



# NEW HANOVER COUNTY

## PUBLIC HEALTH

### ENVIRONMENTAL HEALTH SERVICES

230 Government Center Drive, Suite 140, Wilmington, NC 28403

P: (910) 798-6667 | F: (910) 798-7815 | NHCgov.com

David G. Howard, MPH, Director

### Application for On-Site Water Protection Program (OSWP) Septic and/or Well

**Application Type** (check all that apply):

- Septic System Improvement Permit (IP)** Evaluate/permit septic system:  New  Relocation  Expansion
- Construction Authorization (CA)** Permit to *install* septic system
- Septic System Repair Permit** Septic system is not working
- Permit Revision (CA/IP)** Permit # \_\_\_\_\_
- Re-Use of Existing System:**  Septic  Well
- Well Permit drinking water well:**  New  Replacement/New  Repair  Abandonment
- Water Sample:**  Bacteria  Inorganic  Organic
- Soil Wetness Monitoring** alternative to determine soil wetness

Building Safety Permit #: \_\_\_\_\_ (if applicable)

**Applicant Information:**

Applicant Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 City,State,Zip: \_\_\_\_\_  
 Cell / Home Phone: \_\_\_\_\_  
 Work Phone: \_\_\_\_\_  
 Email Address: \_\_\_\_\_

**Owner Information:**

Same as Applicant  
 Property Owner: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 City,State,Zip: \_\_\_\_\_  
 Cell / Home Phone: \_\_\_\_\_  
 Work Phone: \_\_\_\_\_  
 Email Address: \_\_\_\_\_

**Property Information:**

Tax Parcel # \_\_\_\_\_ Date originally deeded & recorded: \_\_\_\_\_  
 Property Address: \_\_\_\_\_ City,Zip: \_\_\_\_\_  
 Subdivision Name: \_\_\_\_\_ Section/Phase: \_\_\_\_\_ Lot #: \_\_\_\_\_  
 Lot Size (total acres): \_\_\_\_\_ Acreage to be evaluated (IP only):  less than 1 acre  greater than 1 acre

**County Sewer:**  Yes  No If yes, sewer provider:  CFPUA  AQUA  Other: \_\_\_\_\_

**Water Supply:**  New Well  Existing Well  Community Well  Shared Well  Public Water  Spring

If public water, water provider:  CFPUA  AQUA  Other: \_\_\_\_\_ Is there an existing irrigation well?  Yes  No

# occupants/employees drinking water well will serve: \_\_\_\_\_ # homes/ buildings drinking water well will serve: \_\_\_\_\_

**Development Information:** (check any that apply)  Residential  Non-Residential/Commercial/Industrial

- New Septic System
- Building Addition/Conversion:  Relocation of Existing Septic System  Expansion of Existing Septic System
- Building Addition/Conversion, **Re-Use Existing System:**  Septic System  Private Drinking Water Well
- Repair to Malfunctioning Septic System (septic system not working)
- Mobile Home Replacement
- Adding a Swimming Pool (Private)

**Residential Specifications:**    **New Construction**    **Existing Construction**

Type of Residence:    Single Family Home    Multi-family/Duplex    Mobile Home    Other: \_\_\_\_\_

Existing number of bedrooms: \_\_\_\_\_      Maximum number of occupants (# bedrooms x 2): \_\_\_\_\_

Are you adding bedrooms?    YES    NO      Will there be a basement?    YES    NO

Proposed total number of bedrooms: \_\_\_\_\_      Plumbing fixtures in Basement    YES    NO

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**Non-Residential Specifications:**

Type of business:    Industrial    Commercial   \_\_\_\_\_

Total square footage of building(s): \_\_\_\_\_      Maximum number of employees: \_\_\_\_\_      Maximum number of seats: \_\_\_\_\_

Additional Information to help determine design daily flow of sewage: \_\_\_\_\_

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Type of water using fixtures: \_\_\_\_\_

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**If applying for Septic System Construction Authorization(CA) or Septic System Repair:**

**Please indicate desired Septic System Type(s):** *(Systems can be ranked in order of your preference.)*

Accepted\_\_    Alternative\_\_    Conventional\_\_    Innovative \_\_    Other \_\_\_\_\_    Any \_\_

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The Applicant shall notify the local health department upon submittal of this application if any of the following apply to the property in question. If the answer to any question is "yes", applicant must attach supporting documentation.

