in building walls where it will be disturbed during repair work or demolition. I occasionally find it still in place above the arches of old ceramic kilns. And there is probably small amounts of tremolite asbestos from vermiculite in the soil of thousands of green houses and in the soil around landscaped homes.

TWO TREMOLITES. Tremolite is a type of asbestos that comes in two forms, fibrous and nonfibrous. It is the fibrous form that is hazardous. Minerals contaminated with tremolite contain varying amounts of one or both forms. In fact, arguments about which form of tremolite is present in any particular mineral is what enabled some manufacturers to claim their products were safe long after they should have taken them off the market. Today, it is easier to analyze minerals and the presence of fibrous tremolite is no longer difficult to ascertain.

TALC. Other minerals, such as talc, can be contaminated with fibrous tremolite. In the past, fibrous tremolite was found in many industrial and ceramic talcs, soapstones, and an impure talc rock called "steatite" that is used as building stone and for sculpture. Some sources of these minerals are still contaminated and ACTS urges artists to obtain material safety data sheets (MSDSs) on these products. (Every quarry and mine in the US, by law, must analyze their stones or minerals and prepare an MSDS. Art suppliers must tell you where you can obtain this MSDS.)

I knew someone who developed mesothelioma from using talc-containing ceramic slips to make dolls. She was a doctor's wife who never held an outside job. She told me that her only possible asbestos exposure was from her own little doll-making studio. On August 14, 1981, she died of mesothelioma at the age of 54.

Talcs used in cosmetics may even contain a few asbestos fibers. A study of commercial cosmetic talcs found traces of asbestos in six of 15 samples.* But the amounts of asbestos should be insignificant if people use cosmetic powders without creating clouds of dust.

YOUR EXPOSURE. W.R. Grace closed the Libby mine in 1990. The vermiculite available today is from tremolite-free mines, but most people alive in the U.S. in the 1980s and earlier probably have seen or used contaminated vermiculite. Some of us also have worked with tremolitic talcs. But if our exposures were infrequent, or if we used wet cleaning methods and dust control, our exposures should have been small enough to keep our risks extremely low. If you suspect that you have had heavy exposures to tremolite, it is wise to tell your doctor and plan sensible medical surveillance.

* Blount, A.M., "Amphibole Content of Cosmetic and Pharmaceutical Talcs," *Environmental Health Perspectives*, Vol 94, pp. 225-230, 1991. Note: No law limits asbestos in cosmetic talc. Instead, an industry voluntary standard is honored.

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SILVER SHENANIGANS

64 *FR* 44653-8, Aug 17, 1999 and *C&EN*, Jan 24, 2000, p. 80

The October issue of *ACTS FACTS* covered FDA's declaration that all over-the-counter medications containing silver are neither safe nor effective. Silver-containing products are now all classed as "misbranded" and subject to regulatory action. Then this month, *Chemical & Engineering News* published a short item about a catalog advertisement for a colloidal silver generator. The generator was touted as being able to make colloidal silver "for a fraction of the price ... you would pay for it in the health food store or pharmacy...." Since the health food charlatans can't legally sell colloidal silver products, they now sell a generator so you can make your own unsafe and ineffective product. Sheesh.

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BALLERINA CAN'T SUE

BNA-OSHR, 30(3), 1/20/00, p. 44-45

Natalia Makarova, widely regarded as the world's best prima ballerina, was injured in 1982 when a piece of scenery fell on her shoulder at the Kennedy Center. At the time of the accident, Makarova was performing in a production of the musical, "On Your Toes." As the producer of the show, the Kennedy Center was responsible for maintaining workers' compensation coverage for the show's workers and performers.

Makarova filed an administrative claim against the Kennedy Center for her injuries in 1984. And in 1997, Makarova filed a civil lawsuit against the United States under the Federal Tort Claims Act in the U.S. District Court for the Southern District of New York. She claimed that the government, which owns the Smithsonian Institution that operates the Kennedy Center, was responsible for the injuries she sustained during her performance.

A federal appellate court ruled on Jan 12 (*Makarova v. U.S.*, 2d Cir., No. 99-6089, 1/12/00) that the dancer can't sue because her injury was covered by workers' compensation and she was considered an employee of the Kennedy Center at the time of her accident.

Ordinarily, workers' compensation is a reasonable accommodation for an injured worker. But there should be some special considerations when accidents damage a world-class artist's career.

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ACTS FACTS POSTAGE COSTS RISE

Unhappily, our foreign postage rates for the newsletter will rise to more realistic levels starting in April. The new costs are stated on the form at the end of the newsletter. Changed are the additional cost of postage for our Canadian and Mexican subscribers from $2 to $4, and for subscribers from all other countries from 6 to $8. Those who get their newsletter though a subscription service will not be charged the additional postage until they renew in 2001 (these rates are set a year in advance). The cost of *ACTS FACTS*, postage included, to US subscribers is still $15. But those wishing to subscribe for multiple years would be wise to do so this year.

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RADIOACTIVE NICKEL

Chemical & Engineering News, Jan 24, 2000 p. 25, p. 14-15

Six thousand tons of radioactive nickel has been blocked from entering commerce by Energy Secretary Bill Richardson. The nickel became radioactive at the Department of Energy's (DOE) uranium enriching facility in Oak Ridge, Tennessee. Richardson was responding to pressure from unions, Congress members, and steel and metal recycling industries who fear that the nickel will taint recycled products and harm consumers.

However, the block is temporary. The DOE and the Nuclear Regulatory Commission (NRC) are busy developing a policy to address commercial release of radioactive metals. After the policy is set, Oak Ridge's 6000 tons plus nearly twice this much radioactive nickel which is currently being held at other DOE facilities will be released into commerce. And subsequent to this, DOE plans to release even larger tonnages of other radioactive metals.

This Editor remembers serious problems from use of radioactive gold and cobalt that had been illegally recovered from medical products. The gold in particular, was used in rings that caused radioactive damage and even cancer in those who wore them. The DOE and NRC must carefully consider ways to keep these radioactive metals from finding their way into jewelry alloys worn next to the skin.

NICKEL IN THE EU. Radioactive nickel should not be a serious problem in the European Union. The EU already protects consumers from exposure because ordinary nickel is a carcinogen and causes skin allergies. They enacted "The Nickel Directive," a law which limits the amount of nickel in earring post assemblies (for pierced ears) to 0.05% or less and requires products which come into direct and prolonged contact with the skin (e.g. earrings, watchstraps, or zippers) not release more than 0.05 micrograms per square centimeter of nickel per week. Release from nickel-coated products also must not exceed this level after 2 years of normal use.* Most of our nickel-containing jewelry can't be sold in the EU.

* Nickel dermatitis: how much nickel is safe?," *Contact Dermatitis*, 1996, 35:267-271

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LONG ISLAND UNIVERSITY & TWO CONTRACTORS FINED $370,900 FOR ASBESTOS VIOLATIONS

BNA-OSHR, 30(5), 2/3/00, pp.72-73

An asbestos removal project on the C.W. Post Campus of Long Island University in Brookville, New York, resulted in Occupational Safety and Health Administration (OSHA) citations with proposed penalties totaling $370,900 for the university and two contractors for violation of asbestos exposure standards.

OSHA issued six alleged wilful and 30 alleged serious violations to Long Island University, Aramark Corporation of Madison, CT, and Image Construction of Maspeth, NY. The citations followed an OSHA inspection conducted from July 14, 1999 to January 14, 2000, following an employee complaint that workers were being exposed to asbestos while removing thermal system insulation pipes.

WILLFUL VIOLATIONS. The agency issued citations against the university for four alleged wilful violations. According to OSHA, the university did not perform proper monitoring to accurately determine the airborne concentration of asbestos and did not use proper controls and work practices in all asbestos removal operations. The agency also noted that employees were not using respirators and employees working in areas containing asbestos were not notified of the presence, location, and quantity of asbestos.

Aramark was cited for two allegedly wilful violations of OSHA's asbestos standard for improper monitoring and lack of proper engineering controls and work practices to minimize employee exposure to asbestos.

SERIOUS VIOLATIONS. Image Construction was cited for nine alleged serious violations and Aramark and Long Island University were cited for another 13 and 8 alleged serious violations, respectively for not complying with provisions for protection of employees working near the asbestos removal work.

Editor: It's especially disturbing when this occurs at a school.

BERYLLIUM CANCER DESIGNATION UPGRADED

C&EN, Jan 31, 2000, p. 17

After reviewing studies of beryllium workers, the National Toxicology Program's Board of Scientific Counselors agreed unanimously to upgrade beryllium and beryllium compounds from its status as "reasonably anticipated to be a human carcinogen" to "known human carcinogen." In the past, beryllium/copper alloys were commonly used by sculptors and jewelers. Artists who use scrap or found metals still may be exposed to beryllium.

LEAD CANDLE WICKS IN THE NEWS AGAIN

David Ho, Associated Press, New York-02/23/00, 4:27EST

According to the consumer group, Public Citizens, candles with lead wicks are turning up on store shelves despite a voluntary ban by U.S. candle makers. Public Citizen said it purchased 285 candles from a dozen stores in the Washington-Baltimore Area, including 86 different candles with fine metal support wires inside their wicks. Laboratory tests found that nine of the candles with metal wicks contained between 33 and 85 percent lead by weight.

In 1974, candles with lead wicks were common. At that time, the U.S. Consumer Product Safety Commission said they found no signs of specific health risk, but as a precaution, the CPSC and the candle industry reached a voluntary agreement to stop using lead wicks.

Russ Rader, spokesman for the CPSC said the commission has been conducting another of its own investigations since late least year. "We don't know that there is any kind of health hazard associated with leaded candles," he said.

This statement is hard to reconcile with the report of Robert B. Bailey of Bailey Engineering Corporation in Palm Beach Gardens, Florida (see *ACTS FACTS*, June 1999). Mr. Bailey tested dust in a home after some lead core wick candles had been burned and found surface lead concentrations of 40 micrograms of lead per square foot.* Clearly, burning candles regularly could raise the amount of lead in surface dust to hazardous levels.

And now this new study by Public Citizens has concluded that when the lead-wick candles burn for three hours, they can produce average air lead concentrations ranging from nine to 33 times higher than those recommended by federal guidelines.

"How many more children will suffer lead poisoning before the CPSC fulfills its legal mandate to rid the country of this completely unnecessary source of lead poisoning?" said Dr. Sidney Wolfe, director of Public Citizen's Health Research Group. The group is petitioning the government to ban the candles.

J. C. Edmond, spokesman for the National Candle Association, said they would support a ban on lead wicks. According to Edmond, about 95 percent of U.S. made candles are produced by companies belonging to the candle association and they don't use lead wicks. But imported candles and those made by smaller companies or individuals may not keep to that standard. "You could start tomorrow if you want to buy some wax and wicks and dye and start making them in your garage," he said. "And that's where we start running into some questions about who is using what."

Meanwhile, consumers can identify candles containing lead by peeling back the unburned cotton wick, exposing the metal core, and then rubbing it on white paper. A zinc wick, the most common type, will leave no trace, but a lead core will leave a gray mark like a pencil. However, consumers should use all candles sparingly since studies, including those of Bailey, found that the wax also emits toxic hydrocarbons and particulates when candles are burned.

* The current standard for lead in surface dust is 100 $\mu g/ft^2$, but EPA has proposed lowering the standard to $\mu g/ft^2$ in 63 FR 30302-30355, June 3, 1998

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HYDROFLUORIC ACID: NOT FOR AMATEURS

"First aid for a unique acid, HF: A sequel," *Chemical Health & Safety*, Eileen B. Segal, American Chemical Society, January/February 2000, pp. 18-23.

October 22, 1999, Robert Belk, a 48 year-old owner of a company called Chemical Packaging near Atlanta, GA, was mixing some chemicals. A hose slipped, saturating his clothes with 70% hydrofluoric acid. He hosed off with water, but rather than have his secretary call the paramedics, he drove himself to the hospital. Burns were found on both lower legs and his left arm, but it was the HF which went through his skin that caused his death the following day from respiratory and heart failure.

In recognition of the extraordinary hazards of HF, ACTS is providing the following information and advice to the schools, museums, and glass studios that use it.

