

Welcome to NEMCo DISASTER SANITATION

What and Where

- Restrooms
- Water
- Emergency Exits
- Safety Officer
- First Aid Kit / Defibrillator

In case of emergency evacuation of room, meet in center of parking lot. We will verify everyone is present. All are to stay until released.

Emergency Location



If need outside assistance.

- Call 911

- Location:

Kenmore Fire Station 51
Public Meeting Room
7220 NE 181st St
Kenmore, WA

General

- If you need to use your cell phone / radio please step out of classroom, (or put it on speaker mode so we can all listen in.)
- We will not take breaks during this short training. If you need to stand up or excuse yourself please do so.
- If you have a safety concern or issue, please advise Safety Officer.

NEMCo DISASTER SANITATION

Resources needed

WATER

One gallon per person per day
Used for both drinking and cleaning

CLEANING SUPPLIES

Soap, disinfectants, paper products

WASTE REMOVAL

Where does it go?



Water weighs
8 pounds per gallon

Find Safe Water

Do not use water you suspect is contaminated. Contaminated water can lead to illness.

Do not use suspected or contaminated water to wash dishes, brush your teeth, wash or prepare food, make ice, or make baby formula.

Do not drink alcohol, as it dehydrates the body, which increases the need for drinking water.

Not all water is potable

Do not use water from:

- * Radiators
- * Hot water boilers (part of your home heating system)
- * Water beds (fungicides added to the water and/or chemicals in the vinyl may make water unsafe for use)

Do not try to boil or disinfect water contaminated with fuel or toxic chemicals. If you suspect your water has fuel or chemical contamination, contact your local health department for specific advice.

Alternative water sources

Ice cubes

Toilet tank (not the bowl)

Canned fruits and veggies

To use the water in your house pipes and water heater (not a boiler heating system), first shut the water valve at the meter. This isolates your house from city water lines, which might become contaminated.

More alternative sources

Water from pools, spas, collected rain water can be used for cleaning and personal hygiene, but not for drinking.

Distillation can produce potable water, read and follow manufacturer instructions.



MAKING WATER SAFE

FILTERING



BOILING



DISINFECTING



FILTERING

Filter water through a cloth, paper towel or coffee filter prior to boiling. Allow to settle, then draw off of the clear water.

Use a portable filter. Ensure that the filter is designed for bacteria and parasites.

After filtering, add a disinfectant like iodine or chlorine to kill viruses.

BOILING

One minute at a roiling boil.

Store in a clean, sanitized container with a tight lid.

A roiling boil is a vigorous boil in which large bubbles rise quickly to the surface of a liquid and burst continuously, sometimes forcefully enough to splatter. The bubbles don't lessen when the liquid is stirred, and the water has reached a constant 212°F (100°C), causing the continual release of steam



DISINFECTION

Unscented household chlorine bleach or iodine will be useful to kill most (but not all) harmful viruses and bacteria.

Household bleach has a low concentration of chlorine, and chlorine is volatile (that's why it kills bugs so well,) so old bleach that's been sitting around for a couple of months will not be as effective as a new bottle.

Water purification tablets - read and follow label directions.

Ultra Violet sterilizers - read and follow directions, not for cloudy water

Solar disinfection can improve water quality and reduce some germs - lay a clear plastic bottle in the sun for 6 hours (2 days if cloudy)

HOW MUCH BLEACH?

CLOROX: 4 Drops/Quart or 25 Drops(1/4tsp)/1.75 Gallons

CDC: 2 Drops/Quart or 8 Drops/Gallon

16 Drops(1/4tsp)/Gallon for cloudy water

STIR WELL AND LET STAND FOR 30 MINUTES

After 30 minutes the water should have a faint chlorine smell, if not, add 8 more drops/gal, stir, and let sit for 30 more minutes. If still no chlorine smell, discard the water and find another source.

Long term water storage

Store in sealed containers
Away from sunlight/excessive heat
Drain and replenish annually

Before filling with water, follow these steps to clean and sanitize water storage containers:

Wash the storage container with soap and rinse completely with water.

Sanitize the container with a solution made by mixing 1 teaspoon of unscented liquid household chlorine bleach in 1 quart (4 cups) of water. Use bleach that contains 5%–9% sodium hypochlorite. Cover the container tightly and shake it well. Make sure the sanitizing bleach solution touches all inside surfaces of the container.

Wait at least 30 seconds and then pour the sanitizing solution out of the container.

Let the empty container air-dry before use.

Pour clean water into the sanitized container and cover it with a tight lid.



SUPPLIES

Household bleach (typically 5-7% Sodium Hypochlorite.)

