



# EPA Conducts Investigation and Cleanup Operations in Response to Hurricane Irene

## New Jersey

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Community Update

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September 2011

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EPA encourages public participation. If you have any questions or would like additional information about the Hurricane Irene response and activities being conducted, please contact:

**EPA:**

**1-888-283-7626**

George Zachos, Regional Public Liaison

[zachos.george@epa.gov](mailto:zachos.george@epa.gov)

**New Jersey Department of Health and Senior Services (NJDHSS) Call Center:**

**1-866-234-0964**

8AM- 8PM Monday – Friday.  
Weekend/Labor Day Monday hours are: 10AM- 5PM

To report oil and hazardous materials spills, contact the **New Jersey Department of Environmental Protection (NJDEP) 24-Hour HOTLINE:**

**1-877-WARN-DEP  
(1-877-927-6337)**

**ADDITIONAL RESOURCES  
ON BACK PAGE**

### BACKGROUND

On Sunday August 28, 2011, Hurricane Irene impacted many areas throughout the state of New Jersey. The storm caused flooding conditions along the coastline, in low lying areas, along rivers and creeks, and various other places. The U.S. Environmental Protection Agency (EPA) is currently responding to requests throughout New Jersey as a result of the hurricane. Personnel have been deployed to various areas of the State to assess property damage, address odor complaints, conduct air monitoring efforts, recover petroleum products, investigate facility overflows, respond to industrial accidents, and many other tasks. The Hurricane has affected much of New Jersey and will continue to do so as flood waters retreat. There are many steps the public can take to protect themselves from environmental hazards caused as a result of the storm.

These conditions may have caused the release of petroleum based products or other environmental hazards into flood waters and surface water bodies. Petroleum products may be from localized sources, such as home heating oil tanks located in basements, to industrial tanks located at petroleum storage facilities. As the water recedes, residual petroleum materials may be left behind. Odors may be present where petroleum products have been in contact with lawns, furniture, carpet, vegetation, building foundations, and most other materials. As a result, you may be smelling oil, or other petroleum type smells.

People can be exposed to dangerous chemicals from everyday items such as household cleaners, fertilizers, and pesticides that may spill in or near the home during a flood. Be alert for leaking containers and reactive household chemicals, such as caustic drain cleaners and chlorine bleach.

**SEE THE OTHER SIDE FOR  
FREQUENTLY ASKED QUESTIONS**

## **GENERAL FAQ**

### **What areas are affected by Hurricane Irene?**

Flooding is the most common consequence of the storm, and many areas throughout the State of New Jersey have been affected. In particular, areas located near rivers and streams have seen the most impacts. However, properties in other areas may have been affected due to individual property conditions. EPA, along with other federal, state and local agencies want people to be aware of possible threats to human health and the environment associated with petroleum products and other environmental hazards.

### **What should I do if I have oily water in my basement?**

EPA and New Jersey Department of Environmental Protection (NJDEP) are working together to remove contamination and eliminate immediate environmental threats caused by the floods. Should you notice oil or hazardous substances in your basement along with water, you should not pump the water onto your lawn or in the street. Please contact the NJDEP Hotline at 1-888-WARN DEP or 1-888-927-6337 prior to removing the water from your basement or submerged room.

## **HEALTH FAQs**

### **AVOID CONTACT WITH FLOOD WATER, WHENEVER POSSIBLE!**

#### **Why should I avoid contact with flood waters?**

Flood waters can pose various health risks. They may contain potentially dangerous materials such as sewage, agricultural runoff, and hazardous chemicals. Exposure to flood waters can also cause infections or result in injuries. Buildings or facilities that have been damaged by or exposed to flood waters may also pose health risks from mold, chemicals, electrical hazards, and displaced animals.

#### **What is causing the chemical odor in flood water?**

Volatile Organic Compounds (VOCs) found in oil are causing the odor. **You can smell most pollutants well below levels that would cause health problems.** Odors will be strongest in areas where oil is present.

#### **Is the odor bad for my health?**

It is important to understand that people are able to smell some VOCs at lower levels than would cause long-term health problems. Some of the chemicals that cause the odors may cause headaches, dizziness, nausea, or vomiting. If it is possible to stay indoors, close windows and doors, turn your air conditioner on and set it to recirculation mode. If you have severe nausea or other medical issues, see your health care provider as soon as possible.