HAZARDS. Users should remember that concentrated HF covering 2% of the body can be fatal. This means that a splash wetting a 5 inch by 5 inch patch of skin can kill. And the onset of the symptoms is not always the same, but is related to the acid's concentration:

* Concentrations >50%: immediate burns appear with rapid destruction of tissue as noted by a whitish discoloration, usually proceeding to blisters, accompanied by severe pain.

* Concentrations of 20 to 50%: burns can be delayed 1- 8 hours.

* Concentrations <20%: painful erythema may be delayed for up to 24 hours. Redness, burning, or pain may not show up until several minutes or even hours have elapsed. Thus the surface area of the burn is not predictive of effects.

* Concentrations as low as 2% may cause serious symptoms if the skin contact is long enough. (This applies even to the glass etching creams that contain two chemicals that combine to release HF.)

TREATMENT for HF exposure is different from that of all other acids. Most acids require flushing for at least 15 minutes before treatment. That may be too late for HF. Instead, flushing should last about 5 minutes and then immediate treatment with special solutions of calcium gluconate or benzalkonium chloride must be initiated by someone trained to use them. Treatment procedures vary depending on the location of the burn and the extent and delaying treatment even minutes can be fatal.

ADVICE. As soon as HF is ordered for use, a facility should alert local hospitals and train their own personnel in the special emergency procedures needed. Schools of high school age students and younger should never have the acid on the premises. ACTS urges even professionals to cease using HF whenever possible. If HF must be used, follow the guidelines in AliedSignal's excellent booklet: "Recommended Medical Treatment for Hydrofluoric Acid Exposure." It can be obtained from AlliedSignal Inc., P.O. Box 1053, 101 Columbia Road, Morristown, NJ 07962-1053. Write or fax 973/455-6141.

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CANDLEMAKER PAYS $150,000 FOR NOT REPORTING DEFECT

Press Release # 00-065, CPSC, Feb 9, 2000

The CPSC announced that Lancaster Colony Corporation of Columbus, OH, will pay a civil penalty of $150,000 to settle allegations that the company's original formulation Clearfire candles, sold by its Candle-lite division, contained a defect and the firm failed to report the problem to the agency as required by law.

CPSC alleges that Lancaster Colony failed to report that original formulation Clearfire candles could flare up, causing the glass holders to overheat and break, putting consumers at risk of being burned or injured by broken glass. CPSC alleges that Lancaster Colony was aware of at least 142 incidents involving candle flare-ups, resulting in 20 burn or laceration injuries and more than 65 reports of property damage, but did not report to CPSC.

Although the company agreed to the civil penalty, Lancaster Colony denies that the candles contain a defect that could create a substantial hazard or that it violated the law.

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SYNTHETIC FINGERNAILS: A FIRE HAZARD

Reported by *Chemical Health & Safety*, Jan/Feb 2000, p. 45 from a study by: Vanover, W.G., Woods, J.L; Allen, S.B., *J. Chem. Educ.*, 1999, 76(11) 1521

The fact that long artificial fingernails are a fire hazard in the chemistry lab was established in a study conducted at Lamar University in Beaumont, Texas. When in contact with a Bunsen burner flame, the average ignition time of synthetic fingernail was 0.85 seconds, and 87% of the sample nails ignited in 1 second or less. When a birthday candle was used as the ignition source, the average ignition time was 1.1 seconds with 85% of the nails igniting in a second or less. All of the synthetic nails burned to completion. When victims see their nails on fire, they typically fling a hand vigorously sending burning drops of melted plastic flying.

Banning synthetic nails in chemistry lab is not considered practical, but students should be told of the hazards and those who decline to remove their synthetic nails should be prohibited from using open flames. The same prohibition should be extended all art and craft activities in which torches or high heat are used and to performers in theatrical productions in which fire effects or cigarette smoking occur on stage.

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NIKE® GOT ON HIS NERVES

NY Times, Monday December 27, 1999, Obituaries.

On December 24, 1999, Bill Bowerman, a co-founder of Nike® died at age 88. The *NY Times* obituary noted that Bowerman invented Nike's waffle shoe sole in the early 1970s by experimenting with a liquid rubber material which he poured onto his wife's waffle iron. These experiments cost him his health. A glue he used contained hexane whose vapors damaged his neurological system. For the rest of his long life, Bowerman walked with a limp and had to wear a leg brace.

HEXANE, whether inhaled or absorbed through the skin, can permanently degenerate the nerves in the arms, legs, and other selected parts of the nervous system. Limited exposure may only cause a mild, reversible damage. Prolonged or repeated exposure causes permanent disability.

The early symptoms of hexane exposure are easily overlooked. They include loss of appetite, loss of weight, fatigue, cramping of the hands and calves, numbness in hands and feet, and weakness in the legs. As the disease progresses, there may be difficulty in walking, stumbling, paralysis of the legs and sometimes of the arms, visual impairment, and lost of short term memory. A decline in intellectual ability also can occur. The disease may be mis-diagnosed as MS or ALS (multiple or amyotrophic lateral sclerosis).

Many solvents can cause nerve damage, but hexane does it at lower levels and more severely than most other solvents. And unlike other solvents, hexane damage is so unique it can be proven to be the cause when biopsies of the destroyed nerves are examined. This makes lawsuits for damages from exposure to hexane easier to win than those involving exposure to other solvents.

LAWSUITS. There have been many lawsuits filed by individuals claiming they were harmed by hexane exposure, but the first by an artist was filed in 1979. Erica Barton and her husband filed suit for 12 million dollars, alleging that Mrs. Barton's severe nerve damage resulted from the use of spray adhesives. They sued Eastern Artists and Drafting Materials, A.I. Friedman, Pearl Paint, Arthur Brown, Illinois Bronze Paint, Illinois Bronze Powder and Paint, and 3M Company. The amount of Barton's settlement was undisclosed.

A second suit was brought in 1980 against Naz-Dar by a screen printing artist named Betty Brua. Naz-Dar settled for $125,000. These and other lawsuits may partially explain the decline in the use of hexane in consumer and art products in the 1980s and 1990s. For example, most rubber cements were reformulated about this time to contain heptane, a solvent that is much less toxic than hexane.

IT'S BA'ACK! For years I saw very few hexane-containing products. Then recently, hexane began appearing more often as an ingredient in certain spray products, rubber cements, adhesives, permanent markers, and specialty paints and inks. Perhaps manufacturers have forgotten the history of this chemical.

WHAT IS IT? Hexane is a six-carbon organic solvent that exists in more than one form or isomer. The most toxic is called "normal," or "n-" hexane in which the carbon atoms are in a straight line. (Isomers' structures are branched.) When the label says only "hexane", it usually means "commercial hexane" which is 40 to 55% n-hexane. The hexane isomers are not nearly as toxic. Neither is heptane.

Substance	ACGIH TLV-TWA
normal hexane	50 ppm
hexane isomers	500 ppm
heptane	400 ppm

WHAT TO DO. Use substitutes for hexane when possible. If you must use it, have good ventilation and/or a respirator. Keep it off your skin. Ask your suppliers which gloves to wear. Most types of nitrile gloves work, but rubber gloves can be penetrated and/or dissolved by hexane. If you use solvents of any type, do not ignore symptoms of numbness, cramping, or weakness in the hands, feet, arms or legs. Ignoring these symptoms can lead to a disease that cannot be cured even if you are as rich as the founder of Nike®.

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DO NIKE® "POISONED SHIRTS" MATCH THE SHOES?

Chemical Health & Safety, March/April 2000 p. 46 & 48

Replica® football shirts, alleged to contain "poison," were withdrawn from sale in Germany. The shirts were manufactured by Nike® in Britain. The "poison," which is also employed in the U.S. textile industry, is tributyltin (TBT). It is used to kill bacteria and subdue the odor of sweat. The shirts contained 0.1% TBT which is of concern because TBT can be absorbed through the skin.

TRIBUTYLTIN is highly toxic and has been used a pesticide, fungicide, and rat killer. German officials were especially aware of its toxic effects because the International Maritime Organization (IMO) had just approved a ban on TBT-containing antifouling paints for ships. As of January 1, 2003, ships of the 150 IMO members, including Germany, may not be painted with TBT-containing paints.*

TBT is used widely in marine hull paints as a biocide to prevent barnacles and other life forms from growing on ships. It is now known that TBT contamination from these paints has bioaccumulated in coastal ecosystems where it causes endocrine disruption in shellfish, kills algae, and has other environmental effects.

In the U.S., TBT-containing marine paints have been banned except for use on military ships since the late 1980s. Now it appears TBT has found use in the U.S. and Britain as a textile additive to be worn next to the skin! Artists who cast silicone resins should also be aware that TBT, dibutyltin, and other toxic organic tin compounds are found in certain types of curing agents.

* After five years (2008), ships will be banned from having TBT paints on their hulls. This complete ban follows a partial ban imposed by IMO in 1990 on ships $\leq$ 25 meters long.

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EYEWEAR FOR GLASS, CERAMIC, & METAL WORKERS: UPDATED RECOMMENDATIONS

BACKGROUND. Substances heated until they "glow" emit three types of radiation: ultraviolet (UV), visible, and infrared (IR). Welding produces more UV than other types of rays. In glass, ceramic, and foundry work, IR is the major hazard.

REGIONS OF THE OPTICAL RADIATION SPECTRUM

Region	Wavelength Range in nanometers (nm)
Ultraviolet (UV)	**100 to 380-400**
UV-C	100 to 280
UV-B	280 to 315-320
UV-A	315-320 to 380-400
Visible (light)	**380-400 to 760-780**
blue light	400-500
yellow (sodium flare)	588-590
Infrared (IR)	**760-780 to 1,000,000**
IR-A	760-780 to 1400
IR-B	1400 to 3000
IR-C	3000 to 1,000,000

IR can be thought of as waves of energy that heat substances that absorb them. If IR heats the skin, we feel pain and can protect ourselves. If the rays enter the eye, however, we sense no pain. Damage including formation of cataracts occurs when heat is absorbed by various tissues in the eye.

PREVIOUS ADVICE. Until now, ACTS advised artists to either 1) follow the recommendation of the National Institute for Occupational Safety and Health (NIOSH) to use #3 or #4 welding shade lenses or 2) ask sellers of other types of eyewear to provide the transmission spectrum from a reputable laboratory over a range of 0 to 3500nm. This data should enable you to choose lenses that have low transmittance in the UV, yellow (588-590nm which makes it difficult to see) and IR (760-3500nm)ranges.

This advice was based on two NIOSH studies,[1,2] but the studies contained very confusing wording when recommending particular eyewear products. Now a new study, in the *American Industrial Hygiene Association Journal* on radiation exposure in traditional glass factories[3] in Italy[4] cleared up this confusion.

IR MEASURED. As NIOSH had done, the Italian researchers measured radiation sustained by glass workers, especially those who are in close proximity to furnaces when they gather glass, reheat, etc. These workers' exposures were found to exceed the American Conference of Governmental Industrial Hygienist's limits (threshold limit values) for IR-B and IR-C by factors as large as 15!

CATARACTS. Next, the researchers surveyed existing studies on cataract induction and cited three studies[5,6,7] that led them to conclude that both the short wavelength radiation in the visible and IR-A ranges and the long wavelength radiation in the IR-B and IR-C ranges can induce cataract. The studies show that both short and long range IR, by different mechanisms, raise the temperature in the lens. It is the heating of the lens that causes the damage.

This is important since IR-B and IR-C are the predominant irradiances produced by typical glass furnaces and ceramic kilns.

RECOMMENDATIONS. Lastly, the researchers recommended glass-workers wear lenses that provide:

* very low IR transmission;
* good visible transmission;
* low level of optical aberrations; and
* high impact resistance to penetration by hot material.

But then, the Italian researchers stated clearly what was only inferred by the NIOSH studies. This is the fact that commercial lenses are available which guarantee very low IR transmission in the 770-2000 nm range, but IR transmission above this level in the IR-C range is not usually either known or reported!

Manufacturers of safety eyewear must begin immediately to measure and report the IR-C transmission at 3000nm and higher (see chart above). It may be that some lenses already do a good job. But if it is found that IR-C is not blocked effectively by any lenses currently on the market, then new lenses must be developed.

