



## ***Union County Environmental Health***

*Division of Union County Health Department*

*Phone: (704) 283-3553 Fax: (704) 283-3825*

*www.co.union.nc.us*

### **MEMORANDUM**

TO: Swimming Pool Operators and Owners

FROM: David J. Huneycutt, R. S.  
Environmental Health Specialist

DATE: January 4, 2010

RE: Operation Permit

Enclosed is an application for an Operation Permit, the Pool Inspection Checklist, Monthly Pool Record form, an Inspection of Swimming Pool form, and an Updated Fee Schedule.

The application must be filled out **in full**. The checklist must be completed and the fee paid before an inspection is made. The fee is \$275.00 for **each** pool. Please note four (4) and six (6) demerit items are rule violations, which warrant denial of an operation permit or notification of intent to suspend an operation permit. The demerit items are found on the inspection sheet.

**A \$75.00 fee will be charged for return visits for items not completed before or on our initial visit and to re-open a pool if closed due to rule violation(s). The fee must be paid before a return visit will be made, which will be during a one to two week period.**

Please remember that **no public swimming pool shall operate unless the owner or operator has an operation permit issued by this department.** The permit is required by The General Statutes of the State of North Carolina and the North Carolina Public Swimming Pool Rules.

A current copy of the North Carolina .2500 Public Swimming Pool Rules can be found at: [www.deh.enr.state.nc.us/ehs/rules/t15a-18a.25.pdf](http://www.deh.enr.state.nc.us/ehs/rules/t15a-18a.25.pdf) .

If you should have any questions, please feel free to contact me at 704-292-2548 or e-mail me at [davidh@co.union.nc.us](mailto:davidh@co.union.nc.us) .

/jmm

Enclosures



PUBLIC SWIMMING POOL DATA SHEET

Name of Pool \_\_\_\_\_  
Location \_\_\_\_\_  
Pool Contractor \_\_\_\_\_ Date of Construction \_\_\_\_\_

1. Pool dimensions \_\_\_\_\_  
Pool volume \_\_\_\_\_  
Surface area \_\_\_\_\_  
Bather load \_\_\_\_\_

2. Pool Structure:  
\_\_\_\_\_ Fiberglass \_\_\_\_\_ Concrete  
\_\_\_\_\_ Gunite \_\_\_\_\_ Rounded Corners  
\_\_\_\_\_ Other (Specify): \_\_\_\_\_  
Number of Main Drains \_\_\_\_\_  
Size of grate \_\_\_\_\_  
\_\_\_\_\_ Anti-vortex  
Number of Returns/Inlets \_\_\_\_\_  
In wall \_\_\_\_\_ In floor \_\_\_\_\_  
Size of pipe \_\_\_\_\_  
Number of Skimmers \_\_\_\_\_  
Overflow gutters:  
Number of Outlet Drains \_\_\_\_\_  
\_\_\_\_\_ Hair and lint catcher

3. Fill Spout:  
Location \_\_\_\_\_  
Size of pipe \_\_\_\_\_  
Other method \_\_\_\_\_  
Back-flow prevention \_\_\_\_\_  
Source of water \_\_\_\_\_

4. Deck: Type \_\_\_\_\_  
Finish \_\_\_\_\_  
Minimum with \_\_\_\_\_ ft.  
Slope \_\_\_\_\_  
\_\_\_\_\_ Deck drains \_\_\_\_\_ Diving boards  
\_\_\_\_\_ Hose bib; \_\_\_\_\_ Depth markers  
Number of ladders \_\_\_\_\_  
Number of stairways \_\_\_\_\_  
\_\_\_\_\_ Outside rinse showers

5. Safety Equipment:  
\_\_\_\_\_ Underground lights  
\_\_\_\_\_ Deck lights  
\_\_\_\_\_ Ring buoy w/rope  
\_\_\_\_\_ Floating life line  
\_\_\_\_\_ Shepherd's crook  
\_\_\_\_\_ Spa timer  
\_\_\_\_\_ Telephone

6. Equipment Room:  
\_\_\_\_\_ Weatherproof building  
\_\_\_\_\_ Well ventilated  
\_\_\_\_\_ Sanitary sewer fl. Drain  
\_\_\_\_\_ Fl. 1/4" slope to drain  
Ceiling height \_\_\_\_\_ ft.

