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"Safety Comes First"

Case Western Reserve University Environmental Health and Safety

2220 Circle Drive, Service Building, 1st Floor Phone: (216) 368-2906/2907 FAX: (216) 368-2236

Website: case.edu/ehs

What happens in an EPA Inspection - Part II

You have successfully opened the door to your friendly environmental inspector! The next step in the inspection process is the opening conference. This is your opportunity to ask any questions you may have about an inspection, such as business confidentiality issues. You should be sure to inform the inspector of any safety procedures or other relevant procedures established for your facility.

Opening conferences range from a formal meeting to a brief, informal discussion of the plan for the inspection. It is helpful to include your environmental and safety officer at your facility at the conference. The inspector may ask questions concerning facility operations, including: plant layout and processes, management structure, plant safety, and other information relevant to the inspection.

The inspector will take notes throughout the opening conference and the rest of the inspection. This documentation is used in the written report the inspector will prepare following the inspection. The inspector will record information such as facility contacts, plant operations, and discussions with facility representatives.

You can expect that the inspector will identify certain facility records he or she will want to review. The inspector can legally access and copy any records. Be prepared! Inspectors will be looking for past records (up to 3 to 5 years old) as well as current records and will compare information contained in the records with what he or she observes at the facility.

Multimedia environmental inspector(s) will generally review any or all of the following records:

- Facility process information
- Material purchasing records
- Hazardous and nonhazardous waste manifests
- Analytical results for waste determinations
- Air emissions data, wastewater discharge data, and other monitoring data required by permits held by your facility
- Annual reports
- Self-monitoring records
- Operation records
- Training records
- Waste handling and disposal information
- Emergency response and spill control procedures and plans
- Engineering assessments
- Landfill receipts or other bills of lading

What should you expect to happen in the interview and facility tour? Read the next issue of the EHS Newsletter.

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ODH Safety Culture Policy Statement



A positive safety culture should be an integral part of all regulated active-ties..."

Definition of Safety Culture

Safety culture encompasses the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals (i.e., speed, profitability, staffing levels) to ensure protection of people and the environment.

Safety Culture Policy Statement

The information provided in this brochure outlines the Ohio Department of Health (ODH) expectation that individuals and organizations performing regulated activities involving radioactive materials and radiation-generating equipment will establish and maintain a positive safety culture environment. The emphasis on safety culture should be commensurate with the safety and security significance of their activities and the nature and complexity of their organizational structure and functions.

A positive safety culture should be an integral part of all regulated activities, including training and licensure for operators and users; equipment operation and maintenance; and routine and emergency operating procedures. The intent of a positive safety culture, like all other aspects of an organization's radiation protection program, is to minimize radiation exposure to workers, patients and members of the public.

The policy statement applies to all radioactive material general and specific licensees, radiation -generating equipment registrants, individuals licensed as radiation-generating equipment operators or nuclear medicine technologists, and all other personnel involved in the possession, use, handling, storage and disposal of radioactive materials and radiation-generating equipment in Ohio.

Regulation of Radioactive Material and Radiation-Generating Equipment in Ohio

ODH is the agency responsible for the regulation of the many medical, academic, industrial and research uses of radioactive materials and radiation-generating equipment in Ohio. Radioactive materials oversight was granted to Ohio as an Agreement State in accordance with the Atomic Energy Act provision allowing such arrangements between the U.S. Nuclear Regulatory Commission (NRC) and the states.

Radiation-generating equipment is regulated in accordance with rules adopted under Chapter 3748 of the Ohio Revised Code and through contractual agreements with the US Food and Drug Administration.

Background

The 1986 nuclear accident at the Chernobyl nuclear power plant in the Ukraine revealed the importance of safety culture and the impact that weaknesses in safety culture can have on safety. Since then, the importance of a positive safety culture has been further demonstrated by a number of significant events around the world involving radioactive materials and radiation-generating equipment. Assessments of these events revealed that safety culture weaknesses were an underlying cause or increased the severity of problems.