ACTS advice for glassblowers, kiln watchers, and others exposed to glowing glass, ceramics, or metals is to ask suppliers of safety eyewear for transmission spectrum data, including high range IR-C. If this information is not available, be advised: your supplier really doesn't know how well their lenses will protect you.

1. Health Hazard Evaluation of Glass Schell Fused Glass Masks, Houston TX. NIOSH:HETA 95-0119-2554.
2. Health Hazard Evaluation of Louis Glass Factory, Weston, WV, NIOSH:HETA 88-299-2028.
3. "Infrared Radiation Exposure in Traditional Glass Factories," Renata Sisto, Iole Pinto, Nicola Stacchiene, Franco Guiliani. *Am. Indust. Hyg. Assoc. J.*, 61:5-10, Jan/Feb, 2000.
4. NOTE: Although the study was done in Italy, it is applicable to the work of glassblowers worldwide because handcraft techniques have not changed significantly for many decades. Glass furnace temperatures is the study were found to range between 1130 and 1370°C, which are also typical temperatures for most types of glass furnaces and ceramic kilns.
5. Skott, J.A.: The computation of temperature rises in the human eye induced by infrared radiation. *Phys. Med. Biol.* 33:243-257 (1988).
6. Okuno, T.: Thermal effect of infra-red radiation on the eye: A study based on a model. *Ann. Occup. Hyg.* 35:1-12 (1991).
7. Okuno, T.: Thermal effect of visible light and infra-red radiation (ir-A, ir-B and ir-C) on the eye: A study of infrared cataract based on a model. *Ann. Occup. Hyg.* 38:351-359 1994).

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ACTS FACTS sources: the *Federal Register* (*FR*), the *Bureau of National Affairs Occupational Safety & Health Reporter* (*BNA-OSHR*), the *Mortality and Morbidity Weekly Report* (*MMWR*), and many technical, health, art, and theater publications. Call for information about sources.
Editor: Monona Rossol; Research: Tobi Zausner, Nina Yahr, Diana Bryan, Sharon Campbell; Staff: John Fairlie, OES.

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May 2000 Vol. 14, No. 05

COMMON VINYL PLASTICIZER'S CANCER STATUS CHANGES

Editorial

Diethylhexyl phthalate (DEHP), a plasticizer for vinyl plastic, has been known for years to cause cancer in animals.* Now, the Chemical Manufacturers Association's Phthalate Ester Panel is sending out press releases that imply DEHP is not a human carcinogen. The Panel wants people to assume DEHP is safe based on the International Agency for Research on Cancer's (IARC) reclassification of DEHP from "possibly carcinogenic to humans" (Category 2B) to "not classifiable as to carcinogenicity in humans" (Category 3).

This change in DEHP's status is not a vindication of the plastic industry, but a further indictment of it. It shows that industry advocates exposing people to a known animal carcinogen for which there is not enough data to decide whether or not it can cause cancer in humans. The Panel also does not mention that other major agencies have looked at the existing data and have placed DEHP in the following categories:

- The National Toxicology Program lists DEHP in category NTP-R: Reasonably Anticipated to be a Human Carcinogen based on sufficient evidence of carcinogenicity in animals.
- The American Conference of Governmental Industrial Hygienists lists DEHP as TLV A3, a Confirmed Animal Carcinogen with Unknown Relevance to Humans.
- The US Environmental Protection Agency lists DEHP as EPA B2, Probably Human Carcinogen with Sufficient Evidence from Animal Studies, but inadequate data from epidemiologic studies.
- The National Institute for Occupational Safety and Health lists DEHP as a Carcinogen without further classification.

If there were adequate data and DEHP was found not to be a human carcinogen, the agencies would list it in categories such as:

- IARC 4: Probably Not Carcinogenic to Humans;
- TLV A5: Not Suspected as a Human Carcinogen; or
- EPA-E: Evidence of Non-carcinogenicity in humans.

The Phthalate Ester Panel is selling the idea that as long as there is not enough data to prove a chemical causes cancer in humans, it is acceptable to use a known animal carcinogen in consumer products such as medical tubing, baby bottle nipples, toys, and other vinyl products. This policy must be as firmly rejected by the US public as it was in Europe where phthalates are banned from use in toys.

* Administered in the diet, DEHP increased the incidence of hepatocellular carcinomas in female rats, liver neoplastic nodules or hepatocellular carcinomas in male rats, and hepatocellular carcinomas in mice of both sexes. NTP did the study and listed DEHP in 1982.

CPSC RECEIVES PETITIONS ON CANDLES AND RUBBER

65 FR 19742, April, 12, 2000; 65 FR 15133, March 23, 2000

CANDLES. The US Consumer Product Safety Commission (CPSC) received two submissions, one from Public Citizen and one jointly from the National Apartment Association and the National Multi Housing Council, requesting that CPSC ban lead-containing candles and wicks sold for candlemaking that contain lead. These candles are capable of raising the lead content of dust and air in homes to unacceptable levels. The requests are docketed as a single petition and CPSC is soliciting written comments from all interested parties.

RUBBER. The CPSC received a petition from Debi Adkins, editor of *Latex Allergy News*, requesting that natural rubber latex (NRL) and products containing NRL be listed as strong sensitizers under the Federal Hazardous Substances Act. This listing would make warning labels required on such products. NRL can be found in gloves, adhesives, shoes, balloons, pacifiers, carpet backing, and many medical products. Adkins asserts that a portion of the population has allergies to NRL that can cause serious reactions, even death.

COMMENTS can be sent to CPSC, Office of the Secretary, Washington DC 20207, faxed to 301/504-0127, or emailed to cpsc-os@cpsc.gov. They should be captioned "Petition HP 00-3, Candle Wicks Containing Lead" (by June 12) or "Petition HP 00-2, Petition on Natural Rubber Latex" (by May 22). The petitions are at http://www.cpsc.gov.

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CPSC FABRIC FLAMMABILITY STANDARDS CHANGE

65 FR 12924-38, 3/10/00

CPSC is changing flammability tests for children's sleepwear, small carpets and rugs, mattresses, and mattress pads. The laundering procedures are being revised because the detergent specified by the old standard is no longer available and operating characteristics of washing and drying machines have changed. Standard washing tests are needed to assure that flame retardant chemicals are not removed or degraded with repeated washing and drying.

Having strong standards and enforcement of flammability laws is important to fiber artists, fashion designers, and theatrical costumers because they can't identify unsafe fabrics by appearance. For example, recalled fabric items have included thin veil-like skirts, bulky sweat shirts and pants, T-shirts, terry cloth and fleece robes, satin pajamas, and Halloween vinyl vampire capes. Recalled items commonly are found in thrift shops and second hand stores. To determine if any product has been recalled or banned, look it up at www.cpsc.gov or call 800/638-2772.

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PROPHETIC WORDS ON VERMICULITE

The February *ACTS FACTS* discussed asbestos-contaminated vermiculite including the fact that this substance was sold as insulation, under the name of "Zonolite®." We mentioned that it still present in building walls where it can be disturbed during repair work or demolition. Less than a month later, on March 24, a class action lawsuit was filed against W.R. Grace in Superior Court in Spokane, Washington on behalf of home owners who insulated with Zonolite®.

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STACHY NOT PROVEN TO CAUSE INFANT DEATHS

MMWR, 49(9), 3/10/2000, pp. 180-184

The Centers for Disease Control and Prevention (CDCP) concluded on the basis of reports from their own internal working group and the individual opinions of external consultants, that the possible association between a cluster of cases of acute idiopathic pulmonary hemorrhage/hemosiderosis (AIPH) in infants in Cleveland and household water damage or exposure to the mold, *Stachybotres chartarum*, is not substantiated adequately. Serious shortcomings in collection, analysis and reporting of data resulted in inflated measures of association and restricted interpretation of the reports. The association should be considered not proven. The cause of the AIPH deaths of the Cleveland infants remains unresolved.

The CDCP plans to continue investigating cases of AIPH in infants, particularly when clusters are identified. It will continue to consider possible associations between AIPH and many possible causes, including household water damage or exposure to molds such as *Stachybotres chartarum*. But standardized protocols will be recommended for data collection and environmental assessment.

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NATURAL DYE & PHOTOCHEMICAL RECOMMENDED FOR STUDY

65 FR 11329-31, March 2, 2000

The National Toxicology Program (NTP) is requesting comments on substances nominated for study and on the testing recommendations made by the NTP interagency committee for chemical evaluation and coordination (ICCEC). NTP routinely solicits, accepts, and reviews for nominations for toxicological studies to be undertaken by the Program on substances of potential human health concern. Two of the six items now recommended for study are of interest to artists.

JUGLONE [CAS RN 481-39-0] was nominated by the National Cancer Institute. The ICCEC recommends juglone be tested for:

- --mechanistic studies
- --metabolism studies
- --mouse lymphoma assay
- --mammalian mutagenicity
- --carcinogenicity testing (if preliminary tests warrant)
- --genotoxicity
- --subchronic toxicity

NIC recommended juglone because there is potential human exposure resulting from use of walnut-based products used as dietary supplements and as natural dyes and stains. There is good reason to suspect it is a carcinogen based on its quinone structure (5-hydroxy-1,4-naphthoquinone).

POTASSIUM FERRICYANIDE [CAS RN 13746-66-2] was recommended by NIC because consumers and workers may be exposed when it is used in photographic processing. NCI suspects it is a carcinogen based on its potential for redox cycling (alternating between being an oxidizer and a reducer) and there is inadequate data currently available to properly assess its safety. Potassium ferricyanide is nominated for genotoxicity and subchronic toxicity tests. Photographers and graphic artists have used potassium ferricyanide for years without realizing that it may have long term hazards.

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UNIVERSITY LIABLE FOR NOT WARNING STUDENT OF DANGER

BNA-OSHR 30(14), 4/6/00, pp. 272-273

A university can be held liable for assigning an adult student to perform an internship at a site it knows is dangerous, the Florida Supreme Court held March 30 (*Nova Southeastern University Inc. v. Gross*, Fla, No SC94079, 3/30/00).

Bethany Jill Gross, a 23-year-old graduate student at Nova Southeastern University in Fort Lauderdale was abducted, robbed, and sexually assaulted in 1995 while leaving Family Services Agency where she was performing an internship as part of a mandatory program to obtain her doctoral degree. Gross filed a lawsuit alleging Nova's negligence in assigning her to an internship at a facility which it knew to be dangerous without informing her of the danger. According to records in evidence, Nova knew of a number of criminal incidents which had occurred at or near the Family Services Agency parking lot.

Originally, a trial court granted Nova's motion for a summary judgement on the grounds that the school had no duty to warn the student. But on appeal, that ruling was overturned. Nova then sought state supreme court review, arguing that it did not owe Gross any duty because she was an adult and the university did not have control over her actions. Nova claimed that there is no special relationship between a university, where attendance is not mandatory, and where "the university is not standing in place of the student's parents" because the student is an adult.

The Florida high court acknowledged that Nova does not owe the same duty to Gross that it would to a minor student. But according to the court, the extent of the duty the school owes an adult student depends on the amount of control the school retains over the adult student's conduct. In this case, internships were a "mandatory part of the curriculum that the students were required to complete in order to graduate," the court said. "Where the university had knowledge that the internship location was unreasonably dangerous, it should be up to the jury to determine whether the university acted reasonably..." the court said.

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ASBESTOS IN CRAYONS: OLD DEBATES REEOPENED

Seattle Post Intelligencer, Andrew Schneider & Carol Smith, May 23,24,26,27,30 & June 1, 2000, e-mails between ASTM D01.57 committee members and reports from other news media.

On May 23, the *Seattle Post Intelligencer* reported that three major brands of crayons contained asbestos: Crayola, Prang, and Rose Art. The highest amount found was 2.86% in Crayola's Orchid color. The asbestos was traced to R.T. Vanderbilt talc used to harden the wax. The story has spurred debate about Vanderbilt talc contaminants and the Arts and Creative Materials Institute (ACMI) labeling program.