7. Chemical Storage Area:  
\_\_\_\_\_ Dry \_\_\_\_\_ Ventilated

8. Circulation Pump:  
Make \_\_\_\_\_  
Model # \_\_\_\_\_ H.P. \_\_\_\_\_

9. Filter:  
\_\_\_\_\_ Sand \_\_\_\_\_ DE \_\_\_\_\_ Cartridge  
Make \_\_\_\_\_  
Model # \_\_\_\_\_  
Circulation rate (GPM) \_\_\_\_\_  
Backwash rate (GPM) \_\_\_\_\_  
\_\_\_\_\_ Pressure gauge  
\_\_\_\_\_ Sight glass  
\_\_\_\_\_ Flow meter  
\_\_\_\_\_ Air relief valve  
\_\_\_\_\_ Pool heater  
Turnover rate (hours) \_\_\_\_\_

10. Automatic Chemical Feed:  
Type \_\_\_\_\_ Make \_\_\_\_\_  
Model # \_\_\_\_\_  
Automatic soda ash feed:  
Type \_\_\_\_\_  
\_\_\_\_\_ Overflow type \_\_\_\_\_ Surge tank

11. Bathhouse/Toilet Room:  
\_\_\_\_\_ Number of toilets, female  
\_\_\_\_\_ Number of toilets, male  
\_\_\_\_\_ Number of urinals  
\_\_\_\_\_ Lavatories \_\_\_\_\_ Showers  
\_\_\_\_\_ Fl. Drain to sanitary sewer  
\_\_\_\_\_ Non-skid floor finish

12. Wastewater Disposal:  
Sewage to: \_\_\_\_\_  
Pool overflow & backwash water to :

FORM COMPLETED BY:

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Title) (Date)

## Pool Drain Safety Compliance Data

Name of Pool \_\_\_\_\_

Address \_\_\_\_\_

### Pump System Flow

Pump Manufacturer \_\_\_\_\_ Model Number \_\_\_\_\_

Maximum Pump Flow (manufacturer's specifications) \_\_\_\_\_ gallons per minute

Maximum Pumping System Flow is reduced to \_\_\_\_\_ gpm based on:

Measured Total Dynamic Head loss of \_\_\_\_\_ feet;

Calculated Total Dynamic Head loss of \_\_\_\_\_ feet;

Magnetic flow meter reading of \_\_\_\_\_ gpm;

Automatic flow limiting valve factory set at \_\_\_\_\_ gpm

(Provide supporting evidence for flow reduction)

### Drain Sump Measurements

Sump width: round \_\_\_\_\_ inches diameter; rectangle \_\_\_\_\_ inches X \_\_\_\_\_ inches

Sump minimum depth \_\_\_\_\_ inches Diameter of outlet pipe to pump \_\_\_\_\_ inches

Distance of top (inside) of outlet pipe from bottom of cover/grate \_\_\_\_\_ inches

### Drain Cover/grate Data

Number of drains on same pumping system \_\_\_\_\_ Distance between drains (on centers) \_\_\_\_\_

Cover/grate manufacturer \_\_\_\_\_, model \_\_\_\_\_

Maximum flow rating of cover/grate \_\_\_\_\_ gpm (floor); \_\_\_\_\_ gpm (wall)

Number of operable skimmer equalizers \_\_\_\_\_

Equalizer fitting Manufacturer \_\_\_\_\_ model \_\_\_\_\_

Equalizer fitting maximum flow rating \_\_\_\_\_

Full name of person providing this information \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

# 2010 POOL INSPECTION CHECKLIST page 1 of 3

## DEPTH MARKINGS AND PLACEMENT

- At both ends of pools
- On the vertical wall of pool and on the edge of deck next to pool
- At points of maximum and minimum depths
- At the transition point
- Separate markings for Divine Area depths
- Not greater than 25 feet apart
- Must contain the word "feet" or abbreviation "ft"
- At least 4 inches high
- In contrasting color to background; slip resistant finish