The NRC previously issued two policy statements related to safety culture. The "Policy Statement on the Conduct of Nuclear Power Plant Operations," released in 1989, applies to all individuals and activities at nuclear power plants. The 1996 "Freedom of Employees in the



ODH Safety Culture Policy Statement, Cont.

(Continued from page 2)

Nuclear Industry to Raise Safety Concerns Without Fear of Retaliation" policy statement applies to all NRC regulated activities. It provides the expectation that licensees establish and maintain work environments in which employees feel free to raise safety concerns without fear of retaliation. Ohio regulations

provide similar protections to individuals applicable to activities carried out in this state, in accordance with rule 3701:1-38-09 of the Ohio Administrative Code.

In March 2011, the NRC approved their Safety Culture Policy Statement for those radioactive materials licensees subject to NRC oversight. Development of that policy statement included extensive outreach with a broad range of stakeholders. ODH has modified the NRC policy statement to address the importance of safety culture for both radioactive materials and radiation-generating equipment used in Ohio. The ODH Bureau of Radiation Protection (BRP) views safety and security as primary pillars of any radiation protection program and as underlying principles of this Safety Culture Policy Statement.

Importance for Regulated Entities

Industry experience has shown the value of establishing and maintaining a positive safety culture for programs utilizing radioactive materials and radiation-generating equipment. ODH believes that this value will become increasingly apparent through continued outreach activities focused on enhancing safety culture.

It is important to remember that individuals and organizations performing regulated activities bear the primary responsibility for safety and security. BRP does monitor and review trends in the performance of individuals and organizations to determine compliance with regulatory requirements and licensee commitments. This information may serve as an indicator of possible problem areas in an organization's safety culture.

However, BRP does not monitor or trend the traits described in this policy statement. The Safety Culture Policy Statement is not a regulation; therefore, it is the organization's responsibility, as part of its radiation protection program, to consider how to apply the information in the Safety Culture Policy Statement to promote and enhance a positive safety culture throughout its regulated activities.

Moving Forward

As the focus on a positive safety culture in radiation protection programs enters the next phase, BRP staff will continue efforts toward outreach, cooperation and interaction with stakeholders. During this phase, BRP staff will engage affected organizations and individuals and members of the public in dialogue to:

- Reinforce the importance of a positive safety culture in their specific activities.
- Seek out feedback on the ability of stakeholders to use the policy statement in those activities.
- Determine whether there are areas in the policy statement where changes may be appropriate.

"...individuals and
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Hand to Mouth Hygiene and, Vaccines Aren't Just for Kids



Hand to mouth

Practice good hand hygiene and cough etiquette

As we move into cold and flu season, prevent the spread of disease by washing your hands frequently or using an alcohol-based hand sanitizer. Proper hand-washing technique involves:

- Wetting the hands with clean running water and applying soap;
- Lathering hands and scrubbing well for at least 20 seconds;
- Rinsing hands under clean running water; and
- Drying hands thoroughly.

Proper technique for the use of hand sanitizer includes:

- Applying hand sanitizer to the palm of one hand;
- Rubbing both hands together; and
- Rubbing all surfaces of hands and fingers together until product dries.

Coughing and sneezing can spread diseases—even before people realize they are sick. Practice good cough etiquette by:

- Coughing or sneezing into a tissue;
- Putting used tissues in the waste basket;
- Coughing or sneezing into the upper sleeve or elbow, if tissues aren't handy; and
- Washing or sanitizing hands after coughing or sneezing.

Vaccines aren't just for kids

Stay up to date on your vaccines

After a brief respite in the late 20th and early 21st centuries, infectious "childhood" diseases have come roaring back—and these days, they're not just affecting kids. Adults, too, have been affected by recent epidemics of measles, mumps, and whooping cough.

