

**APPENDIX K**  
**GUIDELINES FOR REPLACEMENT OF A SINGLE WATER SUPPLY**

## GUIDELINES FOR REPLACEMENT OF A SINGLE SOURCE WATER SUPPLY

- 1) Determine cost effective way to solve a petroleum contamination of a ground water supply by carbon filter, well replacement, connection to an existing public water supply or extension of an existing water district.
- 2) If well replacement is the preferred solution, obtain authorization from Chief, Spill Response Section.
- 3) Prepare Solicitation Package (Attachment "A") or use existing standby contractor with prior approval.
  - II Replacement well and pump specification for site conditions\*\*
  - II NYS DEC required standard clauses (32-02-2)
  - II Available subsurface information such as boring logs, soil samples from observation wells, and/or local knowledge
  - II Set details for return of price quotations
- 4) Prepare and send letters to all local well drillers, those listed in the telephone yellow pages and/or as maintained on a regional list to be solicited. Note in the letter a response is required to remain or be placed on the address list for future well replacement solicitation. Refer to Action Memo 500-11 for additional solicitation documentation and procedures.
- 5) Obtain releases and subrogation receipts (copies in Attachment "B")
- 6) \*Examine quotations, select and award lowest bid, or provide justification for rejection and select the next lowest bid.

\* These steps are only necessary if you have to solicit bids. Otherwise, work may start as soon as you obtain approval to use standby contractor.

\*\* These specifications may be charged to reflect actual site conditions provided prior approval has been obtained from Chief, Spill Response Section

ATTACHMENT "A"

ATTACHMENT WELL, STORAGE TANK, AND PUMP SPECIFICATIONS

Installation of \_\_\_\_\_ ( ) potable water well(s) with domestic water pump and storage tank including all water line and electrical supply connections system repairs and adjustments at the location attached to this proposal. All work under this contract shall be completed by 60 days after the proposal. All work under this contract shall be completed by 60 days after the proposal is accepted. The Contractor shall: furnish to and remove from the site all equipment, materials, tools and labor; comply with rules and regulations; provide licenses, permits, etc. necessary to complete the above work at no cost to the State.

I. GROUTED PORTION OF WELL

This part of the work for each well shall consist of placing and grouting in a \_\_\_\_\_ inch ( " ) casing into the ground to a depth of \_\_\_\_\_ feet ( ' ) (measured from the ground surface) or to a depth as ordered by the Engineer. The method used shall be either:

A. \_\_\_\_\_ inch ( " ) diameter welded permanent casing centered in a \_\_\_\_\_ diameter hole and grouted through the annular space from the bottom up by tremie method. A \_\_\_\_\_ feet. The temporary casing to bedrock will be required is \_\_\_\_\_ feet. The temporary casing will be removed during the grouting problem.

B. \_\_\_\_\_ inch ( " ) diameter permanent casing centered in and suspended one foot above the bottom of a \_\_\_\_\_ inch ( " ) diameter hole and grouted from the bottom up through a drillable grout plug. A \_\_\_\_\_ inch ( " ) temporary casing to bedrock will be required. (The estimated average length of temporary casing to bedrock will be required. (The estimated average length of temporary casing required is \_\_\_\_\_ feet. The temporary casing will be removed during the grouting operation.

C. GROUT OPTIONS

Grout mix will be 6.5 gal. of water and 5 lbs. of bentonite per 94 lbs. sack of portland cement is added. Seventy-two hours of undisturbed set time must be allowed to elapse before drilling operations may continue. The price bid for this portion of each well shall be on a cost per foot basis including all necessary equipment, materials, tools and labor.

OR

Grout will be one part of E-Z Mud mixed with 100 gallons of water, 100 pounds of Benseal will then be briefly mixed with the above mixture before pumping. The price bid for this portion of each well shall be materials, tools and labor.

OR

Other alternative method/product approved by DEC.

II Uncased Portion of the Well

This part of the work for each well shall consist of drilling an \_\_\_\_\_ diameter incased hole from the bottom of the grouted casing to a depth capable of yielding an acceptable quantity of potable water. The length estimated for this incased portion of the well is \_\_\_\_\_ feet ( ' ). This portion of the hole may be terminated or extended as directed by the Engineer. The price bid for this portion of each well shall be on a cost per foot basis.

III. DEVELOPING

Development shall be by jetting, and/or a combination of pumping and surging. Developing time shall be as ordered by the Engineer. A twelve hour developing time is estimated for each well of this contract. The price bid for this part of the work shall be on a cost per hour basis, including all equipment, materials, tools and labor necessary.