- Yes    No   Does the site contain any jurisdictional wetlands?
  - Yes    No   Does the site contain any existing wastewater systems?
  - Yes    No   Is any wastewater going to be generated on the site other than domestic sewage? Please explain: \_\_\_\_\_
  - Yes    No   Are there any easements or right of ways on this property?
  - Yes    No   Is the site subject to approval by any other public agency? Please explain: \_\_\_\_\_
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**If the information submitted in the application for an Improvement Permit, Construction Authorization, Well Permit, or any of the above application types is found to have been incorrect, falsified or changed, or the site is altered, the Permit or Construction Authorization shall become invalid, and may be suspended or revoked.** It is unaffected by a change in ownership of the property. **The permit is valid for either 60 months or without expiration depending upon documentation submitted.** (Complete site plan = 60 months; complete plat = without expiration).

I hereby certify that I am the applicant/owner, or owner's authorized legal representative. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

The issuance of this permit by New Hanover County Health and Human Services in no way guarantees the issuance of other required permits. The applicant is responsible for checking with other appropriate governing bodies to assure meeting their requirements.

\_\_\_\_\_  
**Property owner's or owner's legal representative\*\* signature (required)**

\_\_\_\_\_  
**Date**

\*\*Must provide documentation to support claim as owner's legal representative.

To make application for Environmental Health Services, please provide all information required on the checklist for each permit you are applying for and upload this application and all supporting documents to New Hanover County COAST at <https://www.nhcgov.com/coast/>.



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## PREPARATION OF YOUR WELL FOR NEW HANOVER COUNTY HEALTH DEPARTMENT APPROVAL AND COLLECTION OF WATER SAMPLE

- Submit a certified well contractor's Well Construction Record (*Form GW-1*) to the Environmental Health Services office (*Email: programsupport@nhcgov.com*). Our phone number is (910)798-6667.
- Any old well no longer functional must be abandoned pursuant to State Rule 15A NCAC 02C .0113. An abandonment well record (*Form GW-30*) must be submitted to the New Hanover County Health Department (NHCHD) and North Carolina Department of Environment and Natural Resources (NCDENR). If the well is not abandoned accordingly, the file will be turned over to NCDENR for enforcement.
- Well casing must extend **NO LESS THAN 12 INCHES** from the ground surface.
- Well Contractor's ID plate and Pump Installer ID Plate must be permanently attached to the well casing, surface grout pad or floor and must be constructed of a durable weatherproof and rustproof metal. All information on the Well Contractor's ID plate and Pump Installer ID Plate **must** be legible.
- Pump must be connected and all plumbing from the well to the building must be completed.
- The person installing the pump must install a non-threaded sampling tap, 12" above the ground, and turned down at the wellhead. In the case of offset jet pump installations, the sampling tap shall be installed on the return (*pressure*) side of the jet pump piping. In the case of pit less adapter installations, the sampling tap shall be located immediately upstream of the water storage tank.
- The well head shall be equipped with a screened vent to allow for the pressure changes within the well except if a suction lift pump or single-pipe jet pump is used.
- All openings for piping, wiring, and vents shall enter into the well at least 12 inches above land surface, except where pit less adapters are used.
- Allow the chlorine solution to stand in the well **AND** distribution system for a period of at least 24 hours. Samples are not taken at wells not yet plumbed to the structure.
- Chlorine must be run off until there is no trace present. This will be confirmed using a chlorine test kit. If chlorine is still present, a water sample will not be collected and will need to be rescheduled.
- Water samples are taken Monday – Thursdays only.
- **THERE MUST BE POWER TO THE PUMP.** Ways to have power:
  - Have a generator and a person to operate it at the site
  - Have your electrician wire the pump off the temporary pole
  - Make arrangements with the Inspections Department for permanent power