In other words, adults may need booster shots, new vaccines, annual vaccines, or vaccines against diseases that only affect older adults, including:

- **Flu vaccine.** A new flu vaccine is available annually and helps keep you on the job through flu season.
- Tetanus/diphtheria/pertussis (Td/Tdap) vaccine. Adults who did not receive this vaccine as children should receive it as adults. Pregnant women should receive a booster in the third trimester of their pregnancy to protect their unborn children. Adults who were vaccinated as children should receive a booster every 10 years.
- Varicella (chickenpox) and measles/mumps/rubella (MMR) vaccines. Adults who did not receive these vaccines or have these diseases as children should be vaccinated.
- **Zoster (shingles) vaccine.** Adults over age 60 should get the shingles vaccine, even if they have already had shingles.
- Pneumococcal and Hib (H. influenzae type b) vaccines. Adults over 65 should be vaccinated against these bacterial infections, which can cause pneumonia.

"infectious
"childhood"
diseases
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come
roaring

back..."

Healthy Holidays-Eating Well

The holidays are traditionally a time to enjoy eating with friends and family. But eating in an unhealthy way can cause illness, weight gain, and other unwanted outcomes. By following a few simple steps, you can enjoy eating during the holidays without the postholiday weight gain and guilt.

Follow these tips to eat heartily yet healthfully during the holidays:

- Eat a full, healthy breakfast. Don't "save" calories for a large meal or party. This is a particularly good practice for the cook to help keep him or her from grazing during food preparation.
- Eat (and serve) fibrous appetizers, such as veggie trays or sliced fruit with light dips. The fiber helps with digestion and fills you so you're less apt to overload your meal plate.
- **Drink plenty of water to help with digestion.** Limit high-calorie beverages, such as alcohol or sweet drinks.
- **Get some light exercise before and after the meal.** Take a brisk walk before and a leisurely one after—but before dessert!
- Load your plate in sections. Fill half of it with vegetables, one quarter with protein, and one quarter with starch (potatoes, stuffing, bread).
- **Eat slowly.** Savor each bite, which also gives the food time to hit your stomach and give you that full feeling.

Limit dessert to one sensibly sized serving.

You can even use leftovers in a healthy way. Here's a quick, easy, and healthful recipe for leftover turkey from the Ohio Department of Natural Resources, Division of Wildlife:

Flatbread Turkey Veggie Pizza

2 tablespoons olive oil

½ cup leftover turkey

½ cup parmesan cheese

½ cup mozzarella cheese

1/4 cup onions, chopped

1/4 cup green pepper, chopped

1/4 cup broccoli, chopped

1/4 cup mushrooms, chopped

1 flatbread pizza crust

Preheat the oven to 350 degrees. Spread olive oil on the flatbread and bake for 5 minutes. Take out of the oven and turn the oven up to 400 degrees. Cover with turkey, mushrooms, onions, pepper, broccoli, and cheeses. Bake for 10 to 15 minutes until the cheese is melted.

"...eating in an un-healthy way can cause ill-ness, weight gain..."



The Season of Lights

Take precautions to prevent fires

Decorating homes and businesses is a long-standing tradition around the holiday season. Unfortunately, these same decorations may increase your chances of fire.

Follow these fire safety tips to keep electric lights, candles, and/or a Christmas tree from creating a tragedy:

- **Don't put your live Christmas tree up too early** or leave it up for longer than 2 weeks.
- Place trees away from heat sources, including fireplaces or heat vents. The heat will dry out the tree, causing it to be more easily ignited by heat, flame or sparks.
- Keep the live tree stand filled with water at all times.
- Use only nonflammable decorations.
- **Don't link more than three light strands,** unless the directions indicate it's safe. Connect strings of lights to an extension cord before plugging the cord into the outlet.
- **Avoid using lit candles;** consider using battery-operated, flameless candles, which can look, smell, and feel like real candles
- Ensure that Christmas trees and other holiday decorations don't block an exit.

For more tips on how to prevent a holiday fire and what to do in case a fire starts in your home, visit the U.S. Fire Administration's website at www.usfa.fema.gov.

Safety.BLR

"Keep the live tree stand filled with water at all

times."