## SAFETY PROVISIONS

- 12 foot non-telescoping body hook pole
- Ring buoy (1/4 inch throwing rope 50 feet long or half pool width)
- Safety ropes as required to separate areas with properly spaced floats – 5'
- Two hook and rope units required when pool is over 3,000 square feet Number required and present \_\_\_\_\_
- Permanently mounted phone inside pool enclosure or within 75' of bather entrance; visible within pool enclosure or sign posted indicating location; capable of directly dialing 911 or other emergency notification system; accessible to all pool users

## POOL MAINTENANCE

- Decks structurally sound, free of trip hazards
- No loose coping
- Artificial light provided to make all part of pool area visible
- Pool protected by fence
- Gate equipped with self-closing and positive latching closure
- Drain covers in good condition and securely attached with stainless steel screws/no suction
- No damaged face plates or fittings
- All fittings, baskets and weirs in place Baskets required and present \_\_\_\_\_
- Underwater light niches covered and not a hazard
- Diving equipment, pool slides and railing in good repair
- All breaks in grade, stairs, seats marked by contrasting color band
- Chemical storage area and equipment room with:
  - Approved pump, filter and flow meter – all working properly
  - Spare basket for each different size pump
  - Chlorine and Bromine feeders meet NSF Standard 50
  - Pipes and valves labeled
  - Backwash discharged through 6" air gap
  - Proper ventilation

## 2010 POOL INSPECTION CHECKLIST page 2 of 3

### WATER QUALITY

- ph between 7.2 and 7.8
- Main drains visible, secure and in good repair
- Cyanuric acid below 100 ppm
- Bromine at least 2 ppm Level during inspection\_\_\_\_\_
- Chlorine at least 1 ppm for swimming pools Level during inspection\_\_\_\_\_
- Chlorine at least 2 ppm for wading pools Level during inspection\_\_\_\_\_
- Automatic chemical feeder used – must be NSF
- Test kits available and water quality log present
- Daily records kept for 6 months
- Type of disinfectant material will be used:\_\_\_\_\_

### SPAS AND HOT TUBS

- Timer switch not to exceed 15 minutes Timer checked:\_\_\_\_\_
- Contrasting color bands on all steps, treads, seats and benches
- Sign provided if water temp exceeds 90 degrees
- At least one handrail
- Must meet emergency telephone requirements
- Chlorine at 1 ppm Level during inspection:\_\_\_\_\_
- Bromine at 2 ppm Level during inspection:\_\_\_\_\_

### DRESSING/RESTROOM FACILITIES

- Accessible with running water and properly functioning sewage system
- Required facilities in good repair with smooth, non-slip floors kept clean
- Floor drains and hose bibs in place
- Mirrors to be shatterproof
- Water is to be 110° F

## 2010 POOL INSPECTION CHECKLIST page 3 of 3

### REQUIRED SIGNS

#### *Swimming Pools*

- WARNING – NO LIFEGUARD ON DUTY** – letters at least 4” high
- CHILDREN SHOULD NOT USE THE SWIMMING POOL WITHOUT ADULT SUPERVISION** – letters at least 1” high
- ADULTS SHOULD NOT SWIM ALONE** – letters at least 1” high
- POOL CLOSED** (for use when closed)
- The location of the emergency phone is not clearly visible from the pool (Dialing instructions, address of the pool location and telephone number located at the emergency phone)
- A sign prohibiting pets and glass containers
- Sign directing pool users to shower before entering pool
- NO DIVING** markers on pool deck where water is less than 5 feet deep; no greater than 25 feet apart; letters at least 4” high; contrasting color to background OR 6 inch by 6 inch international symbol in red and black on a white background