#### **What should I do if I get oil or chemicals on my skin or clothing?**

Wash affected skin with soap and water. Avoid using harsh detergents, solvents, or other chemicals to wash oil from skin as they may promote absorption of the oil through the skin. If you get oil on your clothing, wash in the usual way but separate from other clothing.

#### **How do I know if my drinking water has been affected by flooding?**

Contact your local health department for specific advice. Fuel and other chemical releases and spills are common during flood events. Until you know the water is safe, use bottled water or some other safe supply of water for drinking.

**For more health information please visit the following websites:**

<http://www.bt.cdc.gov/disasters/floods/>  
<http://www.state.nj.us/health/er/natural.shtml>

**Or Call the CDC Info Number at 1.800.CDC.INFO (1.800.232.4636)**



# Cleaning Mold, Mildew & Bacteria

Mold, mildew and bacteria are common after water damage. If unchecked they can lead to sanitation and health problems. The walls, floors, closets, shelves, contents – every flooded part of your house – should be thoroughly washed and disinfected.

In most cases, household cleaning products will do the job if you use them correctly. Check the label on the products to see how much to use. Some products shouldn't be used on certain materials; the label will tell you that. Apply cleaner and give it time to work before you mop or sponge it up. Follow directions and all safety precautions on the container. After cleaning a room or item, go over it again with disinfectant to kill the germs and smell left by the floodwaters. You may also need to get rid of mildew, an unwelcome companion to moisture that shows as fuzzy splotches.

## **Cleaning tips:**

Tackle one room at a time. A two bucket approach is most efficient: use one bucket for rinse water and the other for the cleaner. Rinse out your sponge, mop, or cleaning cloth in the rinse bucket. Wring it as dry as possible and keep it rolled up tight as you put it in the cleaner bucket. Let it unroll to absorb the cleaner. Using two buckets keeps most of the dirty rinse water out of your cleaning solution. Replace the rinse water frequently.

## **Walls:**

Start cleaning a wall at the bottom or where the worst damage was. If you did not have to remove the wallboard or plaster, you may find that the wallboard or plaster won't come clean and you will want to replace it rather than clean it. If you have removed the wallboard or plaster, wash the studs and sills and disinfect them.

## **Furniture:**

Solid wood furniture can usually be repaired and cleaned, but wood veneer often separates and warps. Wood alcohol or turpentine applied with a cotton ball may remove white mildew spots on wood. Cream wood restorers with lanolin will help restore good wooden furniture parts. Upholstered furniture soaks up contaminants from floodwaters and should be cleaned only by a professional. This is also true of carpets and bedding. Unless the piece is an antique or especially valuable, upholstered furniture soaked by floodwaters should probably be thrown out.

## **Cleaners**

- 1<sup>st</sup> choice: Non-sudsing household cleaners
- 2<sup>nd</sup> choice: Laundry soap or detergent

## **Disinfectants**

- 1<sup>st</sup> choice: Commercial disinfectant or sanitizers, such as the quaternary, phenolic or pine oil based ones (Check labels for the contents)
- 2<sup>nd</sup> choice: 1 cup (8 ounces) of laundry bleach for 1 gallon of water

## **Mildew Removers**

- 1<sup>st</sup> choice: Commercial mildew removers or mildewcides
- 2<sup>nd</sup> choice: Washing soda or tri-sodium phosphate (available at grocery or paint stores). Use 5 tablespoons per gallon of water
- 3<sup>rd</sup> choice: 1 cup (8 ounces) of laundry bleach for 1 gallon of water. See below for using bleach.

## **Bleach**

Liquid chlorine bleach, such as Clorox or Purex bleach, can do a variety of flood clean up jobs. Make sure that 5.25% sodium hypochlorite is the only active ingredient. Bleach that has a scent to improve its smell is available. Scented bleach is fine for cleanup jobs, but don't use it for treating drinking water. Don't use dry bleach or any bleach that does not contain chlorine. Be careful of fumes and wear rubber gloves, protective eye wear and mask. Do not mix bleach with other household chemical products, especially ammonia or toilet bowl cleaner; the chemical reaction can create a poisonous gas. Do not use bleach on aluminum or linoleum.