BACKGROUND

Plumstead Township has three (3) classes of well permit applications identified as Class 1, Class 2 and Class 3. The Class 1 application is for wells that will serve two or fewer residences or for non-residential wells that will produce less than 1,000 gallons per day (gpd). The Class 2 application is for wells that will serve 3 to 30 single-family units (individual on-lot wells) or for community wells that will serve 15 connections or 25 people or more, and for non-residential units that will require between 1,000 and 10,000 gpd. Community wells require also a permit from the Pennsylvania Department of Environmental Protection (PADEP). Class 3 wells are those which will serve more than 30 residential units or produce more than 10,000 gpd and must also satisfy the requirements of the Delaware River Basin Commission (DRBC) and PADEP.

INSTRUCTIONS FOR COMPLETING THE PERMIT APPLICATIONS

The following instructions are arranged from the top to the bottom of the first page of the application form.

PART I – PERMIT, FEE and DATE

These lines WILL include the permit number assigned by the Township, the fee paid and the date that the application was filed and the fee was paid. This part will be completed by the Township staff.

PART II – OWNER’S NAME, ADDRESS and PHONE NO.

These lines should include the name or names of the owner or owners of the property. The address should be the current legal address of the owner (where the owner receives mail) and the phone number should be the current phone number of the owner.

PART III – SITE LOCATION

These spaces should include the lot number if the land has been subdivided into lots (if not enter N/A), the Tax Parcel Number which can be obtained from the Township office if the applicant does not know the tax parcel number and the street address and town.

PLOT PLAN

This section indicates that a plot plan must be submitted with the application. The plan must show the present property lines, the locations of existing and planned buildings, the existing streets, present and planned wells and all elements of the wastewater disposal system. The separation distances of the wells from the wastewater disposal areas should be shown. The wastewater disposal system means the parts of the system that are in the ground. It does not mean plumbing in the house. If the applicant does not have a formal plot plan, a neat sketch will suffice.
PART IV – WELL DRILLER'S NAME, ADDRESS and PHONE NO.

Simply fill in this information.

Provide also name of approved or proposed development, where applicable.

Briefly describe the purpose for the well you plan to drill.

PART V – DISTANCE FROM WELL TO WASTEWATER SYSTEM

This section shows the minimum separation for elements that may be part of a wastewater system. If you know the distance from the well to the nearest cesspool, septic tank, drain field, sewer line or spray irrigation field, indicate that distance in the appropriate space. If you don't know the exact distance, but you do know that it is more than the required minimum distance, you may indicate >50' or >100'. Distance to known sources of pollution must also be indicated. Community Class 2 wells and Class 3 wells will require sanitary approval from the Pennsylvania Department of Environmental Protection or the Bucks County Department of Health.

PART VI – WATER REQUIREMENTS

In this space indicate the amount of water that your project will require. In most cases it will be appropriate to indicate the requirement in gallons per day (gpd), in some cases gallons per month may be appropriate or in some cases both may be appropriate. If the proposed well is for a new dwelling unit, use the NJ Two-Part Pump Test Method to determine the daily requirement. This requirement is 200 gpd per bedroom for ordinary homes. You can propose an alternate test method, however, the alternate must be approved by the Township.

The remainder of the application is to be completed after the well has been drilled and various tests have been performed.

For Class 2 and Class 3 wells, the information required in Parts VII and VIII can be included in the hydrogeologic report required by Ordinance 2004-04.
WELL PERMIT APPLICATION
CLASS I WELLS
(SINGLE FAMILY RESIDENCE, 2 UNITS OR LESS, & NON-RESIDENTIAL FOR LESS THAN 1000 GPD)

Part I
Permit #: ______________________
Fee: ______________________
Date: ______________________

Part II
Owner's Name: ______________________
Address: ______________________
Phone #: ______________________

Part III
Site Information:
Lot #: ______________________
T.M.P. #: ______________________
No. and Street Address: ______________________