#### *Wading Pools*

- WARNING – NO LIFEGUARD ON DUTY** - letters at least 4” high
- WARNING TO PREVENT SERIOUS INJURY DO NOT ALLOW CHILDREN IN WADING POOL IF DRAIN COVER IS BROKEN OR MISSING** – letters at least ½” high (if pool has only one main drain)
- POOL CLOSED** (for use when closed)
- Sign directing pool users to shower before entering pool

#### *Spas*

- CAUTION** – “Pregnant women; elderly persons; and persons suffering from heart disease, diabetes, or high or low blood pressure should not enter the spa/hot tub without prior medical consultation and permission from their doctor
  - Do not use alone
  - Unsupervised use by children is prohibited
  - Enter and exit slowly
  - Observe reasonable time limits (that is, 10-15 minutes), then leave the water and cool down before returning for another brief stay
  - Long exposure may result in nausea, dizziness, or fainting
  - Keep all breakable objects out of the area” – letters at least 1/2” in size
- POOL CLOSED** (for use when closed)

APRIL 1, 2006 ALL POOLS WITH SINGLE MAIN DRAIN SHALL BE PROTECTED FROM POTENTIAL BATHER ENTRAPMENT BY A SAFETY VACUUM RELEASE SYSTEM INSTALLED ON THE DRAIN PIPING AND SINGLE DRAINS SMALLER THAN 12 INCHES IN DIAMETER SHALL BE PROTECTED BY AN ANTI-ENTRAPMENT DRAIN COVER MEETING STANDARD.



# Inspection of Swimming Pool Form

N.C. Department of Environment and Natural Resources  
Division of Environmental Health

Demerit Score: \_\_\_\_\_  
Date of Insp/Chg \_\_\_\_\_  
Status Code: \_\_\_\_\_

Health Department \_\_\_\_\_  
Current Facility ID \_\_\_\_\_  
Old Facility ID \_\_\_\_\_

## Inspection of Swimming Pool

Water Supply:  1 Community  3 Non-Transient Non-Community  
 2 Transient Non-Community  4 Non-Public Water Supply

Water sample taken today?  YES  NO  
 1 Inspection  Name Change  
 2 Re-Inspection  Verification of Closure  
 V Visit  Status Change

Wastewater System:  1 Community  2 On-Site System

Name of Establishment: \_\_\_\_\_  
Location Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: NC Zip: \_\_\_\_\_

Pool Operator: \_\_\_\_\_  
Mailing Addr.: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Points  
Deducted  
(Circle)

\* Indicates critical item (6-point demerit)

**WATER QUALITY: (.2535)**

- \*1. Water clear enough to clearly see bottom of pool and pool drain ..... 6
- \*2. Disinfectant residual provided by:  
free chlorine = \_\_\_\_\_ (at least 1.0 ppm or 2.0 ppm where required);  
bromine = \_\_\_\_\_ (at least 2.0 ppm); or  
biguanide = \_\_\_\_\_ (30 to 50 ppm)..... 6
- \*3. Pool water pH = \_\_\_\_\_ (7.2 to 7.8)..... 6
- \*4. Water temperature of heated pool \_\_\_\_\_ °F; does not exceed 90°F  
(swimming pool) or 104°F (spa) ..... 6
- 5. Daily written records of water quality and test kit kept on site ..... 4

**IF ANY (4) OR (6) DEMERIT ITEMS ARE VIOLATED,**

**AN OPERATION PERMIT WILL NOT BE ISSUED..**

**FOR ANY POOLS IN OPERATION, ANY (6) DEMERIT**

**ITEMS WARRANT IMMEDIATE SUSPENSION.**

**POOL MAINTENANCE:**

- \*6. Main drain covers secured and in good repair, no suction hazard. Single  
drains protected by April 1, 2006 (.2537, .2539)..... 6
- 7. Pool walls and floor kept clean, free of debris and in good repair (.2537)..... 4
- 8. Surface skimmers (with weirs, baskets and covers) or gutters clean, in good  
repair, and functioning properly, no floating debris (.2518, .2537) ..... 4
- 9. Depth markings and no diving markers or signs visible and properly located  
(.2523, .2537)..... 4
- 10. Safety ropes with floats and contrasting color bands provided at shallow area  
breakpoints (.2515, .2523)..... 2
- 11. Diving equipment, ladders, steps and handrails properly placed, in good repair  
(.2517, .2521)..... 2
- 12. Inlets and other fittings in place and in good repair (.2537)..... 4
- 13. Contrasting band on steps and benches (.2521, .2516, .2532)..... 4
- 14. Spa timer working properly (.2537)..... 4