ACMI certified all three brands of crayons as "nontoxic." Deborah Fanning, Executive Director of ACMI stated flatly that there is no asbestos in crayons because their toxicologist doesn't allow it. Dr. Woodhall Stopford, ACMI's toxicologist, states that he doesn't certify asbestos-containing products, but admits "We don't analyze talc for asbestos that goes into crayons because I'm not aware of any talc in our program that had asbestos in it." Consumers should wonder on whose studies he relied for this opinion.

TALC. The battle between experts regarding the type of asbestos found in Vanderbilt talc has raged since the early 1970's. The problem is that there can be two forms of tremolite asbestos in talc: a nonfibrous form which is not very hazardous, and a fibrous form which is an especially toxic type of asbestos. Vanderbilt's experts say that all the tremolite in their talc is the nonfibrous type. Other experts claim otherwise. But asbestos testing has improved greatly over the years and ACTS hopes that the crayon issue will spur a renewed interest in identifying any true fibers in talc and properly regulating substances containing them.

HAZARDS. Some people say the crayons are not hazardous because the fibers are embedded in the wax. But no one really knows if fibers are released when crayons are used, when they get old and crumbly, or when they are ingested by children. And fibers also may be released when crayons are heated and/or burned in many common art projects such as painting with melted crayons, ironing designs on T-shirts, using crayons as batik wax resist, and candlemaking.

ACTS is also concerned about the workers who make the crayons. If a crayon contains almost 3% asbestos from only one of its ingredients, the percentage in the original talc must be much higher. OSHA considers materials containing even 1% asbestos to be "asbestos" and requires workers to be protected from exposure.

ADVICE. The Consumer Product Safety Commission says parents may want to halt crayon use until the scores of lab reports that have been sent to CPSC and their own tests are evaluated. ACTS suggests potters using Vanderbilt talc ceramic materials also use caution.

GOLDEN STAKES OUT LABELING HIGH GROUND

Daily Hues, April 2000, GOLDEN Artist Colors, Inc., pp. 1-2

Golden Artist Colors announced in their newsletter that they have left the Arts and Creative Materials (ACMI) labeling program. They have developed their own icon and product safety statement. The icon is a child's marble to remind people to take the products away from anyone who puts them in their mouth. And their new label statements are revolutionary. For example, paints which Golden could label "nontoxic" under the ACMI program will carry the following statement instead:

> **Health and Safety. Based upon toxicological review, there are no acute or *known* chronic health hazards with anticipated use of this product (most chemicals are not fully tested for chronic toxicity). Always protect yourself against potentially unknown chronic hazards of this and other chemical products by keeping them out of your body. Do this by avoiding ingestion, excessive skin contact, and inhalation of spraying mists, sanding dusts, and concentrated vapors. Contact us for further information.**

Golden's newsletter discusses the process by which a toxicologist assesses an art material's potential hazards under the American Society of Testing and Materials chronic hazards labeling standard (ASTM D 4236). Golden points out the major flaw in this standard:

> **Toxicological assessment can only rely upon current scientific and medical knowledge of chemical hazards. Although ASTM D 4236 states that "knowledge about chronic health hazards is incomplete", we have seen the leap made from the "absence of known hazards" to the declaration that a product is "non-toxic" under this Standard. We do not believe these phrases mean the same thing and our new labels reflect this.**

X MEANS HARMFUL. Golden products containing known toxic ingredients such as cadmium will now carry the European icon for a harmful product, which is a prominent black X on an orange background.

CALIFORNIA WARNINGS. Golden says they will meet the provisions of the California Safe Drinking Water and Toxic Enforcement Act (known as Proposition 65). Prop 65 does not exempt art materials which have been assessed "nontoxic" by the ASTM D 4236 standard. It simply requires warnings on products containing chemicals suspected to cause cancer or reproductive damage such as cobalt, nickel, cadmium, chromium, lead and crystalline silica. The labels will be on shipments leaving Golden's facility after October 6, 2000.

GOLDEN STATES, "We have always believed that people have a right and a need to know what chemicals they are working with...." They proved this for years by identifying pigments by color index and chemical names on each label and by supplying material safety data sheets. Now they are the first to eliminate the misleading "nontoxic" label and replace it with realistic information.

Golden warning labels end with the statement, "Contact us for further information." They mean this as well. Their labels not only provide the required address and phone number, but they include their website, www.goldenpaints.com. ACTS suggests artists visit this site to congratulate Golden's Safety Director, Ben Gavett.

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M.O.U. DÉJÀ VU

53 FR 17764-6, *ACTS FACTS* 2(6) June 1988 and 64 FR 40603-40611, July 27, 1999

In the September issue of *ACTS FACTS* we announced the signing of a memorandum of understanding (MOU) between the US Food and Drug Administration (FDA) and the State Administration of Import and Export Commodity Inspection of the People's Republic of China. The purpose was to begin a program of regular testing for lead and cadmium release of ceramic ware by Chinese laboratories.

ACTS was optimistic that this might reduce the amounts of hazardous ceramics slipping through our borders. We should have checked our own files. We published an almost identical MOU between the same agencies in 1988. Obviously, it didn't work eleven years ago.

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COLLEGE EMPLOYEES SUE FOR PCB-INDUCED CANCERS

BNA-OSHR, 30(20), 5/18/00, p. 497

Lawsuits were filed by 13 employees of Burlington Community College in New Jersey who have cancers they attribute to polychlorinated biphenyls (PCBs) exposures. The employees were exposed after a 1985 fire released PCBs from Armstrong Travertone Sanserra® ceiling tiles containing a Monsanto PCB plasticizer (Arochlor 1254).

The right of these employees to sue was disputed in court by Armstrong World Industries (*Maertin v. Artstrong World Industries Inc.*, D.N.J., No. 95-2849 (JSB), 5/3/00). Armstrong contended that the employees could not sue because they did not file within the two year "discovery" period after they developed cancer. Armstrong contends that they should have known from the plethora of news stories and employer's memoranda concerning the presence and cleanup of PCBs that there could have been a connection between these cancers and the PCBs.

The employees claim they never received the memoranda nor did they read the articles. Their claim was supported by records showing that none of them mentioned PCBs to their doctors prior to 1994. Furthermore, they contended that even if they had read the newspapers or memoranda, they all contained additional information which would quell a reasonable person's urge to link PCBs and cancer, the court found. It was only after the Plaintiffs were investigating to try to find out why so many of the employees had cancer that they consulted the school's right-to-know files and discovered the extent of the PCB contamination of the school. For example, they were shocked to find out that the carpeting in the building had been replaced in 1988 because it was saturated with PCBs, not for redecorating purposes as they had been told. As a result, the suit against Armstrong may go forward.

PCBs were used in a number of paints and ceiling tiles made prior to 1980 and soot from all fires involving old building materials should be analyzed. Arochlor 1254 is still used as an historic slide mounting medium. Museums and archives with such slide collections or whose labs still use Arochlor 1254 should be aware that a fire involving these items could result in million dollar cleanups or lawsuits filed by cancer victims years later.

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LEAD EXPOSURE MAY INCREASE RISK OF ALZHEIMER'S

BNA-OSHR, 30(19), 5/11/00, p. 469

A study conducted by Case Western Reserve University and University Hospitals of Cleveland, Ohio, indicates that exposure to lead on the job has long-term effects and may "dramatically increase the risk of developing Alzheimer's disease in later years." The study concludes that workers who have had high levels of lead exposure are up to 3.4 times more likely to develop the disease.

Elisabeth Koss, lead author of the study, noted that employees are most often exposed to lead by either breathing lead dust, which is considered to be the most toxic route, or by direct skin contact. Job duties that can expose workers to lead include smelting or casting lead; removing lead coatings by welding, brazing, cutting, and blasting or sanding old paints; heating, machining, or spraying lead-containing products; and making lead products.

Case Western researchers also examined exposures to aluminum, copper, iron, mercury, zinc, and solvents. Although previous studies have raised concerns about possible relationships between Alzheimer's and many of these substances, only lead exposure was found to increase the risk of the disease in this study.

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BUSINESSMAN GETS 17 YEAR SENTENCE, $6 MILLION PENALTY

BNA-OSHR, 30(18), 5/4/00, pp 445

A federal judge sentenced an Idaho fertilizer company operator to 17 years in prison and to pay nearly $6 million in restitution for endangering an employee in an incident that left the worker permanently brain damaged. Allan Elias, owner of Evergreen Resources, was convicted in 1999 of one count of knowingly endangering an employee (by sending him without proper protective equipment into a 25,000 gallon storage tank in which cyanide was present), two counts of illegally disposing of hazardous substances, and one count of providing false statement to the Occupational Safety and Health Administration (*U.S. v. Elias, D. Idaho*, No. 98-0070-E-BLW, sentencing 4/28/00). Way to go, Judge.

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ACTS FACTS sources: the *Federal Register* (*FR*), the *Bureau of National Affairs Occupational Safety & Health Reporter* (*BNA-OSHR*), the *Mortality and Morbidity Weekly Report* (*MMWR*), and many technical, health, art, and theater publications. Call for information about sources.
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July 2000 Vol. 14, No. 07

ASBESTOS IN CRAYONS: UPDATE

Editorial

Last month, *ACTS FACTS* covered the *Seattle Post Intelligencer's* report on three brands of crayons that contained asbestos. While asbestos doesn't belong in crayons at all, it appears that exposure to asbestos from crayons is probably negligible except perhaps from activities such ironing crayon designs onto T-shirts or making and burning crayon candles. But the crayon issue has reignited a more important debate about the source of the asbestos.

Vanderbilt talc from upstate New York mines has been at the center of stormy controversy for 30 years. Time and time again, people have sent samples of this talc to labs and the reports always come back positive for tremolite asbestos. However, tremolite has two mineral forms. One is clearly fibrous and is regulated. The other form is considered non-fibrous and is unregulated. Under the microscope, the talc appears full of fibers, but Vanderbilt claims these fibers are transitional fibers, cleavage fragments, or other structures that are composed of the unregulated tremolite mineral.

ACTS believes that it is irrelevant whether the fibers are of regulated or unregulated tremolite. There is ample evidence that thin fibers of any inert substances can cause adverse health effects. For example, studies show that erionite, a fibrous mineral that is unrelated to asbestos, causes all the same diseases that asbestos does. Erionite has been listed as a carcinogen by both the National Toxicology Program and the International Agency for Research on Cancer. Other non-asbestos mineral fibers such as attapulgite and even synthetic fibers such as ceramic and glass fibers are also listed as carcinogens.

ACTS hopes the crayon debate will spur users of tremolitic talcs to consider the potential health effects of inhaling dust containing these fibers. We are particularly concerned about ceramicists, printmakers, and other artists that use talc in powdered form.

GOOD NEWS FOR COFFEE DRINKERS

C&EN, February 7, 2000, p. 40

Ground coffee in automatic-drip coffee makers removes 78-90% of copper and lead from tap water. The deeper the bed of grounds, the more effective the removal. Scientists think the negatively charged organic acids and other functional groups in the coffee grounds bind to the positively charged metal ions. Coffee brewing may also bind mercury, cadmium, zinc and other metals. Studies of adverse effects from polluted tap water should be reworked since coffee drinkers in the population are far less exposed than predicted.

NEW ARSENIC WATER STANDARD PROPOSED

65 FR 38887-38983, June 22, 2000

The Environmental Protection Agency (EPA) has proposed lowering the maximum contaminant level (MCL) for arsenic from 0.05 to 0.005 mg/L. They also propose a non-enforceable MCL Goal of zero. The reduction is intended to reduce potential skin damage, circulatory system damage and cancer effects in exposed populations.

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DIOXIN-CLAY CONNECTION UPDATE

DIOXIN IN ANTI-CAKING AGENTS USED IN ANIMAL FEED AND FEED INGREDIENTS. Guidance for Industry from the US FDA and the Center for Veterinary Medicine, October 6, 1999.

Two years ago, a multi-agency investigation tracked a previously unknown source of dioxins in our food supply back to a mined clay anti-caking agent called "Ball clay" (*ACTS FACTS*, Aug, 1997).

The problem began when EPA found elevated dioxin levels in Tyson chicken from food plants in Arkansas and Texas. One sample contained 22 parts per trillion (ppt) of dioxin and the other 26 ppt. The norm for edible meat is 0.6 ppt. The FDA also detected dioxin levels ranging from 0.87 to 2.19 ppt in egg samples and similar levels in farm-raised catfish.

