IOWA DEPARTMENT OF NATURAL RESOURCES

Kayla Lyon, Director

Water Supply Engineering: Construction of Emergency Wells

BACKGROUND

This guidance document is to help a Public Water Supply (PWS) obtain approval for construction of emergency wells, when it is determined by the DNR that an imminent health hazard exists when the well source capacity or the drinking water quality is suddenly compromised. These emergency circumstances may not allow for the normal construction permitting process.

Construction of emergency wells is necessary due to:

- A natural disaster such as flood, or similar, have damaged the existing well(s) preventing its use.
- The existing well(s) have been contaminated by an accidental spill.
- Other emergency situations.

An emergency occurs when all wells of the PWS have been compromised. Lack of adequate project planning to allow for the normal permit application process is not considered an emergency.



OBTAINING DNR APPROVAL DURING EMERGENCIES

First, contact the DNR Water Supply Engineering or nearest Field Office (FO). See page 2 for contact information.

Site selection and approval:

- A. Call the DNR Water Supply Engineering or nearest FO to request an out of order, or emergency, site survey.
- B. Verify that the emergency well(s) can meet the separation distances of the 567 lowa Administrative Code (IAC)43.3(7) and Table A.
- C. Also verify that the PWS has legal control of the land for a 200-foot radius around the new well through purchase, lease, easement, ordinance, or other similar means. Proof of this legal control must be submitted to DNR.

Approval for construction of an emergency well:

- 1. Contact the DNR Water Supply Engineering (see page 2), and obtain written authorization to drill an emergency well. The PWS must meet all of the following conditions:
 - a) Construction of the emergency well must follow The Recommended Standards for Water Works (Ten States) Part 3.
 - b) A Professional Engineer (PE) licensed in Iowa must oversee construction of the emergency well, which shall be done by a certified well contractor per 567 IAC 43.3(3) "d".
 - c) The emergency well must be constructed at the site approved by the DNR FO.
 - d) As-built plans and specifications must be submitted to the DNR within 30 days following construction.
- 2. Before beginning use of the emergency well, submit to the DNR satisfactory water testing results of at least bacteriological samples, nitrate, nitrite and manganese.
- 3. Additional water samples are required in the <u>567 IAC Chapter 41</u>. Include the results with the as-built application.

- 4. A Well Water Pollution Prevention Plan (WWPPP) must be followed as part of the National Pollutant Discharge Elimination System (NPDES) <u>General Permit #6</u> requirements. In addition, Best Management Practices (BMPs) should be used during the construction of an emergency well.
- 5. If for some reason the new well must be abandoned, it must be plugged per <u>567 IAC Chapter 39</u> and file <u>Form 542-1226</u>.

As-Built approvals:

Within 30 days of the approved emergency well construction, the PWS must submit the following:

- i. As-Built permit application, fee, plans and specifications of the emergency well, certified by a PE.
- ii. The results of the complete water quality testing per 567 IAC Chapter 41.

DNR FIELD OFFICES CONTACT INFORMATION:

Contact the DNR <u>Water Supply Engineering</u> or call (515) 725-0278. The DNR general number is (515) 725-8200 and the Fax is (515) 725-8201.

You may also contact the nearest DNR FO as follows:



FO1 (Manchester): 563-927-2640

FO2 (Mason City): 641-424-4073

FO3 (Spencer): 712-262-4177

FO4 (Atlantic): 712-243-1934

FO5 (Des Moines): 515-725-0268

FO6 (Washington): 319-653-2135