Use for Water
□ Public
□ Community
□ Non-Community
□ Other (Specify)____________________

Type of Construction
□ New Well
□ Deepen Existing Well
□ 2nd Well on Property
□ Geothermal/Heat Pump
□ Monitoring/Testing
□ Agricultural

Sewage System
□ If on-site, Sewage Permit#
□ Year Installed
□ Date Installed
□ Date Finished

Provide a plot plan showing at least the following:
□ Property lines
□ Streets
□ Wastewater Disposal Area
□ Building Locations
□ Well Location
□ Separation Distances
□ Parking Lots & Driveway
□ Easements and Deed Restricted Areas
□ Grade Elevations around proposed well

Part IV
Well Driller's Name: ______________________
Address: ______________________
Phone #: ______________________

Development
Purpose of Well

Part V
Proposed Distance from Well to Wastewater System

□ Cesspools ______________________ (100 feet required)
□ Septic Tanks ______________________ (50 feet required)
□ Drain Field ______________________ (100 feet required)
□ Sewer Lines ______________________ (50 feet required)
□ Spray Irrigation* ______________________ (100 feet required) *Denotes Zone of Saturation

Part VI
Water Requirements:

SHOW INFORMATION ON PLOT PLAN AND ATTACH TO PERMIT APPLICATION

Note:
Prior to the issuance of a Building Permit, the well must be drilled, tested and certified by the well driller (Residential) or geologist (non-residential) to be in compliance with the Plumstead Township's Well Ordinance: (Ordinance No. 2005-05)
WATER CERTIFICATION:

Within 30 days of requesting issuance of an Occupancy Permit the well shall be tested and a water quality certificate meeting or exceeding the Commonwealth of Pennsylvania's drinking water requirements shall be submitted to Plumstead Township. The water quality certification shall include the laboratory's address and Commonwealth of Pennsylvania license number.

The undersigned hereby affirms that the foregoing information is true and correct to the best of said persons knowledge, information and belief; said affirmation being made subject to the penalties prescribed by 18 Pa. C.S.A. Section 4904 (unsworn falsifications to authorities).

<table>
<thead>
<tr>
<th>Site Owner's Signature:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner's Name: (print)</td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td></td>
</tr>
<tr>
<td>Well Driller's Signature:</td>
<td></td>
</tr>
<tr>
<td>Driller's Name: (print)</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approvals:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Township Review: (Date)</td>
</tr>
<tr>
<td>Approved by: (Date)</td>
</tr>
<tr>
<td>Twp. Code Enforcement Officer</td>
</tr>
</tbody>
</table>

To submit for a well permit issuance do the following:
- Complete this form in its entirety,
- Use a ball point pen, and print clearly,
- Do not remove any pages from the well permit application,
- Return the entire application with plot plan attached to Plumstead Township for review.

UPON COMPLETION OF DRILLING AND TESTING, THE FOLLOWING INFORMATION MUST BE SUBMITTED TO THE CODE ENFORCEMENT DEPARTMENT BY MAIL OR FAX (fax # (215) 766-9831) FOR REVIEW AND APPROVAL BEFORE THE WELL CAN BE USED:

A. WELL COMPLETION REPORT
B. WELL DRILLING LOG
C. PUMP TEST WORKSHEET (MIN, 4-HOUR PUMP TEST AT PEAK DEMAND AND CONSTANT HEAD)
D. CHEMICAL ANALYSIS

WELL PERMIT APPLICATION FOR CLASS 1 WELLS

Page 2 of 2
PLUMSTEAD TOWNSHIP

WELL DRILLING LOG
(To be returned to the Township completed)

Project Name and Location

Well Identification  Depth  Diameter  Casing

Driller  Logged By

Time & Date  Comments

Please indicate Interval (feet), Type of rock, Yield (gpm) at significant intervals and Comments.