Soap and a towel stored in your kit is a sanitation staple.

Remember toilet paper at the beginning of covid? Keep a supply of paper products in your home.

Camping toilet.

Garbage bags

WASTE REMOVAL

When you flush a toilet during a disaster, where does it go?

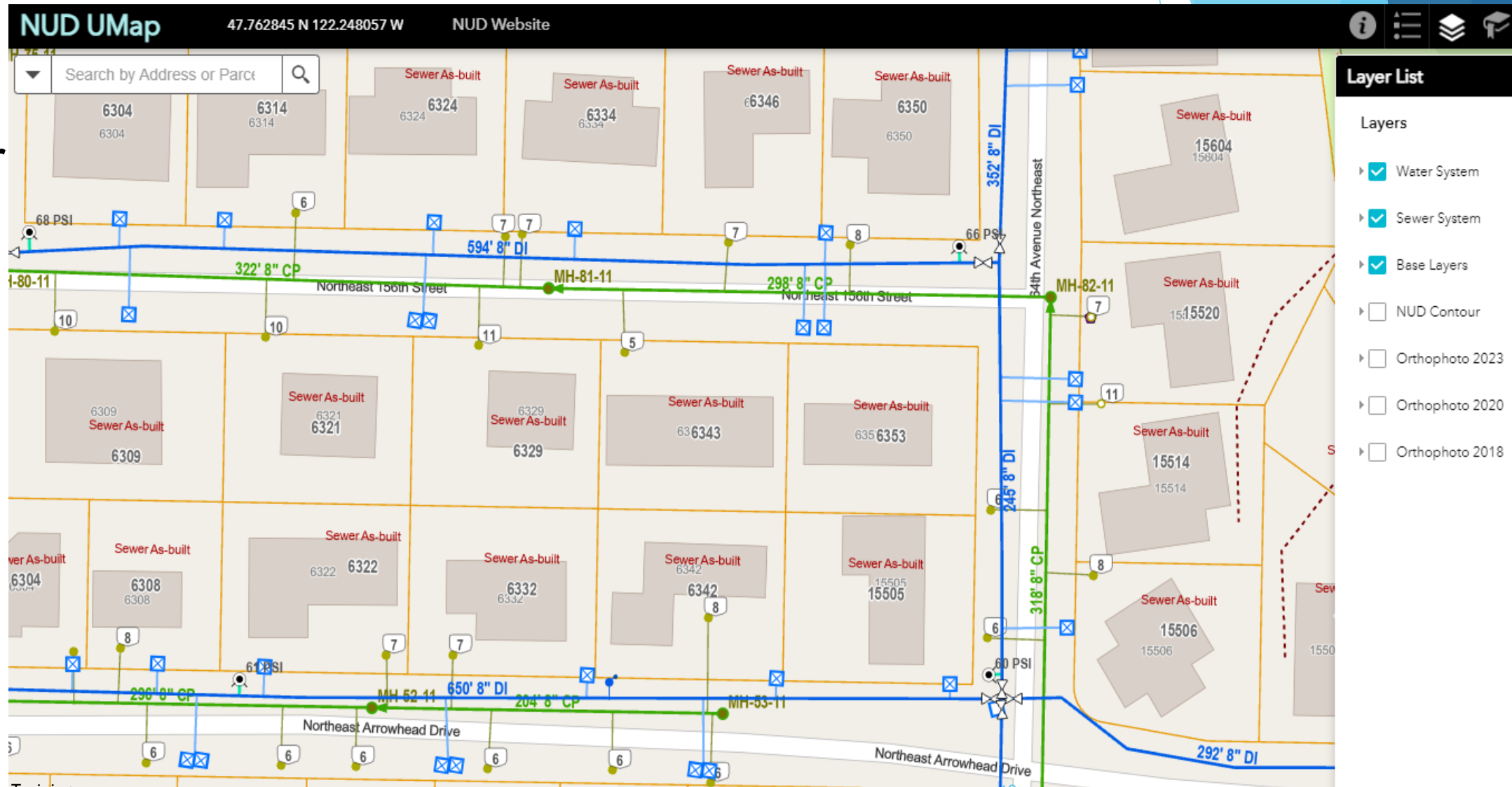
Typically, sewage collection points have a back-up generator.
Ground motion may indicate broken sewage pipes.
If there is sewage leaking, report it to the EOC.

Human waste should be buried at least 6" below the soil, and 200' away from water sources

WASH YOUR HANDS OFTEN

Where are the poop pipes?

Your utility provider should be able to help you find your local pipes



QUESTIONS, COMMENTS?