THE CULPRIT. The dioxin contamination was traced to two animal feed manufacturers that used small amounts of clay as an anti-caking agent in soybean meal. The tainted clay came from an open-pit mine in Sledge, Mississippi and was used by chicken farms nationwide and by several major catfish farms in Mississippi. A spokesman for the Kentucky-Tennessee Clay Company in Nashville said they don't know how their mine became contaminated. Neither does FDA.

MORE TESTS. Late in 1998, FDA collected more samples of mined clays. The Environmental Protection Agency (EPA) tested the samples for all of the toxic dioxin congeners (chemicals in the same class). Nine of fifteen samples were found to contain detectable dioxins ranging from less than 1 ppt to over 20 ppt. Unexpectedly, the primary dioxin congener was 1,2,3,7,8-pentachlorodibenzodioxin instead of 2,3,7,8-tetrachlorodibenzodioxin which was found in the original ball clay samples. EPA suggests that analyses for the entire congener group of dioxins should be done on the original ball clay samples from the tainted Sledge mine.

In addition, the fifteen new samples were not ball clay. The samples were labeled "montmorillonite," "bentonite," "ground clay," and even "silicate" and "lime." This means that there is evidence that dioxins can be present in mined mineral products other than ball clay.

The significance to public health of the dioxins found in the latest samples is unclear. The concentrations found in these new samples are on the order of one-one thousandth of the highest concentrations found in the ball clay. On the other hand, the limited no of samples may not represent the full range of mined products that may be contaminated. FDA recommends that animal feed companies use only those clay products shown to be free of dioxin.

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TEACHER AWARDED DAMAGES UNDER WHISTLEBLOWER RULE

BNA-OSHR, 30(22), 6/1/0, p. 536

The US Occupational Safety and Health administration (OSHA) ordered an Oregon school district to pay kindergarten teacher, Tina Dierkes, $12,000. She received critical job performance reviews after she complained about asbestos and PCB exposure in two school buildings in the West Linn-Wilsonville School District.

Tina Dierkes first filed a complaint in 1994 regarding a boiler in an elementary school. After she asked for a transfer, she filed a complaint with the U.S. Environmental Protection Agency (EPA) against her new school in 1999 when she learned a light fixture ignited and leaked an oily substance containing PCBs. As a result of the complaint, EPA announced in January it was seeking $328,000 from the School District for "egregious" violations alleging they delayed cleanup of the PCBs, did not adequately clean up the leaks, and improperly disposed of the leaking fixtures.

In addition to paying Tina Dierkes $7,500 in compensatory damages and $4,500 for legal fees, OSHA also ordered the critical job reviews to be expunged from her records. OSHA further ordered the district to begin immediate training of managers on whistleblower discrimination rules, cessation of harassment of Dierkes, and posting a list of protected activities in district workplaces. Superintendent Robert L. Woehl said the district has appealed.

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WE'VE ALL BEEN SCOTCHGARDED

Business Week, June 5, 2000

The 3M Company will phase out its popular Scotchgard® line even though it has been used without apparent incident for 40 years to protect clothing, fabrics, upholstery, and carpets from stains. Scotchgard® contains a chemical listed by the EPA as "persistent, bioaccumulative and toxic." The chemical is perfluorooctanyl sulfonate (PFOS). Rats dosed at high levels with PFOS gave birth to offspring that died a few days after birth. Monkeys also have died in tests with PFOS.

The environmental persistence of the chemical became clear when highly sensitive blood testing devices found tiny amounts of PFOS in blood drawn from people living all across the US, even in places far from 3M factories. It also was found in flesh-eating birds in the Pacific Ocean and Baltic regions. This means that all Americans, and even people far beyond the this continent probably have small amounts of PFOS in their bodies.

==========

CHINESE HERB CAUSES KIDNEY DAMAGE AND CANCER

NY Times, June 8, 2000

An herb called Aristolochia was given to patients at a weight-loss clinic in Belgium from 1990 to 1992. By 1993, more than 100 of the patients had kidney damage and so far more than 70 of them have suffered kidney failure requiring transplants or dialysis. Now some of the patients are also developing cancers of the urinary tract. A warning letter to doctors and a list of products that might contain Aristolochia can be seen at www.fda.gov.

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PLASTICIZERS TIED TO CHILDREN'S RESPIRATORY PROBLEMS

References in the footnotes

Plastics provide inexpensive, easy-to-clean surfaces. They are increasingly used to cover walls and floors of kitchens, bathrooms, and children's bedrooms. But these plastics emit chemicals into the air such as the plasticizers used in polyvinyl chloride.

A number of studies have shown relationships between emissions from plastics and respiratory problems. A recent Norwegian study of 251 case-control patients matched one-to-one to controls indicated that the presence of polyvinyl chloride and other plasticizer-containing surface materials in the home increases the risk of bronchial obstruction during the first 2 years of life.[1] Two studies of children in Finland using extensive health data complied in 1991 found a relationship between plastic materials in the home and the risk of asthma and asthma-like symptoms.[2,3]

Now a new population-based cross-sectional study involving 2568 Finish children aged 1 to 7 years also has shown that emissions from plastic materials indoors may have adverse effects on the lower respiratory tracts of young children. Lower respiratory tract symptoms such as persistent wheezing were strongly related to the present of plastic wall materials whereas upper respiratory symptoms were not. The risk of asthma and pneumonia was also increased in children exposed to such materials.[4]

ACTS also is concerned about indoor use of craft products that release plasticizers such as polymer clays and glue guns. Manufacturers of these products should determine how much plasticizer is released in typical use and assess the risks to children.

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1. Jaakkola JJK, Oie L, Nafstad P, Botten G, Samuelsen SO, Magnus P. Interior surface materials in the home and the development of bronchial obstruction in young children in Oslo, Norway. Am J Public Health. 1999;89:188-192.

2. Jaakkola JJK, Jaakkola N, Ruotsalainene R. Home dampness and molds as determinant of respiratory symptoms and asthma in pre-school children. J Exp Anal Environ Epidemiol. 1993; 3(suppl 1):129-142.

3. Louhiala PJ, Jaakkola N. Ruotsalainen R, Jakkola JJK. Form of day care and respiratory infections among Finnish children. Am J Public Health. 1995;85:1109-1112.

4. "Plastic Wall Materials in the Home and Respiratory Health in Young Children," Am J Public Health. 2000; 90:797-799

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August, 2000 Vol. 14, No. 08

LEAD-CONTAINING MINIBLINDS RECALLED--AGAIN

Press Release #00-122, CPSC, June 8, 2000 & #96-150, June 25, 1996

The U.S. Consumer Product Safety Commission (CPSC) is recalling about 87,000 white and woodgrain rollup vinyl window blinds because they contain lead in amounts exceeding government guidelines. This is the second recall of such blinds. The first was in 1996 (*ACTS FACTS*, July, 1996) when over 1 million blinds were recalled.

The blinds are hazardous because lead vinyl plastics deteriorate from exposure to heat and sunlight causing the lead filler to be released in tiny particles on the surface. Children touching the vinyl blinds can ingest the lead from hand-to-mouth contact.

Lead levels in some blinds recalled in 1996 were so high that CPSC estimated children ingesting dust from touching less than one square inch of blind a day for 15-30 days could raise their blood lead levels to 10 micrograms per deciliter--the amount considered dangerous in children. The CPSC is not aware of any lead poisonings involving these window blinds. The recall is being conducted to prevent lead poisonings.

To identify the lead-containing blinds, look for labels which say "MANUFACTURED IN THAILAND FOR ACE HARDWARE CORP." Do not be fooled by the label on the white miniblinds which reads "SAFE NONLEADED VINYL FORMULATIONS!"

Consumers can return the blinds for a refund. For further information, call Ace Hardware at 877/223-4391, Monday through Friday from 7am-6pm. At least this time, consumers can get their money back. In the 1996 recall, consumers were simply advised to throw out their blinds and buy new ones at their own expense! Is it any wonder that with no penalties for selling blinds with lead fillers that it happened again?

==========

FAMOUS FILM AND TV SETS FIRED UP BY PAINT RAGS

GTA Today, Toronto, Wednesday, July 5, 2000, page 20

Part of Canadian film and TV history went up in smoke last week when of Shavick Entertainment's Vancouver studios were gutted by fire. Among the casualties were the original Ninja Turtle sets. Also incinerated were a courtroom set, police station and a make-believe alley familiar to viewers of The Commish, X-Files, and other television shows.

Investigators say the June 25 blaze was probably caused by the spontaneous combustion of improperly disposed stain-soaked rags.

==========

PARTICULATES LINKED TO EARLY DEATHS

C&EN, July 3, 2000 p. 6

The Environmental Protection Agency (EPA) has been trying to regulate outdoor airborne particulate matter 10 microns diameter and smaller. Industry has disputed EPA's studies of the problem and forced EPA to put these regulations on hold until 2002.

Now another study released by the Cambridge, Massachusetts Health Effects Institute, bolsters the EPA's position. The EPA says, "This important new study further confirms the scientific basis for EPA's measure to protect public health from particulate matter." The agency says it will review the study as it conducts a new evaluation of particulates scheduled for release in 2002.

According to the Cambridge study, data on deaths in 90 US cities and hospitalizations of the elderly in 14 cities showed that increased levels of particulate matter in the air cause premature deaths and lead to more hospitalizations of elderly people who have chronic heart and lung disease.

The Cambridge study focuses on airborne particles that are 10 micrometers (μm) or less in aerodynamic diameter. Particulate matter of this size is called PM_{10}. According to the Washington DC based Clean Air Network, sources of PM_{10} include fuel combustion, industrial processes, burning of biomass, and natural processes.

The study found a 0.5% increase in the overall death rate for each 10 microgram (μg) increase of PM_{10} per cubic meter of air. This effect is slightly greater for deaths from heart and lung disease than for total deaths, the study says. Also the presence of absence of other air pollutants does not alter this effect significantly.

In addition, the study examined the rate of hospitalization of those 65 years of age and older in 14 cities. It finds a 1% increase in hospital admissions for cardiovascular disease and a 2% increase for pulmonary disease and pneumonia for each 10 micrograms per cubic meter increase in PM_{10}.

The Northeast, the industrialized parts of the Midwest (Indiana Ohio, Michigan, Illinois, Wisconsin, and Kentucky plus Pittsburgh), and Southern California had the highest increase in deaths due to PM_{10}, the study finds. "These regions tend to have higher sulfate concentrations" than the rest of the US, the study says.

The Health Effects Institute, which funded the study, is an independent, non-profit corporation that studies health effects of pollutants from motor vehicles and other sources. Its money comes from EPA and auto and engine manufacturers and marketers. The report can be downloaded at http//www.healtheffects.org/news.htm.

Theater workers should consider how these studies may relate to the accepted practice of dousing audiences with pyrotechnic particles, oil and glycol mists and other special effects chemicals which are also under 10 microns.

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HANTAVIRUS UPDATE

MMWR, 49(10), March 17, 2000, 205-207

ACTS receives a significant number of calls about removal of rodent waste and the threat of hantavirus. Our experience leads us to believe that there are a lot of misconceptions about the disease, even among physicians. Some of these we will address here.

Hantavirus pulmonary syndrome is an acute viral rodentborne disease characterized by severe cardiopulmonary illness with a 40-60% fatality rate. It was identified in the US in 1993. Cases have been identified in Canada and South America. A recent outbreak in Panama indicates that disease's ranges are contiguous.

In Panama, in mid-January 2000, reports of a cluster of 12 acute cases including three deaths occurred in Los Santos province. Rodent trapping at 10 homes, six occupied by confirmed case-patients, yielded 54 rodents, of four species common to the area. None of these rodents were the deer mice which are associated most often with transmission in the United States and Canada.

Clearly, the disease can be found throughout the Americas and more than one type of rodent can transmit the virus. There also are many different strains of hantavirus and it is transmitted by inhalation of the virus or direct contact with infected rodents or their excreta. Transmission between humans has never been documented.

