



Household Hazardous Waste Collection Day 2018

Pesticide Disposal Assistance Program



DATE and TIME:

Saturday, April 28th, 2018 from 8:00 AM until 1:00 PM.

LOCATION:

**The Johnston County Livestock Arena, 520 County Home Rd.,
Smithfield, NC 27577. (Next to the Landfill)**

The Johnston County Department of Solid Waste Services will be holding a one-day Household Hazardous Waste Collection Event on Saturday, April 28th, 2018, from 8:00 AM until 1:00 PM at the Livestock Arena (located next to the Landfill) at 520 County Home Rd., Smithfield, NC 27577.

Co-sponsors for the event will be:

-  **The Johnston County Cooperative Extension Service.**
-  **The Johnston County Sheriff's Office.**
-  **The North Carolina Department of Agriculture & Consumer Services Pesticide Disposal Assistance Program.**

We have provided some answers to “**Frequently Asked Questions**” about the collection day:

Why does Johnston County host Household Hazardous Waste Events?

The purpose of a household hazardous waste one – day collection event is to provide an opportunity for the residents of Johnston County to dispose or recycle ignitable, corrosive, reactive, toxic and pharmaceutical wastes generated from their home usage. This will help to prevent accidental spills, explosions, fires, poisonings and overexposures due to household storage. It will also serve to reduce soil, groundwater and landfill contamination; and curtail public wastewater or private septic system disposal. In addition, the Sheriff's Department initiative, with the collection of medications, will further strengthen our overall public safety.

What items can I bring to the event and why are they considered hazardous?

- ✓ **Oil-Based Paints, Oil-Based Deck Stains, Varnishes and Thinners:** These liquids are either flammable or combustible and present a danger for explosion or fire. Common ingredients in these products are the aromatic petrochemicals *toluene* and *xylene*, two of the major components in gasoline. *Mineral spirits* can also be present; this too is derived from petroleum distillates. In addition, these chemicals are sometimes mixed with *methyl ethyl ketone* or “MEK.” Besides being ignitability hazards, these household products can be toxic in the event of overexposure; or if spilled, can contaminate soil and groundwater.
- ✓ **Solvents, Paint Strippers and Degreasers:** The ingredients in these products are typically the same that are incorporated into oil-based paints, oil-based stains and varnishes. So, in following the rule of thumb “like dissolves like,” these chemicals can also be used to remove, clean or thin petroleum-based products. *Denatured alcohol (ethyl alcohol)*, *acetone* and *VM&P (Varnish Makers & Painters) Naphtha* are other products sold for these purposes. Again, these compounds are flammable or combustible; and toxic. Another highly effective chemical class from this heading, although much less prominent today in the home setting, is the “*chlorinated solvent*.” Examples are *methylene chloride*, *trichloroethylene* and *perchloroethylene*. These compounds are non-flammable but pose toxicity problems and are being viewed as contributing to atmospheric ozone depletion.
- ✓ **Solvent - Based Adhesives, or Glues and Fillers (that have not cured)** contain these same liquid formulations, as discussed above, which are used to keep the resins soft and workable. Common wood filler products are also flammable (*styrene (monomer)*) and may use an oxidizer (*benzoyl peroxide*) as a hardener.
- ✓ **Aerosol Paints, Aerosol Products and Lubricants:** These items contain propellants such as *butane* and *propane* which are extremely flammable and can also cause explosions and fires. Moreover, the widely used product, “WD-40,” contains a high percentage of combustible *mineral spirits*.
- ✓ **Personal Care Products:** Items like perfume, aftershave, hand sanitizer and hairspray contain a high concentration of *denatured alcohol*. Also, most hair sprays are aerosols; therefore, *butane* and *propane* are present. Other products that are used in most homes include rubbing alcohol (*isopropyl alcohol*), nail polish (*ethyl and butyl*

acetate) and nail polish remover (*ethyl acetate and acetone*). These very common household goods can become dangerous fire hazards if exposed to a flame or other ignition sources.