<table>
<thead>
<tr>
<th>INTERVAL</th>
<th>GEOLOGIC DESCRIPTION</th>
<th>YIELD</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

C:\Plumstead Twp\Instruct for Well Permit Applc.rev.doc
### Secondary Contaminants

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SMCL (mg/L or as noted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH(^1)</td>
<td>6.5 – 8.5 Units</td>
</tr>
<tr>
<td>Temperature</td>
<td>N/A Degrees</td>
</tr>
<tr>
<td>Chloride</td>
<td>250</td>
</tr>
<tr>
<td>Sulfate</td>
<td>250</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>500</td>
</tr>
<tr>
<td>Hardness(^2)</td>
<td>120-150</td>
</tr>
<tr>
<td>Color</td>
<td>15 Color units</td>
</tr>
<tr>
<td>Odor</td>
<td>3 (Threshold Odor Number)</td>
</tr>
<tr>
<td>Turbidity(^3)</td>
<td>0.5 to 1 NTU</td>
</tr>
<tr>
<td>Iron</td>
<td>0.3</td>
</tr>
<tr>
<td>Manganese</td>
<td>0.05</td>
</tr>
<tr>
<td>Copper</td>
<td>0.1</td>
</tr>
</tbody>
</table>

SMCL = Secondary Maximum Contaminant Level.  
\(^1\)pH and temperature can be measured in the field.  
\(^2\)Concentration beyond which softening is recommended.  
\(^3\)Performance standard.

### Microbiological Contaminants

| Coliform Bacteria | 0 |

### Primary Contaminants

<table>
<thead>
<tr>
<th>Parameters</th>
<th>MCL (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>0.01</td>
</tr>
<tr>
<td>Lead</td>
<td>0.005</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.002</td>
</tr>
<tr>
<td>Nitrite</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate</td>
<td>10</td>
</tr>
<tr>
<td>Volatile organic compounds(^1) (VOCs, to include MTBE)</td>
<td>as applicable</td>
</tr>
</tbody>
</table>

\(^1\)The concentration of volatile organic compounds shall meet the primary drinking water standards established by the EPA.  
MCL = Maximum Contaminant Level.
DOMESTIC WELL WORKSHEET FOR TWO-PART PUMP TEST
(sheet 1 of 2)

PUMP TEST

Test Design

Preliminary Well Summary
1. Depth of well .......................... feet
2. Static water level (depth to water from top of casing) .................. feet
3. Number of hours between well completion and measurement of static water level .................. hours

Dwelling Summary
4. Number of bedrooms .......................... 
5. Number of bathrooms ..........................

Peak Demand Test Requirements
6. Peak time (required minimum duration of test, from table 1) ........ minutes
7. Peak demand rate (required minimum discharge rate from pump during test, from table 2) .................... gpm
8. Peak load (from table 4) .................. gallons

Test Measurements

Peak Demand Test
9. Depth to water at beginning of test (static water level) .................. feet
10. Depth to pump at end of test ........ feet
11. Discharge rate measured during test (use minimum observed) .... gpm
12. Duration of test ................ minutes
13. Depth to water at end of test ........ feet
14. Drawdown at end of peak demand test ........ line 13—line 9 = feet

Constant Head Test
15. Constant head pumping rate ........ gpm
16. Duration of pumping at constant head rate ................ minutes
17. Depth to water at end of test ........ feet
18. Drawdown at end of constant head test ................ line 17—line 9 = feet

Evaluation of Results

19. Peak demand test duration. If line 12 is less than line 6 then pass or well fails peak demand test .... failure
20. Peak demand pump test rate. If line 11 is less than line 7 then pass or well fails peak demand test .... failure

21. Calculate aquifer contribution (multiply line 15 by 1440 or use table 3) ................ gpd
22. Daily home water demand (from table 4) ................ gpd
23. Aquifer contribution rate. If line 21 is less than line 22 then well passes or fails constant head pump test .... failure
### Actions Based on Test Results