**IF ANY OF THE ABOVE STEPS IS NOT TAKEN, THERE IS NO GUARANTEE THAT A REVISIT  
CAN BE SCHEDULED ON THE NEXT BUSINESS DAY**

***“Healthy People, Safe Environment, Strong Community”***

Preparations of Well for NHCHD Approval & Collection of Water Sample

EHS097

6-2021



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### *DISINFECTION OF WELLS*

Wells can become contaminated when surface water containing bacteria and other contaminants find their way into the well. Well chlorination is the best way to kill harmful organisms that may be present. Outlined below is a simplified method for the disinfection of a contaminated well. A certified well contractor can provide assistance with well disinfection. Please refer to the following website to find a list of certified well contractors: <http://h2o.enr.state.nc.us/wc/FindaCertifiedWellContractor.htm>

#### *Simplified Well Chlorination*

- 1) To disinfect your home water system, use safety goggles, gloves, and appropriate clothing and completely spread chlorine throughout the well and plumbing system. You should use only a solution made from high test calcium hypochlorite containing 65% - 75% available chlorine. Do not use household bleach. High test calcium hypochlorite, including trade names HTH and Chlor-Tab, is available from home improvement stores, swimming pool product suppliers, and drill shops. Do not use stabilized chlorine tablets or any chlorine product that contains fungicides, algaecides or other disinfectants; read the product label carefully.
- 2) The standard method of disinfection is to produce a 100 parts per million (ppm) chlorine concentration in your entire water system. About 3 ounces of hypochlorite containing 65 % to 75 % available chlorine is needed per 100 gallons of water to achieve this. Determine the volume of water in the well (a two inch well has .163 gallons per foot and a four inch well has .65 gallons per foot). Add an additional 3 ounces of calcium hypochlorite to compensate for the entire plumbing/distribution system.
- 3) Please also refer to [www.newelldriller.org/documents/DisinfectaWaterWell\\_rev2007-6.pdf](http://www.newelldriller.org/documents/DisinfectaWaterWell_rev2007-6.pdf) for additional information on calculating the amount of chlorine or calcium hypochlorite needed. Add the calculated amount of calcium hypochlorite to a five gallon bucket of clean water and mix to dissolve. **PLACE THE WATER IN THE BUCKET FIRST.**
- 4) Pour the chlorine solution in the vent opening using a funnel or in through the top of the well casing after removing the well seal and let it settle for 30 minutes prior to turning on the pump. Attach a clean hose to the faucet closest to the well head and turn on the water. Circulate the water through the hose and into the well for 30 minutes. Be sure to thoroughly rinse the inside walls of the casing. In the case of a 2 inch well with a jet pump, the removal of the pipe, pump and jet unit may be necessary. Remember to submerge all equipment with the chlorine solution prior to reinsertion.
- 5) If you have a water treatment system, make sure that chlorine will not damage it. Bypass the system if necessary. Distribute the chlorinated water throughout the entire water system. Each faucet in the water supply should be opened up until the smell of chlorine is detected. Once the chlorine is detected, the faucet should be turned off and the next faucet should be opened. The hot water heater and the toilets should also be flushed until the chlorine is detected. The chlorinated water must remain stagnant in the water supply for at least 24 hours to insure proper disinfection.
- 6) After 24 hours, the chlorinated water can be flushed out of the lines. Chlorinated water can cause damage to a septic system and also to landscape plants. It is recommended that most of the chlorinated water be discharged to a ditch or into a sewer system when available. The water should be run until the smell of chlorine is no longer detected.
- 7) Once the chlorinated water has been flushed out of the water system, the water should be tested by a certified laboratory to determine if bacteria are present. The water sample must be collected by a laboratory technician or the Health Department for the results to be acceptable. If bacteria are present, the water should not be consumed, and the well chlorination procedure should be repeated.
- 8) Continue using bottled water or water that has been boiled at a rolling boil for three minutes until sampling shows no contamination. Since boiling water concentrates levels of nitrates in the water, young infants and pregnant women should use bottled water instead of boiled tap water for drinking and cooking.

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