



## Water Supply Engineering: Guidance for when an Engineering Report and a Construction Permit are Required

### PUBLIC WATER SUPPLY

A public water supply is a system that provides water for human consumption, through pipes or other constructed conveyances, to at least 15 service connections or regularly serves at least 25 people daily for a minimum of 60 days out of the year.

A public water supply can be a community water supply or a non-community water supply.

### PRELIMINARY ENGINEERING REPORT (PER)

During the planning for construction, installation or modification at a public water supply, a preliminary engineering report (PER) may need to be submitted to the DNR. All projects seeking State Revolving Fund (SRF) loans must submit a PER.

For example, adding or modifying a surface or ground water source, treatment processes or treatment capacity, distribution system and water storage tanks, to ensure adequate supply, pressure and compliance with drinking water standards, require that a PER be submitted to DNR.

The PER must include the information required in The Recommended Standards for Water Works (Ten States) Part 1.1, including preliminary design data to comply with the construction design standards of 567 Iowa Administrative Code (IAC) 43.3(455B), and a discussion of the existing or proposed water treatment waste disposal.

A PER must be submitted to DNR, at least 60 days prior to the desired action date. For more information, contact the DNR Water Supply Engineering Section.

### WHEN A CONSTRUCTION PERMIT IS REQUIRED

The 567 IAC 43.3(455B) regulates construction, modification or installation at public water supplies. A construction permit is required prior to constructing, installing or modifying a public water supply system. This includes any raw water source, treatment, storage, pumping and distribution of potable water.

For instance, projects for surface water intakes, wells, raw water transmission pipes and lift stations, pre-treatment, water treatment plant units and controls, pumps, high service pumps, booster stations, elevated storage tanks, ground storage reservoirs, distribution system, water

treatment wastes and all associated processes that are part of a public water supply system, are required to first obtain a construction permit from the DNR prior to construction.

Examples of when a construction permit is required:

- Replacing a 4" PVC water main with 6" PVC pipe.
- Replacing a 6" PVC water main with 6" DIP pipe.
- Replacing a water main at a different vertical and/or horizontal alignment.
- Constructing a new well or modifying an existing well such as wellhead, new casing, pump, pitless unit, controls, etc.
- New water mains, water storage, water treatment processes or components, chemical treatment, controls, pumps, etc.
- Adding or modifying a chemical feed system.
- New or modified water treatment waste disposal system.

Plans and specifications submitted with the construction permit application must be in accordance with the approved PER. Deviations or modifications from the approved PER require an approved addendum.

Public water supplies shall apply for a construction permit at least 30 days prior to the proposed date for commencing construction or awarding contracts. Additional time should be allowed for projects that include new or modified water source, site approvals, water treatment plant, water treatment waste disposal and those seeking SRF loans.

The 30-day period may be waived if it is determined by DNR that an imminent health hazard exists to consumers of a public water supply, including those caused by a natural disaster.

Except for projects seeking SRF loans, the engineering requirements may be waived for simple chemical feed systems, some self-contained treatment units, that meet the conditions of 567 IAC 43.3(4). In such cases, instead of a construction permit, a DNR authorization letter will be issued, subject to final inspection by DNR.

## WHEN A CONSTRUCTION PERMIT IS NOT REQUIRED

Maintenance activities of the public water supply system do not require a construction permit or DNR approval.

Examples of when a construction permit is not required:

- Installation of service connection lines.
- Repairs and maintenance such as cleaning, flushing of water mains, hydrants and water storage structures.
- Painting of water storage structures.
- Replacing water mains, pumps and appurtenances with exactly the same size, material and model.
- Replacing a chemical feed pump or tubing with the same model and size.
- Replacing an existing 6" PVC water main after a break with the same 6" PVC pipe, within the same trench.
- Replacing filter media with the same media.
- Cleaning of water treatment waste settling lagoons.
- Relocation of water main in a rural setting of the same material, diameter, pipe class, in the same easement or ROW, and negligible influence on distribution pressure.
- Mixers for reservoirs.

## CHANGE ORDERS AND ADDENDA

Modifications to the approved plans and specifications of a construction permit must first obtain "Change Order" or

"Addendum" approval from DNR. However, significant changes may necessitate a new construction permit.

For more information, contact DNR Water Supply Engineering Section.

## EXPIRATION OF CONSTRUCTION PERMITS

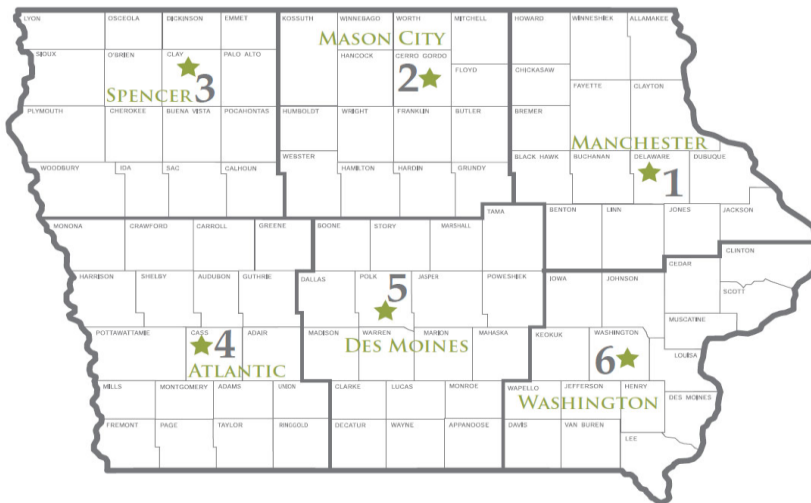
Construction of a permitted project must begin within one year from the date of the permit issuance, or the construction permit is no longer valid.

The DNR may extend the deadline for a maximum of two years, if an extension is requested prior to the expiration date.

## DNR CONTACT INFORMATION

For more information on rule requirements or to download 567 IAC Chapter 43, visit: [567 IAC Chapter 43](#).

If you have any questions about the PER and construction permit requirements, modifications or extensions, or whether a construction permit is required, contact the DNR Water Supply Engineering Section at (515) 725-0278, or visit: [DNR Water Supply Engineering Section](#).



**FO1 (Manchester):**  
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