

SUDAS Revision Submittal Form

Status Date: As of 5/20/2020 **Topic:** Water main LUST interaction
Manual: Design **Manual Location:** Section 4C-1

Requested Revision:

From Section 4C-1 - Facility Design

B. Water Mains

1. Water main pipe will typically be either polyvinyl chloride (PVC) pipe or ductile iron pipe (DIP); and meet AWWA Standards. ~~For larger mains (24 inch and greater), prestressed concrete cylinder pipe meeting AWWA Standards can be used.~~

Designers should use the Iowa DNR's website to determine if there are any leaking underground storage tanks (LUST) sites within 500 feet of the proposed water main: <https://facilityexplorer.iowadnr.gov/facilityexplorer>. Where distribution systems and service connections are installed in areas of known groundwater contaminated by volatile organic compounds (LUST), pipe and joint materials (non-PVC pipe) that do not allow permeation of the volatile organic compounds must be used.

The Iowa DNR requires underground storage tank (UST) owners to meet specific design requirements for USTs installed within 1,000 feet of a community water system. The Project Engineer should determine if there is an UST within 1,000 feet of the project area. If so, the Designer should determine the need to design the water mains to prevent future permeation of any volatile organic compounds into the water system. There are various elements to consider, some of which include soil types, groundwater table depth, size of the UST, age of the UST, etc.

Consult with manufacturers concerning permeation of the pipe walls, jointing materials, valve seats, etc.

Reason for Revision: Match Iowa DNR's permit requirements.

Comments: None.

District: 1 2 3 4 5 6 **2/27/2020 Webinar**

Comments: None.

District: 1 2 3 4 5 6 **4/2020 Webinars**

Comments: None.

Action: Deferred Not Approved Approved

Final District Action Summary: All 6 districts approved.

Board of Directors Action: Approved.