**ANY (4) DEMERIT ITEMS WARRANT AN INTENT**

**TO SUSPEND AN OPERATION PERMIT.**

**PREMISES:**

- \*15. Body hook and ring buoy with throw rope or lifeguard with rescue tube  
provided and properly located (.2530, .2537) ..... 6
- 16. Fence or barrier with self-closing, self-latching gates properly constructed and  
maintained (.2528, .2537) ..... 4
- 17. Decks unobstructed, properly drained, free of trip hazards (.2522, .2537)..... 4
- 18. Lifeguards present or warning signs posted (.2530) ..... 4
- 19. Signs prohibit glass containers or pets in pool area(.2530) ..... 4
- 20. Caution signs posted at hot water spas (.2532) ..... 4
- 21. Pool and deck lighting provided at pools that operate at night (.2524, .2537) ... 4
- \*22. Emergency telephone provided (.2530) ..... 6

**EQUIPMENT ROOM:**

- 23. Chlorine or bromine automatic feeders that meet NSF Standard 50 (.2535) ..... 4
- 24. Approved pump, filter, and flow meter operating properly (2518, .2519) ..... 4
- 25. Equipment and chemicals kept in a dry, well-ventilated enclosure (.2533, .2534,  
.2537) ..... 2
- 26. Valves and pipes identified by color codes or labels (.2518) ..... 2
- 27. Filter backwash discharged through an air gap (.2513) ..... 2

**DRESSING AND SANITARY FACILITIES:**

- 28. Bathroom or rest rooms accessible; shower sign posted (.2526) ..... 2
- 29. Required fixtures provided, clean, and in good repair (.2526) ..... 2
- 30. Approved water source, no cross connections (.2512) ..... 2
- 31. Sewage disposed of in a properly operating sewage system (.2513) ..... 2
- 32. Floors smooth, slip-resistant, kept clean(.2526) ..... 2
- 33. Hose bibbs and floor drains provided (.2526) ..... 2

Inspection Conducted by: \_\_\_\_\_  
Report received by: \_\_\_\_\_

EHS I.D.# \_\_\_\_\_ Comment Sheet Attached  
 YES  NO

**Purpose:** General Statute 130A-282 requires the Commission for Health Services to adopt rules governing Public Swimming Pools. 15A NCAC 18A .2511 specifies the contents of an inspection form to record the results of inspections. This form is developed to be used in making inspections of public swimming pools, spas, wading pools and water recreation attractions. Preparation: Local environmental health specialists shall complete the form every time they conduct an inspection. Prepare an original and two copies for: 1. Original to be left with the responsible person. 2. Copy for the local health department. 3. Copy for the Environmental Health Services Section, Division of Environmental Health. Disposition: This form may be destroyed in accordance with Standard 7. Inspection Records, of the Records Disposition Schedule published by the N.C. Division of Archives and History. Additional forms may be ordered from: Division of Environmental Health, 1630 Mail Service Center, Raleigh, NC 27699-1630.



## ***Union County Environmental Health***

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### **2010 SWIMMING POOL FEES**

(Effective April 1, 2009)

Public Swimming Pool Operation Permit	\$275.00
Year Round Public Swimming Pool Operation Permit	\$275.00
Public Swimming Pool Plan Review	\$250.00
Public Swimming Pool Re-inspection Fee (Pool does not meet Rules to obtain Operations Permit)	\$75.00
Public Swimming Pool Re-Inspection Fee (Pool closed due to Rule Violation(s))	\$75.00
Private Swimming Pool Water Testing (Chlorine, pH, Alkalinity, Cyanuric Acid)	\$75.00