<table>
<thead>
<tr>
<th>Peak demand test</th>
<th>Constant head test</th>
<th>Action</th>
<th>Peak demand test</th>
<th>Constant head test</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. pass</td>
<td>pass</td>
<td>Go to Pump Placement and Minimum Well Depth (lines 35-37).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. fail</td>
<td>pass</td>
<td>The well must be developed to increase yield, deepened to increase storage or surface storage installed. If the well is deepened or developed, it must be retested.</td>
<td>26. pass</td>
<td>fail</td>
<td>The well must be developed, deepened or redrilled at a new location to increase yield. It must then be retested.</td>
</tr>
<tr>
<td>27. fail</td>
<td>fail</td>
<td></td>
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</tr>
</tbody>
</table>

### ADDITIONAL DRAWDOWN FOR A 6-INCH DIAMETER WELL WITH INSUFFICIENT STORAGE

28. Assured volume

\[ \text{line } 18 \times 1.4 \text{ gallons/foot} = \text{gallons} \]

29. Assured time

\[ \text{line 28/line 7} = \text{minutes} \]

30. Shortfall volume

\[ \text{line 8 - line 28} = \text{gallons} \]

31. Shortfall time

\[ \text{line 6 - line 29} = \text{minute} \]

32. Aquifer contribution volume

\[ \text{line 15} \times \text{line 31} = \text{gallons} \]

33. Required additional storage

\[ \text{line 30 - line 32} = \text{gallons} \]

34. Additional drawdown needed in well

\[ \text{line 33/1.4 gal/ft.} = \text{feet} \]

### TOTAL WELL DEPTH AND PUMP PLACEMENT

35. Minimum total drawdown needed

\[ \text{line } 14 + 10 \text{ feet} = \text{feet} \]

36. Depth below top of casing to place pump

\[ \text{line } 9 + \text{line } 35 = \text{feet} \]

37. Minimum total depth of well

\[ \text{line } 36 + 10 \text{ feet} = \text{feet} \]
Well Completion Form (to be returned to Plumstead Township)

Subdivision ___________________________
Property Owner ________________________
Address ______________________________
Phone ________________________________

Drilling Co. ___________________________
Address ______________________________
Phone ________________________________

Use of well: (Check one)
☐ Domestic ☐ Monitoring
☐ Production ☐ Other

Estimated average daily water use
during peak 30-day period ___ gpd.
Metered? ☐ yes ☐ no

Wastewater disposal
☐ Septic system (located on site plan
☐ Spray irrigation (locate on site plan)
☐ Other

Date of well completion ____________________
Driller's name ___________________________
State license# ____________________________
Depth drilled _______ ft. below land surface
Depth of completed well _____ ft. below land surface
Grout Top _______ ft. below land surface
Grout Bottom _______ ft. below land surface
Casings (ft. below land surface)
Depth to Top _______ ft. below land surface
Depth to Bottom _______ ft. below land surface

Diameter (in) Material (Steel, Iron, PVC)
1) ___________________________ ___________________________
2) ___________________________ ___________________________
3) ___________________________ ___________________________
4) ___________________________ ___________________________

Depth to water yielding zones (ft. below land surface)
Yield (gpm) Method of Treatment
1) ___________________________ ___________________________
2) ___________________________ ___________________________
3) ___________________________ ___________________________
4) ___________________________ ___________________________

Estimated Total Yield (gpm) ___________________________

Pump Information
Installation date __________________________
Pump manufacturer and type ______________________
Motor capacity ____________________________
Pump capacity ____________________________
Pump intake setting _______ ft. b.s.
Current water level _______ ft. b.s.
Pump Installer ____________________________

Name of Geologist supplying data __________________________
Address ____________________________
Phone ____________________________
Date ____________________________
Signature ____________________________
Date ____________________________

(Print) ____________________________

For Official Use: Permit No. ___________ Validated (name & date) ___________