Chemical Spotlight: Phenol

Phenol is a chemical that is both a manufactured and a natural substance. It is used primarily in the production of phenolic resins and in the manufacture of nylon and other synthetic fibers. It is also used in slimicides, as a disinfectant and antiseptic, and in some medicinal preparations.

Skin exposure to high amounts of phenol can produce skin burns, liver damage, dark urine, irregular heartbeat, and even death. If ingested, phenol can produce internal burns. If it is in its pure form, the substance is a colorless-to-white solid or liquid. When manufactured, it is a red or pink liquid. Phenol has a distinct and sickeningly sweet odor.

When a small amount is released into the air, phenol is rapidly removed from the air. However, when phenol is released into soil, it remains for 2 to 5 days, and it can remain in water a week or more. Larger or repeated releases of phenol can remain in the environment for longer periods of time. Phenol has been found in at least 595 of the 1,678 National Priorities List (NPL) sites identified by the EPA.

In the event of a phenol spill, you should:

- Avoid direct contact with the chemical and use personal protective equipment
- Isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquid and at least 25 meters (75 feet) for solid
- Cover with dry lime or soda ash
- Pick up and transfer to properly labeled containers
- Ventilate area and wash spill site after material pickup is complete



"Phenol has been found in at least 595 of the 1,678 National **Priorities** List (NPL) sites identified by the EPA."

Fun Page

Across

- 3. EHS Safety Associate highlighted in this issue.
- 5. Place live Christmas trees away from _____ (two words).
- It is important to remember that individuals and organizations performing regulated activities bear the primary responsibility for safety and ______.
- 8. For an EPA inspection, it is helpful to include your company's environmental and _____ officer at the conference.

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8	
EclipseCrossword.com	

Down

- 1. ______ is the agency responsible for the regulation of the many medical, academic, industrial and research uses of radioactive materials and radiation-generating equipment in Ohio.
- 2. Shingles vaccine
- 4. Phenol has a distinct and sickeningly _____ odor
- 7. Proper hand-washing technique involves wetting, lathering, _____ and drying.

Funny Corner



"He sees you when you're sleeping, he sees when you're awake... He just can't see his toes!"

Puzzle Answers





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Environmental Health and Safety Staff

Victoria COOK (vmr6), Health Physics Specialist II

Gwendolyn Cox-Johnson (gxc13), Department Assistant II

Anna DUBNISHEVA (agd), Safety Services Specialist II

Roy EVANS (rxe81), Fire and Life Safety Services Specialist I

Brad FYE (jxf308), Asbestos and Lead Specialist I

Charles GREATHOUSE (cxg118), Analyst Programmer II

Brandon KIRK (bxk230), Manager of Plant and Construction Safety

Kumudu KULASEKERE (kck40), Health Physics Specialist II

Robert LATSCH (rnl2), Safety Services Specialist II

Tom L. MERK (tlm8), Assistant Director of Safety Services

Yelena NEYMAN (yxt13), Health Physics Specialist II

Joe NIKSTENAS (jen), Safety Specialist II, RRPT

Eileen OSTER (emo21), Industrial Hygienist Specialist II

Heidi PAGE (hep14), Assistant Director of Biosafety, BSO

Marc RUBIN (mdr6), Director of Safety Services, CSO

Dr. Mary Ellen SCOTT (mas35), Safety Services Specialist II

Dr. W. David SEDWICK (wds), Director of Radiation Safety and RSO

Felice THORNTON-PORTER (fst2), Assistant Director of Radiation Safety, ARSO

Kelci WILLIAMS (klw84), Department Assistant II

All back issues of the EHS Newsletter can be found online at case.edu/ehs. Click on the "Newsletter" link in the left-hand column!

Environmental Health and Safety
Case Western Reserve University
(216) 368-2906/2907 FAX: (216) 368-2236
(E-mail) cwruehs@gmail.com (www) case.edu/ehs



Meet Robert Latsch

An EHS Safety Services Specialist II

368-6090 *(rnl2)*

With over 20
years of
experience,
contact Bob
with any
questions
concerning
hazardous
chemical waste.