- ✓ **Hobbies and Crafts (Non-Profit):** Many people have household leisure time interests such as model building; painting; woodworking; pottery; photography; lure making and a variety of other pursuits. At times, chemicals that are flammable/combustible and toxic are, or were, used in these activities. Examples are *solvent-based* paints, adhesives or lacquers; *lead* and *cadmium* (toxic heavy metals) in ceramic glazes; the use of *lead* for fishing lures; and photographic chemicals that include *silver* containing film, fixers and developers. Again, the list of hobby and craft chemicals can be extensive; however, we can only accept “normal household quantities” that were not generated from a home business.
- ✓ **Pesticides and Herbicides:** It goes without saying that these chemicals are toxic as they are made to control or eliminate unwanted pests and plants.
- ✓ **Furniture Polishes, Shoe Polishes and Waxes:** These products can be combustible. In addition, when furniture polish is dispensed from aerosol cans, it once again utilizes extremely flammable propellants.
- ✓ **Fluorescent Lights & Bulbs:** Contain the toxic heavy metal *mercury* that normally fails the EPA test for hazardous levels to leach from a landfill.
- ✓ **Thermostats and Thermometers:** Also contain *mercury*.
- ✓ **Swimming Pool Chemicals:** comprised of chlorine (bleach type) products that can cause corrosive burns and oxidizers such as *calcium hypochlorite* which can react with other materials and cause fires or explosions.
- ✓ **Automotive Fluids: Brake, Transmission, Hydraulic and Gear Oil:** These are all petroleum products that, if spilled, can contaminate soil or seep into groundwater. **Windshield Washer Fluid** contains *methanol*, which is both flammable and toxic.
- ✓ **Fuels: Gasoline, Diesel, Kerosene, Charcoal Lighter and Liquid Petroleum Gas (LPG-Propane) Tanks:** These are all petroleum-based or natural gas products that can cause explosions, fires and be toxic. *We accept 1 lb. (camping cylinders) and 20 lb. (gas grill cylinders). Please remember, we may not take them at our landfill or convenience*

sites unless the valve has been removed or the cylinder is sufficiently perforated. If these steps have not been taken, the HHW Collection Day is the ideal place to bring these items to be processed safely.

- ✓ **General Cleaners for the Bathroom, Kitchen and Windows:** These can range from *bleach, ammonia, acids, caustics, alcohols, etc.* Many of these products can cause corrosive burns or be a potential fire hazard.
- ✓ **Drain Cleaner:** This is made up of *caustic soda (lye)* which is highly corrosive and can cause severe and permanent burns.
- ✓ **Concrete Cleaner:** Comprised of *hydrochloric (muriatic) acid* which is highly corrosive and can cause severe and permanent burns.
- ✓ **Household Batteries: Alkaline, Nickel-Cadmium, Nickel Metal Hydride, Lithium-Ion and Lithium Polymer (LiPo) batteries (undamaged and completely discharged).** These items contain toxic heavy metals and a reactive alkali metal. Even though alkaline batteries are considered safe for landfill disposal, they still have trace amounts of *mercury* and contain the solid electrolyte, *potassium hydroxide*, which is a corrosive.

I have prescription and Over-The-Counter medications in my home. Should I bring them to the collection event also?

Yes. Pharmaceutical substances are chemicals too and they are widespread in today's society. They are categorized as "controlled" i.e. codeine, valium and morphine; and "non-controlled" substances such as antibiotics, diuretics and cholesterol absorption inhibitors. Over-The-Counter medications, such as aspirin and ibuprofen, are also considered non-controlled substances. Our Sheriff's Office believes strongly that unwanted medications in the home provide a terrible potential for child poisonings and if controlled substances fall into the wrong hands and find their way to the streets, they threaten the safety of our community.

What else should I know about my prescription and non-prescription medications?

Actually, very few pharmaceuticals meet the EPA definition of "hazardous waste." However, it is now being widely recognized that these water-soluble (dissolving) medicines can ultimately wind up back in drinking water sources. Either through landfill disposal or being flushed down a toilet or sink to the public sewer system, these medications will flow to a wastewater treatment plant. Whether the substances completely break down before they re-enter surface water or

groundwater (private septic system) is not a certainty. EPA water testing requirements address a lengthy list of organic chemicals and heavy metals but not pharmaceutical products.

I'm a farmer; may I use this opportunity to dispose of my unwanted pesticides?

Yes. The pesticide chemicals that will be collected at our event will be disposed, at no cost to us, through the courtesy of the North Carolina Department of Agriculture & Consumer Services Pesticide Disposal Assistance Program (PDAP); therefore, the farming community is invited. **Please Note:** If you have accumulated large or bulk items such as drums or cylinders at your farm that you need disposed, please call prior to the event for an individual appointment. This will help ensure an uninterrupted traffic flow for the collection day. If a special accommodation will be required, the NCDA & CS PDAP can be reached at (919)733-3556 or the Johnston County Department of Solid Waste Services (Compliance Section) at (919)938-4747.

What items will not be accepted and why?

- ✘ **Latex (or Acrylic) Paint:** This is considered a nonhazardous liquid that is essentially water-based. Due to the expense of an HHW program, it is more cost-effective and just as “environmentally friendly” to solidify this with sand, soil or kitty litter and dispose of it at the MSW (Municipal Solid Waste) Landfill.

- **How do I know if I have latex or oil-based paint?**

If the label is readable it will indicate “*Latex*” (or “*Acrylic*”); or “*Oil-Based*,” sometimes called “*Alkyd*.” Others may be able to identify oil-based paint by the strong solvent odor. However, if the label is paint-coated and you don’t trust your sense of smell, the most positive test is to take a dab of paint on your finger. If it can be washed off with soap and water, it is latex; if not, it is oil-based.

What other items will not be accepted and for what reason?