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NATURAL COMPANY GRILLED ABOUT PAIN RELIEF DEVICE

FDA Consumer, July-August 2000 p. 35

An Ohio appellate court upheld a decision barring two Akron companies, Universal Management Services Inc., and Natural Choice Inc., and their managers from making or selling an untested and unapproved medical device. Called "Stimulators," the devices were advertised nationally as devices to relieve pain.

Sparked by complaints from disappointed users, the U.S. Food and Drug Administration investigated. They found that the Stimulators were actually gas grill igniters which were modified with finger grips! Users were instructed to apply the tip of the gas grill igniter to so-called accupressure points and press on the plunger to send an electric current into the body.

Daredevil Evel Knievel and actress Lee Merriweather were among those endorsing the product and participating in TV infomercials. According to court documents, between 1994 and 1997, the companies sold a total of 800,000 of the devices, which cost the companies one dollar each, for about $88 each.

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SOMETIMES POLITICIANS SPEAK CLEARLY

BNA-OSHR, 30(27), 7/6/00, pp 631

Discussing a proposed smoking ban in restaurants in Anchorage Alaska's Assembly, Chairwoman Fay Von Gemmingen explained that "Someone said that having a smoking section in a restaurant is like having a peeing section in a swimming pool." The Anchorage Assembly then passed its ban on smoking in restaurants.

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SHARKS GET CANCER, TOO

FDA Consumer, July-August 2000 p. 35

Scientists from Johns Hopkins University and George Washington University reported on April 5, 2000 in the annual meeting of the American Association for Cancer Research, that sharks get cancer. The researchers examined data in the National Cancer Institutes's Registry of Tumors in Lower Animals and found 40 cases of tumors in sharks and related fishes.

Cancer found in sharks casts doubt on the use of shark cartilage pills to cure or prevent cancer. This may be good news for sharks who are being killed needlessly for their cartilage and fins.

==========

WHEN DOES "FIRST AID" BECOME "MEDICAL TREATMENT?"

Chemical Health & Safety, ACS, Jan/Feb 2000, p. 45

Medical treatment must be reported on OSHA injury and illness recordkeeping forms. First aid does not have to be reported. The distinction between the two centers around the difference between wound closure and wound covering.

Sutures (stitches), Steri Strips®, staples, butterfly adhesive dressings, etc., are all classified as devices designed for wound closure. Their purpose is to align the edges of wounds and to promote healing. Also included are the new topical skin adhesives used to close wounds. Use of any device or adhesive to close wounds is considered medical treatment for OSHA recordkeeping purposes.

Bandages (Band-Aids, gauze pads, etc.), are wound coverings to prevent the invasion of bacteria and infection to an open wound. Use of a wound covering is deemed to be first aid treatment. Further information can be found at:

http://www.osha.cov/OshDoc/Interp_data/19990721A.html

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September 2000 Vol. 14, No. 09

FORMER STUDENTS SUE UNIVERSITY OF ALBERTA

The Edmonton Journal, Kerry Powell, Tue., Aug 15, Wed. Aug. 16, 2000

Three former fine arts students are suing the University of Alberta for $1 million each, claiming they suffered permanent brain damage from exposure to toxic chemicals. Susan Shannon, Janie Cranfield, and Pamela Vilcsak claim they unknowingly inhaled toxic vapors from paints, solvents, and chemicals while attending art classes from 1988 to 1992.

As a result, the three plaintiffs say they suffered permanent harm including brain damage which caused symptoms including headaches, nausea, vomiting, dizziness, disorientation, numbness, memory loss, aches and pains. These allegations were filed with the Court of Queen's Bench on July 31. The university has not yet filed a statement of defense.

The former students claim their injuries are the result of the university's negligence. They say the university ventilated toxic fumes from paints and chemicals into classrooms and study areas, that storage facilities for paints and chemicals were inadequate, and that the staff, faculty and students weren't properly trained in the use of materials or processes causing toxic emissions.

As a result of their injuries, the women say they have spent time in hospitals, have been taking medications and have sought treatment from psychologists. They also have been unable to keep steady jobs and their career options have been limited by their poor concentration and ability to perform tasks. They say their symptoms have embarrassed them and caused problems in their social lives.

Although the exposures occurred between 1988 and 1992, the women say they didn't know their chemical exposures were the cause of their medical problems until August 1 of 1998. They say they were not warned about the chemicals when they were in school and the university "took steps" to prevent them from gaining enough knowledge to determine whether they each had a claim against the university. Shannon, who lives in Winfield BC., is known to Edmonton residents as the artist who painted the large murals hanging in a prominent downtown restaurant called Zenari's. Cranfield lives in Edmonton. Vilcsak lives in Sherwood Park.

UPDATE: Since this article appeared in the Edmonton Journal, ACTS has received communications from two other people claiming similar injuries and who also are considering suing the University of Alberta.

ONE DEATH, FIVE INJURIES ON *X-FILES* SET

X-Files News Website

Twentieth Century FOX Television and FOX Broadcasting announced Monday that six crew members were injured and one, Jim Engh, was killed in an accident during pre-production of *The X-Files* on location in Los Angeles. Five of the injured were treated and released, and one was in critical condition.

A scaffolding holding the workers 35 feet from the ground came in contact with a 4,800 volt power line. The crew was preparing for a film shoot the next day in which cameras would be pointed through the windows of the apartment building to shoot a chase scene down a flight of stairs.

A Department of Water and Power crew had to first turn off the power before the firefighters could get to Engh. Jim Engh died from full cardiac arrest at Century City Hospital, according to 20th Century Fox TV.

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CONTACT LENSES ON THE JOB

AWS Journal, Mar. 2000, p. 73

The following guidelines from the Contact Lens Ophthalmologists Association were modified for use in welding by the American Welding Society. The rules are useful for many other types of work.

* Wear contact lenses in industrial environments in combination with appropriate industrial safety eyewear except where there is likelihood of injury from intense heat, massive chemical splash, highly particulate atmosphere or where regulations prohibit use.
* Employees wearing contact lenses should tell their immediate supervisors and safety medical personnel that they use contacts.
* First-aid personnel must be trained to remove contacts properly.
* Employees whose central and peripheral vision is increased by contact lenses, as contrasted to spectacles (e.g., those with cataracts removed or corneal scars) should be encouraged to wear contact lenses.
* Employees should keep a spare pair of contacts or prescription spectacles or both handy in case they damage or lose a contact lens while working.
* Safety and medical personnel must not to discriminate against employees who can achieve visual rehabilitation by contact lenses, either in job placement or on return to a job.

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ACTS FACTS EDITOR INTERVIEWED ON NPR

Monona Rossol, Editor of *ACTS FACTS*, was interviewed for the second time on Leonard Lopate's National Public Radio program on August 14. As a result, the next three days were consumed by phone calls and e-mails from listeners. The phone rang so continuously the first day that Monona's attempt to make dinner ended up setting off her smoke detector while talking to a caller. Monona assumes the caller was not impressed by her own personal safety precautions.

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BRONZE AND ALUMINUM POWDERS

United Scenic Artist's Newsletter, July & Aug 2000, Jane Snow & M. Rossol

Powdered aluminum, iron, magnesium, titanium, tungsten, zinc, zirconium, and alloys of these metals (e.g. bronze) are pyrotechnic ingredients. However, metallic powders are also used in paints to make them appear gold and silver. If they are kept in a studio, a spark, flame, static electrical discharge, or even vacuuming up a spill can cause them to explode.

In general, the more finely divided the powder, the faster the material "burns" in air and the more explosive it is. Using fireworks to illustrate the difference: the fine powders would produce a quick flash or a noisy blast while the bigger particles would burn more slowly producing a "flitter" or sparkle effect. But both the flash and the flitter can be deadly inside a studio!

Once metallic powders are mixed with paint, they are not explosive. In fact, one way to dispose of the powders safely is to mix them with paint, let the mixture dry and dispose of the dried paint in the trash. But mixing the powders with paint is not always safe.

For example, if aluminum powders (and some metal powders as well) are mixed with water-based acrylics, vinyls, or polyurethanes, they produce a strange bubbly soufflé after a time. The soufflé is caused by a reaction which releases flammable hydrogen gas. The combination can be explosive in a sealed container. It's best to mix small quantities and use it all up or let the remaining solution dry out in an open container. And never ship it mixed!

METALLIC PASTES which are not explosive are available. The pastes are made by blending the metallic powders homogeneously into a very small amount of solvent with no binder. The solvents can be mineral spirits, propylene glycol, ethylene glycol, or isopropyl alcohol, among others. The pastes that contain glycols can be mixed with water. The paste goes a long way. Ten pounds in a small 1/2 gallon container can make 4 to 5 gallons of heavy mix. Each of these heavy mix gallons can be diluted even up to six times with some binders before opacity diminishes.

The advantage of pastes are that 1) they do not explode, 2) users cannot inhaled the powder during mixing, and 3) there is far less mess. The disadvantages are that 1) it may take a little longer to mix them, 2) there is a smaller number of colors available from fewer suppliers, and 3) they have a six month shelf life or less since the paste can dry out.

SUPPLIERS

M.D. Both, Ashland MA (800/288-2684) has a $150 minimum order and a repackaging charge for orders under 100#. They sell 5 gold colors, 1 copper, 1 aluminum. Custom colors are available.

Crescent Bronze Powder, Chicago IL (800/445-6810)sells aluminum in paste form with a 10# minimum order.

U.S. Bronze, Flemington NJ, (908/782-5454) has a 110# minimum order and has 3 gold, 1 copper, 1 aluminum color, and will mix custom colors in both paste (their "AX" line) and granular ("BX" line).

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SUBSCRIPTION PRICE TO RISE

Subscriptions to ACTS FACTS will rise in January from $15 to $18.00 per year. Canadian and Mexican subscriptions will be $21.00. Subscriptions to all other foreign countries will be $24.00 per year. All subscriptions include first class postage.

All subscriptions renewed before January, even for multiple years, may be purchased at the old price. Payments must be prepaid in U.S. dollars drawn on a U.S. bank or money order payable to ACTS.

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COSMETIC COMPANY FACES $133,000 FINE FOR ALLEGED VIOLATIONS OF AIR SHIPMENT RULES

BNA-OSHR, 30(30), 7/27/00, p 690

Last July, the Federal Aviation Administration announced that it has proposed a $133,000 civil penalty fine for an Oklahoma-based cosmetic firm for allegedly violating regulations for shipping hazardous materials aboard aircraft.

Cosmetic Specialty Labs, Inc., based in Lawton OK, was assessed the proposed penalty for allegedly offering 21 boxes of hair styling spray for shipment to Oslo, Norway, without the proper marking of packaging, FAA said. The shipment contained more than 1,400 individual bottles of hair spray, which is classified as a Class 3 hazardous material because of its flammability.

The shipment never made it aboard the plane, but Cosmetic Specialty Labs was cited for offering the hazardous material for shipment without proper classification, description, packaging, or labeling. The shipment also exceeded the hazardous material quantity limits for transportation on passenger aircraft. In addition, the company was cited for failing to train the employees who were in charge of handling hazardous materials.

Many types of artists use spray products. It is common to see stocks of many hundreds of spray can products stored in art and theater schools and shops. Included are sprays for hair, shoes, paint, fixatives, and more. These schools must store such products in approved flammable storage cabinets.

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ACTS FACTS sources: the *Federal Register* (*FR*), the *Bureau of National Affairs Occupational Safety & Health Reporter* (*BNA-OSHR*), the *Mortality and Morbidity Weekly Report* (*MMWR*), and many technical, health, art, and theater publications. Call for information about sources.

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181 THOMPSON ST., # 23, NEW YORK, NY 10012-2586 PHONE 212/777-0062

October 2000 Vol. 14, No. 10

AIR-PURIFYING RESPIRATORS: ARE THEY OK FOR URETHANE?

www.osha.gov, letter of interpretation, July 18, 2000

Many artists have told ACTS that sellers of two-component urethane products suggest using ordinary air-purifying respirators for protection from the diisocyanates released by these foams, paints, and casting systems. Salesmen say that the Occupational Safety and Health Administration (OSHA) now approves using these respirators for diisocyanates. Such statements are dangerous and misleading unless OSHA's limits on using these respirators are explained.