IV DISINFECTING AND TESTING

After the test pump is installed, each well shall be disinfected in accordance with the procedure outlined in "Rural Water Supply" published by the New York State Department of Health or as ordered by the Engineer. The Engineer shall be given twenty-four hours notice prior to the start of the pump test. Pump testing shall be at a constant rate compatible with the well yield but not to exceed 5 pgm. The pump test for each well shall consist of four hours of pumping and four hours of recovery. Water level readings will be taken during the pumping and recovery phases of the test at the time intervals as specified by the Engineer. The price for this part of the work shall be on a cost per hour basis including all equipment, materials, tools and labor necessary. No payment will be made for incomplete tests.

V. SEALING OF ORIGINAL WELL

At the direction of the Engineer (after the new well is proved potable and in operation) the original well will be plugged full depth with cement grout from the bottom up (grout mix as in II). The price bid for this term shall be at a cost per foot basis on an average depth of \_\_\_\_\_ feet ( ' ).

VI. INSTALLATION OF PITLESS ADAPTER, PUMP, PLUMBING AND HOOKUP

It is anticipated that this work will be completed under this contract. The cost of this work including equipment, materials, tools and labor will be as bid in this proposal. Item 1. \_\_\_\_\_ ( ) gallon tank with \_\_\_\_\_ ( ) horsepower pump. Bid quotation includes installation and disconnection of existing well. Item 2. A \_\_\_\_\_ ( ) pipe of approved material from well head to house. The pipe will be buried below the frost line or in accordance with applicable rules and regulations. Alignment of this water line will be as ordered by the engineer in coordination with the property owner. Quotations will be bid on a linear foot basis.

VII. TOTAL BID

The selection of the contractor will be based on the sum of the prices bid on the estimated quantities for parts I, (A or B), II, III, IV, V, VI, VII as listed below. All costs direct and indirect shall be included in the total bid. Bid for optional testing will be quoted separately.

VIII. OPTIONAL TESTING OF ORIGINAL WELL

At the direction of the engineer (after the new well is proved potable and is in operation) it may be required that original well be pump tested for four hours. Pump test data shall be submitted to the engineer within five days of the completion of the test. The price bid for this Item shall be on a cost per hour basis and quoted separately.

IX. WELL LOG

An accurate log will be required for each completion well indicating dates of work, location, diameters and depths, materials encountered, noticeable seams or openings, depths at which water was encountered, noticeable seams or openings, depths at which water was encountered, and static water levels taken each AM before drilling commenced. Complete well logs shall be submitted to the engineer within five days of completion of pump test. The cost for this Item shall be included in the price bid for other Items on the contract.

X. METHOD OF PAYMENT

1. It is the intent that payment be made to the contractor within 45 days after receipt by the State of a correctly executed State of New York Standard Voucher Payment (92).

2. The payment package will be submitted to the Regional Oil Spill Engineer and consist of:

- State of New York Standard Voucher
- Appendix A New York State required Standard Clauses (CONR 296) with payments over \$2,500.00
- Invoices showing cost details as quoted
- Statement on letterhead detailing work performed, special problems on installation or operation, and authorizations for special work or subcontractors.

3. Requests for payment of installation and equipment purchases will be in accordance with actual work performed. Payment requests can be submitted on a monthly basis. All well logs, test data and bills for any items installed under Part 5 shall be submitted before final payment is made.

QUOTATION LISTINGS

SP \_\_\_\_\_ Oil Spill # \_\_\_\_\_ (LOCATION) \_\_\_\_\_

I. GROUTED PORTION OF WELLS

A. Annular Space - \_\_\_\_\_ x price/ft. \_\_\_\_\_

B. Drillable Grout Plug - \_\_\_\_\_ x price/ft. \_\_\_\_\_

II. UNCASED PORTION OF WELLS - \_\_\_\_\_ x price/ft. \_\_\_\_\_

III. DEVELOPING - \_\_\_\_\_ x price/ft. \_\_\_\_\_

IV. DISINFECTING & TESTING - \_\_\_\_\_ x price/ft. \_\_\_\_\_

V. ITEM 1 - \_\_\_\_\_ x price/ft. \_\_\_\_\_

\_\_\_\_\_ gallon storage tank  
\_\_\_\_\_ horsepower water pump  
includes installation

Lump sum Price \_\_\_\_\_

ITEM 2

Pipeline connections from \_\_\_\_\_ x price/ft. \_\_\_\_\_  
well head to house \_\_\_\_\_  
\_\_\_\_\_

VI. TOTAL BID

Include site restoration and well logs.

VII. SEPARATE QUOTATION

Optional testing of \_\_\_\_\_  
origin well \_\_\_\_\_ 4x price/hr. \_\_\_\_\_

\* (If price for both A & B are included in the bid, only the lower of the two should be included in the total).