- ✘ **Commercial, Industrial or Institutional Waste:** Our program, with the exception of farm generated pesticides and herbicides, is designed for households and for the disposal, or recycling, of the products “normally used” in a residential setting. Chemical waste from a business falls under different disposal requirements. In this case, federal

and state regulatory criteria must be followed. Any questions pertaining to this should be directed to the Johnston County Department of Solid Waste Services (Compliance Section) at (919) 938-4747.

- ✘ **Waste in Containers Greater than 5-Gallons:** Once again, we must consider the typical home chemical quantities. Any substance purchased for residential do-it-yourself projects should not exceed a 5-gallon vessel size.
- ✘ **Radioactive Materials:** This includes smoke detectors. If you have a smoke detector that no longer works properly, please contact the manufacturer for ship back information. In addition, many cardiac pacemakers have had radioactive material within their makeup. In this case please contact your physician for disposal options.
- ✘ **Explosive Waste:** Shock sensitive chemicals such as picric acid, organic peroxides and diethyl ether fall into this category. These are both extremely dangerous and not considered “normal household” chemical waste. In addition, **ammunition will not be accepted.** Please contact your local law enforcement agency, the Johnston County Sheriff’s Office or the North Carolina State Highway Patrol for disposal options.
- ✘ **Lithium Polymer (LiPo) Batteries that have been damaged or not fully discharged:** These devices are now a common power source in Radio Controlled (RC) aircraft, cars and boats. They are also being used in some cell phones and laptop computers. Even though these items are becoming frequently used in household settings they have been proven to be a fire hazard. We have already seen an example of this at one of our convenience sites. If an incident should occur at a Household Hazardous Waste event, where other ignitable chemicals are present, it has the potential to be disastrous. When a residential consumer purchases these batteries, he or she needs to read the manufacturer’s information and take responsibility for their charging/discharging, safe handling and recycling/disposal.
- ✘ **Fire Extinguishers:** Please make sure the nonhazardous chemical (monoammonium phosphate) and pressure is expelled in an open area on a day with little or no wind. Then bring the empty cylinder to the landfill for disposal. However, if the valve stem is removed, it can be placed in the metal recycling bin.
- ✘ **Hardened Glues, Adhesives and Fillers:** If the solvent has completely dried out and all the resin is cured (hardened) there is no need to dispose of this as a hazardous chemical. It can be discarded in the regular trash.

- ✘ **Cooking Oil and Grease:** These are nonhazardous and biodegradable items that should again be mixed with kitty litter, sand or soil and brought to the landfill for disposal. However, please do not dispose of it in the public wastewater system or your home septic tank.
- ✘ **Used Motor Oil:** Recycling containers are already available at the Johnston County Solid Waste Convenience Sites and at the Landfill.
- ✘ **Lead-Acid Batteries:** Recycling collection is already available at the Johnston County Solid Waste Convenience Sites and at the Landfill.
- ✘ **Used Antifreeze:** A recycling container is already available at the Landfill.
- ✘ **Used Motor Oil Filters:** Recycling containers are already available at the Johnston County Solid Waste Convenience Sites and at the Landfill.
- ✘ **Asbestos Containing Material:** This can be disposed at the Johnston County Construction and Demolition (C & D) Landfill. Before you bring it in, it will be necessary to call (919)938-4750 for all special waste requirements.
- ✘ **Electronic Waste of Any Type:** Recycling containers/pallets are already available at the Johnston County Solid Waste Convenience Sites and at the Landfill.

Must I be a resident of Johnston County to bring my chemical waste to the collection event and will there be a charge for this?

You must live in Johnston County to dispose of, or recycle, your household chemicals and the event is **FREE**. When you arrive, you will be asked some questions that we may complete a small survey. Your residency will need to be confirmed at that time.

What if my chemical waste is in a leaking or severely damaged container?

Please place it in another receptacle that will contain it securely for delivery and handling. Also, and very importantly, please make sure that it is properly labeled.

What if I have a chemical in an unlabeled container and I don't remember what it is?

As long as it was used for your home or yard and not for any business purposes, you may bring it to the event. It will then be characterized for disposal.

How much chemical waste can I bring to the event?

The USEPA estimates that the average home can accumulate as much as 100 lbs. of household hazardous waste in basements, garages and storage sheds. One (1) vehicle per household is the common rule for these events. Therefore, please try to limit your delivery to 100 lbs. per vehicle, per home.

How can I reduce the household hazardous waste that I have been creating?

Well, the simplest way is to use it up. However, if you have something leftover, give it to a friend or a neighbor for their home so no waste will be generated. Another option is buying products that are less potent. Many chemicals purchased at a hardware store will have words on their labeling like "Corrosive," "Danger," or "Warning." At times these types of formulations can be substituted with more generic kitchen items such as vinegar and baking soda.

If I have additional questions about household hazardous waste, who should I contact to get more information?

Please call the Johnston County Department of Solid Waste Services at (919) 938-4750.

See You at the Event!