OSHA'S RULES do not allow respirators for any substance unless the employer first has a written respiratory protection program, medical certification for each person wearing one, professional fit testing, and documented worker training. If this program is in place, then OSHA allows cartridge respirators for substances such as the diisocyanates whose warning properties do not enable workers to reliably sense their presence--but only under two conditions.

1. Cartridges can be used if they have an end-of-service life indicator, e.g. they change color or show some visible change when they cease working. This option is excluded since currently there are no such indicators for the diisocyanates.

2. Cartridges can be used if the employer has a change out schedule for cartridge replacement based on objective exposure data. This data includes the concentration of airborne contaminant to which employees will be exposed as determined by personal air-monitoring of potentially exposed employees during routine tasks. This is not usually feasible for art and theater shops, since "routine" tasks are rare. The jobs artists do and objects they create are unique.

OTHER FACTORS that OSHA requires employers to consider include:

* Employers must comply with 1910.134(d)(3)(i) which requires them to "provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements under routine and reasonably foreseeable emergency situations." This means that employers must objectively determine the likely exposure during an accidental release, spill, ventilation failure, and so on.
* Employers' programs must account for additional risks during emergency situations due to the fact that air-purifying negative pressure respirators pose a greater risk of leakage than positive pressure respirators.
* Employers must provide eye protection for the workers. Vapors of diisocyanates are corrosive and can cause permanent eye damage. Either full-face respirators must be used or employers

are required under 1910.133(a)(1) to select appropriate eye protection to use with half-face respirators.

* Employers must consider the need for skin protection. Vapors of diisocyanates can cause skin irritation and sensitization. Employers are required under 1910.132(d) to assess the exposure and select appropriate methods to protect the face and neck.

* Employers must take appropriate action if an employee using an air-purifying respirator reports any medical signs or symptoms which could be attributed to diisocyanate exposure and provide additional medical monitoring under 1910.134(e)(7)(i) for that worker. Certain respiratory ailments caused by diisocyanates can affect the worker's ability to use a respirator.

This last rule is particularly important to artists. Overexposure to diisocyanates can cause permanent sensitization and breathing problems. Artists with these problems may no longer be able to wear respirators which can forever compromise their ability to work.

Lastly, OSHA requires that all of the data above be put into writing and included in the employer's respiratory protection program. The program must be regularly reviewed and revised if new data are available or if there are changes in shop conditions, urethane product formulas, production processes, or personnel.

SUMMARY. In the art and theater world, air-purifying respirators almost never can be used safely or legally as protection against products which release diisocyanates. Shops must either have a local ventilation system (e.g. a spray booth) that air sampling tests show completely capture the diisocyanates, or employers should provide air-supplied full-face respirators with protective clothing for the skin for workers using significant amounts of two-component urethane. For the full OSHA policy, see the July 18, 2000 letter of interpretation at www.osha.gov.

==========

LEGIONNAIRES' DISEASE ASSOCIATED WITH POTTING SOIL

MMWR, 49(34), September 1, 2000, p. 777-778

We often think of Legionnaires' Disease as one which is caused by waterborne bacteria because it has been transmitted by inhalation of water mists from cooling towers, showers, and even a shopping mall Jacuzzi display. Actually, the bacteria is common in soils.

Now cases of Legionnaires' Disease have been documented to have been transmitted by potting soil. In May and June of 2000, three people, a 46-year-old Washington woman, a 77 year-old Oregon woman, and a 45-year-old California man were diagnosed with legionellosis. They were all infected with a particular strain of the disease (*Legionella* from *L.longbeachae*). The strain was found in potting soil used by the two women. The man died and his house was cleaned before an investigation could be undertaken, but the fact that he had the identical strain of *Legionella* makes it likely that he also was exposed to the potting soil.

==========

FIREWORKS ACCIDENT KILLS THREE

National Fire Protection Assoc. Journal, Sept/Oct, 2000, p. 60

This past July 4th, in Arkansas, three people were killed at a speedway when a mortar round misfired shooting directly into an open trailer where fireworks were stored.

==========

SOLVENT EXPOSURE TIED TO PARKINSON'S DISEASE

Neurology 2000;55:667-673

A study in the September journal of the American Academy of Neurology found that people whose occupations involve the use of hydrocarbon solvents are at elevated risk for earlier onset of the symptoms of Parkinson's disease and for a more severe disease throughout its course.

Parkinson's Disease (PD) can be caused by both genetic and environmental factors. Recently a large study failed to find a genetic component for typical PD diagnosed after the age of 50 years. So the search is on for more environmental factors. This study showed that hydrocarbon solvents may be involved in the development of Parkinson's in people who do not have a major genetic predisposition for the disease.

Several studies have focused on solvents. For example, a survey of elderly Canadians showed that patients with PD had been more exposed to solvent-containing resins, paints, and petroleum derivative than a healthy control group (***ACTS FACTS***, Jan., 1996).

The new study in *Neurology* investigated 990 patients with PD selected from 1455 consecutive subjects presenting at a Parkinson's referral center. A total of 188 of the patients were found to have been exposed to solvents. This means that exposure to solvents was detected in nearly 20% of all patients with PD at this medical center. The percentage increased to 30% in men, a finding to be expected in the industrial area in which the clinic was located. In most instances exposure occurred within family-run businesses, where safety measures are less stringent.

The solvent-exposed patients included: petroleum, plastic, and rubber workers; painters, lacquerers, and furniture workers; typographers and lithographers; leather workers; chemists; textile workers; and weavers. Biological samples were collected from all the patients who were still working and these always supported the fact that they were solvent exposed. The most frequently encountered solvents were acetone, methyl ethyl ketone, n-hexane and isomers, cyclohexane and isomers, n-heptane and isomers, ethyl acetate, isobutylacetate, butylacetate, dichloropropane, trichloro-ethylene, trichloroethane, tetrachloroethylene, freon, toluene, and 1-methoxy-2-propanol.

Since the authors of this study did not have access to comparative data in a control population in their geographic area for healthy subjects, they were not in a position to say that solvents <u>cause</u> PD. However, they could state that exposure to hydrocarbons was associated with earlier onset of the disease and the development of a kind of PD that responds poorly to treatment which results in worse symptoms than in non-exposed patients.

==========

STILL MORE ON DIOXIN IN CLAY

Oct 19, 2000, jmatheso@cvm.fed.gov

ACTS receives almost daily inquiries about dioxin in clay. Our reply to these inquiries is that the significance of the dioxin to potters is still not known. We encourage potters to keep abreast of the research. One member of the Clayart forum heeded our advice and received the following reply from an FDA contact:

...we at FDA and EPA have discussed, but have been unable to definitively answer [your questions]. I think we can say that:

1) Ball clay is mined in specific locations in the US (mostly Tennessee, Kentucky and Mississippi) and marketed as a specific product, even though it is geologically a mixture of various clay minerals. Ball clays from several mines may be mixed to provide desired properties.

2) Every ball clay that was tested in 1997 contained elevated levels of dioxins. Clays from mines in all three states were sampled. As a result, no ball clays are now in use in animal feeds and, as far as I know, no ball clay has been shown to be free of dioxins. The Ball Clay Association (they have a web site) can be contacted for additional information.

3) EPA is considering what this may mean for the ceramics industry. It is unknown whether dermal or inhalation contact with ball clay is of any toxicological significance. To my knowledge, it is also not known whether dioxins are destroyed in situ during the firing of ceramics, whether any remains in the fired ware or whether any may be lost to the air during firing. Contact Matt Lorber (Lorber.Matthew@epamail.epa.gov) or Dwain Winters (Winters.Dwain@epamail.epa.gov) at EPA for more information on this and to find out whether there are any ongoing studies on this issue.

I hope this provides you with some useful leads.

John Matheson
Office Surveillance and Compliance
Center for Veterinary Medicine
301-827-6649 e-mail:jmatheso@cvm.fda.gov

==========

ACTS FACTS sources: the *Federal Register* (*FR*), the *Bureau of National Affairs Occupational Safety & Health Reporter* (*BNA-OSHR*), the *Mortality and Morbidity Weekly Report* (*MMWR*), and many technical, health, art, and theater publications. Call for information about sources.
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November 2000 Vol. 14, No. 11

PCBs IN PAINT

Environmental Protection, October 2000, pp. 58-61 (www.eponline.com)

HISTORY. Polychlorinated biphenyls (PCBs) were first manufactured in 1929 and gained wide acceptance due to their excellent electrical and temperature insulating properties. Their primary use has been in electrical equipment such as transformers and capacitors, heat transfer systems, hydraulics, inks, and carbonless copy paper.

By the 1950's, PCBs also had become an established ingredient in many exterior and interior paints. Chlorinated rubber paint was the most common paint to contain PCBs. This paint gives excellent water and chemical resistance and elasticity. But chlorinated rubber becomes brittle with time, so a plasticizer was added. Monsanto's Aroclor 1254 was the PCB plasticizer of choice. One formula for "Swimming Pool Paint" specified 5.4% Aroclor 1254 by weight. Paint and lacquer formulations typically specify five to 10% or more Aroclor 1254. Dried paint films may contain 15 to 25% PCBs.

Studies in the 1970s revealed that PCBs could cause cancer in humans and that they persist in both the environment and the human body. PCBs were found in almost every species on earth. In 1978 use of PCBS was essentially banned. This included a ban on use of PCBs in paints. (A handful of uses remained exempt including the use of Aroclor 1254 as an historic slide mounting medium and which is still in use in museums today.)

THE LAW. PCBs are regulated under the Toxic Substances Control Act. The PCB Spill and Cleanup and Disposal Amendments published in 1998 modified the PCB regulations and, in one case, paints are mentioned (TSCA 40 CFR 761.62). The disposal regulations apply to PCB containing materials including "applied dried paints, varnishes, waxes or other similar coatings or sealants." Disposing of such materials in landfill triggers several requirements such as notice, leaching potential and record keeping.

THE PROBLEM is that these rules are not being followed because no regulation requires PCB assessment of paint prior to demolition. Only lead-based paint and asbestos materials must be assessed in buildings before demolition. As a result, demolition workers are probably being exposed to PCB-containing dust. If heat guns or torches are used, workers may be exposed to volatile PCBs and their combustion by-products such as extremely toxic furans. Property owners are a financial risk if PCBs are on their sites or if landfill facilities unknowingly accept PCB-containing materials. The law should be changed to require PCB-testing of old paints.

NEW LEAD DUST STANDARD

Environmental Protection, October 2000, pp. 66-69 (www.eponline.com)

As of September 15, 2000, the Environmental Protection Agency (EPA) and the Housing and Urban Development (HUD) Authority are enforcing lower levels for acceptable amounts of lead in dust in homes. The new dust-wipe levels for federally owned property and all housing units built prior to 1978 after lead removal or renovation have been dropped from 100 $\mu g/ft^2$ on floors and 500 $\mu g/ft^2$ on sills to 40 $\mu g/ft^2$ on floors and 250 $\mu g/ft^2$ on sills.

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PYROTECHNIC INJURED BY ELECTROSTATIC DISCHARGE

American Fireworks News, K.L. Kosanke, No. 229, October, 1000, pp. 1-2

American Fireworks News reported on an accident which occurred when an unlicensed pyrotechnic operator was demonstrating indoor pyrotechnic effects for the fire marshal in a Southwestern state in the course of obtaining a permit for their use.

The effect being demonstrated was a concussion mortar. The mortars in question had not been fired for days. Earlier on the day of the accident the mortars were placed in a carpeted area. Electric matches (ignition devices) were installed in the mortars and the firing control wires had been attached. However, the control wiring was not connected to the firing controller so they could not be accidentally set off.

The pyrotechnic operator had mixed the concussion powder and approached the unloaded mortars with a jar containing a ounce of concussion powder in his hand. At the first mortar, he opened the bottle of powder and poured out a cap-full of powder. As best as can be determined, as the powder was poured into the mortar, an explosion occurred involving the essentially full bottle of powder that he was holding in his other hand. The force of the explosion was sufficient to cause the traumatic amputation of three fingers on his left hand.