Dear Mr. \_\_\_\_\_ :

The Department of Environmental Conservation is soliciting quotes for the installation of potable water wells with storage tank and pump as described in the attached specifications. The well(s) (is, are) expected to be installed at:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

in the (town, village) of \_\_\_\_\_  
County.

Attached is a map to further locate the residence.

Please provide complete quotations listing in the specifications and return it to me by \_\_\_\_\_  
\_\_\_\_, 198\_\_ attached to your letterhead. The awarded contract may be examined in my office by request.

It is requested that you respond to this letter if you wish to be considered for future solicitation for replacement wells. You may wish to indicate the New York State countries in which you would be willing to install water wells for future replacement well solicitation.

Sincerely yours,

\_\_\_\_\_

Regional Spill Engineer

Attachment

Attachment "B"  
RELEASE IN FULL

We, \_\_\_\_\_ in consideration of a new drilled well to be installed by the Department of Environmental Conservation at the \_\_\_\_\_ premises, do hereby release and forever discharge the New York Environmental Protection and Spill Compensation Fund, upon the installation of said new well from any and all claims or causes of action arising from or growing out of damages of every description sustained by us, whether now apparent or which may hereafter develop, as the result of an oil spill which was discovered on or about \_\_\_\_\_

It is expressly agreed that this release is not to be construed as an admission of liability.

This is a full and final release and satisfaction of all claims.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Seal)

Witness:

\_\_\_\_\_  
\_\_\_\_\_

State of \_\_\_\_\_)

SS

County of \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_  
personally

appeared \_\_\_\_\_ To me personally known to be the signer(s) of  
the

above release and acknowledged that \_\_\_\_\_ voluntarily executed this release

for the uses and purposes therein set forth.

SEAL

\_\_\_\_\_  
Notary  
Public

SUBROGATION RECEIPT

In consideration of and to the extent of the cost of a new drilled well be to installed by the Department of Environmental Conservation at the premises the undersigned hereby subrogates, upon the installation of said new well, the New York Environmental Protection and Spill Compensation Fund, to all of the rights, claims and interest which the undersigned may have against any person or corporation liable for the loss mentioned above, and authorizes the said New York Environmental Protection and Spill Compensation Fund to sue, compromise or settle in the undersigned's name or otherwise all such claims and to execute and sign releases and acquittances and endorse checks or drafts given in settlement of such claims in the name of the undersigned, with the same force and affect as if the undersigned executed or endorsed them.

Warranted no settlement has been made by the undersigned with any person or corporation against whom a claim may lie, and no release has been given to anyone responsible for the loss, and that no such settlement will be made nor release given by the undersigned without the written consent of the said New York Environmental Protection and Spill Compensation Fund in the prosecution of such claims, and to procure and furnish all papers and documents necessary in such proceedings and to attend court and testify if the New York Environmental Protection and Spill Compensation Fund deems such to be necessary but it is understood the undersigned is to be saved harmless from costs in such proceedings.

IN WITNESS WHEREOF \_\_\_\_\_ ha \_\_\_\_\_ hereto set \_\_\_\_\_ hand \_\_\_\_\_ and seal \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_\_

WITNESS: \_\_\_\_\_ (L.S.)

\_\_\_\_\_  
BY \_\_\_\_\_ OFFICER

(Notarization is to be completed on losses where local law requires it.)

FOR INDIVIDUALS

FOR CORPORATIONS

STATE OF \_\_\_\_\_ SS: \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

STATE OF \_\_\_\_\_ SS: \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 19\_\_\_\_,  
BEFORE ME CAME \_\_\_\_\_ TO ME KNOWN  
TO BE THE INDIVIDUAL DESCRIBED IN, AND WHO  
EXECUTED. THE FOREGOING INSTRUMENT, AND  
ACKNOWLEDGED THAT \_\_\_\_\_ EXECUTED THE  
SAME.

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 19\_\_\_\_  
BEFORE ME CAME \_\_\_\_\_ TO  
ME KNOWN WHO BEING BY ME DULY  
SWORN DID DEPOSE AND SAY THAT HE  
RESIDES IN \_\_\_\_\_: THAT HE IS THE \_\_\_\_\_  
OF \_\_\_\_\_ THE  
CORPORATION DESCRIBED IN, AND WHICH  
EXECUTED, THE FOREGOING INSTRUMENT:  
THAT HE KNOWS THE SEAL AFFIXED TO  
SAID INSTRUMENT IS SUCH CORPORATION  
SEAL: THAT IT WAS SO AFFIXED BY ORDER  
OF THE BOARD OF DIRECTORS OF SAID  
CORPORATION: AND THAT HE SIGNED HIS  
NAME THERETO BY LIKE ORDER.

\_\_\_\_\_  
NOTARY

\_\_\_\_\_  
NOTARY