Investigators determined that it was likely that the accident was caused by an electrostatic discharge created as the result of walking on the carpeting. This charge was built up in the pyrotechnic's body and was discharged from the operator to the mortar as he began pouring the concussion powder. The discharge first ignited the powder being poured into the mortar. Next a spark produced by the burning concussion mortar entered the open bottle of powder in the pyrotechnic operator's other hand, causing the ignition and explosion of the bottle of powder.

Assuming the cause and course of the accident were as described, this accident could have been avoided by using a well-established safety precaution. The pyrotechnic operator could have touched the metal concussion mortar for an instant before opening the bottle of powder. In this way the charge on the operator and that on the mortars would have been equalized by an electrostatic discharge occurring at that time. This is the principle behind the installation of grounded touch plates or other means of relieving static discharges on personnel entering magazines and buildings in which fireworks are manufactured.

==========

PHTHALATE CATEGORY PROPOSED FOR EPA's TOXIC LIST

65 *FR* 53681-53689, September 5, 2000

EPA proposes to add a diisononyl phthalate (DINP) category to the list of toxic chemicals subject to the reporting requirements under the Emergency Planning and Community Right-to-Know Act based on DINP's carcinogenicity and liver, kidney, and developmental toxicity. EPA states:

> *EPA's assessment preliminarily concluded that the DINP category can reasonably be anticipated to cause carcinogenicity and liver, kidney, and developmental toxicity. In the light of the continuous assessment of the developmental and reproductive toxicity potential of phthalates by the National Toxicology Program, the Agency may decide to evaluate potential hazards from other branched alkyl di-ester phthalates in the future (e.g. with eight or ten carbon alkyl chains).* 65 *FR* 53683

CONFLICTING OPINIONS. The phthalates are a very large category of chemicals many of which have not been studied for toxicity. Some, like the DINP's above and diethylhexyl phthalate (DEHP) are animal carcinogens. However, there is much confusion about human effects. Examples of recent news stories about phthalates include:

* The Chemical Manufacturers Association's Phthalate Ester Panel whose Chair is former Surgeon General Dr. C. Everett Koop, sends out press releases stating that the phthalates are safe as used.
* The European Union Product Safety Emergencies Committee approved a ban on phthalates in children's toys. This ban will affect all the European Union countries.
* Greenpeace and other advocate groups advise removing phthalate plasticizers from consumer products. They cite studies showing endocrine damage and asthma in children exposed to phthalates.
* *Science News* (Vol 158) September 2 and 9, 2000, ran articles summarizing data linking phthalates to the emasculation of boys and premature breast development in girls aged 6 to 24 months.

Even a non-profit group claiming to serve artists, the National Polymer Clay Guild, uses unethical methods to defend phthalates. For example, in 1994 the Editor of their *POLYinforMER* newsletter told ACTS they had room to print only one page of our four-page data sheet on phthalates in polymer clays. We let them cut it and provided it free. Unknown to us, they printed over three pages of criticism of our one page of material! Worse, ACTS was not given an opportunity to reply. Last month we asked to rebut the criticisms and were told we could submit only 500 words or less. And they reserved the right to edit for length!

ACTS suggests artists discount the opinions of *POLYinformMER*, the Phthalate Ester Panel, or any other group that either promotes or sells phthalate-containing products. Until there is enough data from legitimate scientific studies to establish which (if any) of the phthalates are safe, exposure to all phthalates should be avoided. Children, women who plan to have children, and pregnant women certainly should not work with phthalate-containing products. Such products include polymer clays and hot glue guns.

==========

FLOCK WORKER'S LUNG DISEASE REAFFIRMED

Occup. H & S, section nsltr, Jim Celenza, Am. Public Health Assoc., Fall 2000, pp. 4-5.

Five new cases of a unique new occupational lung disease called "flock lung" have been identified. This raises to 24 the total number of confirmed cases in North America. The National Institute for Occupational Safety and Health (NIOSH) has published lab studies showing that nylon flock causes the lung damage that Dr. David Kern first diagnosed in Rhode Island Microfibers workers in the early 1990s. NIOSH's current position is summarized as follows:

> *The disease is caused by occupational exposure to nylon 'flock,' a surfacing material used widely in the auto industry, for upholstery, and in the textile industry. NIOSH laboratory research has found nylon flock particles to be more inflammatory than silica, a highly toxic occupational dust. The American Association of Fiber Manufacturers has distributed information from the NIOSH HHE [Health Hazard Evaluation] and lab studies to their membership in a toxicity alert and Dupont has initiated a program of research, which is confirming the NIOSH findings.*

This statement validates the outstanding clinical investigation that Dr. Kern conducted under extraordinary duress from both industry and Brown University administrators. For his efforts, Dr. Kern lost his job at Memorial Hospital and his position at Brown Medical School (See also *ACTS FACTS* July, 1997 and April 1999).

Fiber artists and costumers should be aware that inhaled nylon flocking dusts can cause a serious lung disease.

==========

TWO SERIOUS INJURIES FROM PAINT STRIPPING FIRE

National Fire Protection Assoc. Journal, Sept/Oct, 2000, p. 20

A young couple was applying lacquer thinner to the living room floor and removing the finish with a commercial sander when vapors from the flammable liquid ignited with explosive force. Fire-fighters arrived within a minutes to find smoke coming from both stories of the house. The 25 year-old woman suffered second- and third-degree burns over 70-75% of her body. The 24-year-old man who had been closer to the point of ignition and operating the sander, had mostly third-degree burns over 85 to 90% of his body.

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December 2000 Vol. 14, No. 12

GRAD STUDENT WORKERS CAN UNIONIZE

Editorial

November 1, 2000, the National Labor Relations Board decided in a case involving New York University said that teaching and research assistants in private universities and colleges are workers and can form unions. The right to unionize has already been accorded to students in a number of public universities.

NYU strongly opposed a graduate student union claiming that introducing bargaining would imperil the educational process. This position was supported by such prominent universities as Columbia, John Hopkins, MIT, Stanford and Yale.

The new ruling is a victory for graduate students who have increasingly complained over the past decade that they do more and more of the teaching and research on campuses but receive subsistence wages and substandard benefits.

This Editor is delighted with the NRLB decision. I have answered safety inquiries from students for over 20 years and find that grad students are afraid to complain about safety problems when their schools control both their financial support and their grades. Further, graduate students often know more about safety issues than the faculty or school administrators (see case in point on page 2).

CHILDREN'S CHALKS NOT ASBESTOS-CONTAMINATED

Press Releases # 01-002, Oct 3, 2000 & #00-123 June 13, 2000, www.cpsc.gov

After the U.S. Consumer Product Safety Commission's tests found traces of tremolite asbestos and larger amounts of unregulated hazardous transitional tremolite fibers in crayons last summer, CPSC undertook tests on children's chalks as well. They found neither asbestos nor transitional fibers in the chalks.

This is good news because chalks cannot be used without exposing users to dust. The CPSC tested chalks from five manufacturers: Crayola®, Prang®, Pentech®, Curiosity Kits®, and Sketch & Scribble®. They also tested pastels from major manufacturers and found no fibers. (However, we remind readers that adult pastels still expose users to pigment dusts, some of which are toxic. The pigments in children's chalks are not identified so we can't comment on these.)

CPSC says that chalks and even the asbestos-contaminated crayons are safe to use. ACTS would add that the crayons should be used for coloring paper only. It is not known whether asbestos is released during common crayon craft projects such as ironing crayons onto T-shirts or making them into candles and burning them.

STUDENT WHISTLEBLOWER NICKS UNIVERSITY FOR $250,000

BNA-OSHR, 30(42), 10-26-00, p. 956

The University of Missouri was ordered to pay more than $250,000 in damages to former student employee, Bobby Lunsford, who was discharged for alleging that the university was discouraging workers from using protective equipment to guard against lead released by a smelter on campus.

The ruling was delivered October 17 by the Occupational Safety and Health Administration (OSHA) under the whistleblower provisions of the Toxic Substances Control Act (TSCA). The OSHA investigation found that the university was building and operating the smelter to extract "low-alpha" lead, which is used in electronic and other applications. Mechanical breakdowns permitted lead particles to escape into the atmosphere, exposing employees who were working without personal protective equipment.

Evidence at trial further revealed that use of protective equipment was discouraged by university officials because they did not want to create an "alien" looking environment on campus!

Bobby Lunsford was fired for complaining to the news media about the smelter, according to the OSHA regional office in Kansas City, MO. The investigation was launched after Lunsford filed a formal complaint with the agency under TSCA which provides workers alleging whistleblower violations with a private cause of action.

OSHA ordered the university to pay Lunsford more than $250,000 in damages, which included $125,000 in punitive damages, back pay, compensation for medical and other bills. The punitive award could rank as the largest issued by OSHA under the whistleblower provisions. The University has appealed.

==========

IS THE RED CROSS A FEDERAL AGENCY?

65 *FR* 62610-62612, October 19, 2000

Which governmental agency enforces safety rules in your workplace? If you don't know, your employer is violating the law by not informing you. Workers in some states must be told they come under the federal OSHA while others are under state agencies. A few state, county and municipal employees are exempt and/or have internal enforcement mechanisms.

Some workers come under jurisdictions that are unpredictable. For example, in the October 19, 2000 Federal Register, OSHA reports that North Carolina's state OSHA decided that the local offices of the National Red Cross were "federal" agencies and they did not have authority over them. Asked to settle the issue, the North Carolina Attorney General's Office issued a determination that the Red Cross is an "instrumentality of the federal government" within the meaning of North Carolina General Statute §95-128.

Although the federal OSHA knows the Red Cross is <u>not</u> a federal agency, they decided that: "To assure worker protection under the OSH Act, Federal OSHA will assume jurisdiction over the American National Red Cross and its facilities in North Carolina."

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HYDROFLUORIC ACID HARMS MECHANIC

BNA-OSHR, 30(42), 10-26-00, p. 957

A California jury ordered a Los Angeles company to pay a United Parcel Service worker $775,000 in damages because it failed to train its own employees to properly pack and ship hazardous materials (*Laeng v. Johnstone Supply Inc.*, Cal, Super. Ct., No. RCV 42611, *jury verdict* 10/18/00).

According to the verdict handed down by a San Bernadino County Superior Court jury, Thomas Laeng, a UPS mechanic, suffered permanent lung damage in 1996 after breathing odorless, toxic, and corrosive vapors leaking from a plain-labeled package he moved in order to repair a UPS truck. The package had been picked up by UPS from Johnstone Supply, a company that sells air conditioning parts and cleaning solutions.

Laeng noticed a thick clear liquid leaking from the box, but he was not concerned because the box bore none of the requisite labeling for hazardous materials. The liquid was Acti-Brite, a hydrofluoric acid-based product used to clean air conditioning equipment. Laeng subsequently developed reactive airway disfunction syndrome, RADS, as a result of exposure to the cleaning agent. He suffers from shortness of breath, chest pain, and severe allergic reactions. Lang sued Johnstone, alleging that the company failed to train a new employee to follow the UPS hazardous materials manual procedures in violation of the Federal Hazardous Substances Act.

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TWO PAINTBRUSH MAKERS FACE OSHA PENALTIES

BNA-OSHR, 30(42), 10/26/00, pp. 952-953 & 30(46), 11/23/00. p. 1081

On October 19, OSHA announced that a New Hampshire paintbrush manufacturing company is facing proposed penalties totalling $301,050 for 21 alleged safety and health violations. American Brush Company of Clarmont, NH, was cited for six wilful violations, eight serious violations, and seven other-than-serious violations.

Then on November 16, OSHA announced that Linzer Products Corporation of Wyandanch New York, the parent company of American Brush, was also cited for 74 allegedly serious violation and 11 alleged other-than-serious violations. Linzer Products is faced with proposed penalties totaling $158,400.

The two paintbrush manufacturers were cited for some of the same violations including lockout/tagout and machine guarding standards. The cost of some types of brushes may rise.

==========

LAST CHANCE FOR A $15 SUBSCRIPTION

The cost of a one year subscription will be raised from $15 to $18 on January 1. Those who get their renewals to us before December 31 can order single or multiple year subscriptions at the old prices of $15 for US subscribers, $18 for Canadian and Mexican subscribers, and $21 for other countries. The prices after January first are listed in the blank at the end of this newsletter.

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