

ANSI/AWWA **F130-22**
(First Edition)

AWWA Standard

Aeration Systems for Biological Wastewater Treatment

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Foreword

This foreword is for information only and is not a part of ANSI/AWWA F130.

I. Introduction.

I.A. *Background.* Aeration systems for biological wastewater treatment bring air into contact with water for the purposes of transferring oxygen into the wastewater being treated. There are many types of aeration systems in use for biological wastewater treatment and this first edition of the standard describes three specific categories: Diffused Air, Jet Aeration, and Mechanical Surface Aeration. Additional categories may be added to future versions of this standard. Aeration systems may also be used for other water treatment applications, such as air stripping of volatile compounds, degasifying, and precipitation of inorganic contaminants, but those applications are outside the scope of this edition of the standard.

I.B. *History.* The need for a standard addressing aeration systems for biological wastewater treatment was recognized by the American Water Works Association (AWWA) in 2016. The AWWA Standards Council authorized the development of a new standard and formed an Aeration Systems Standards Committee to develop the new standard. This first edition of ANSI/AWWA F130, Aeration Systems for Biological Wastewater Treatment, was approved by the AWWA Board of Directors on June 10, 2022.

II. Special Issues. This standard has no applicable information for this section.

III. Use of This Standard. It is the responsibility of the user of an AWWA standard to determine that the products described in that standard are suitable for use in the particular application being considered.

III.A. *Purchaser Options and Alternatives.* The following information should be provided by the purchaser:

1. Standard used—that is, ANSI/AWWA F130, Aeration Systems for Biological Wastewater Treatment, of latest revision.
2. Details of federal, state, provincial, territorial, and local requirements (Sec. 4.1).
3. Aeration system requirements (Sec. 4.3).

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4. Whether updated plans, procedures, and required testing shall be provided (Sec. 4.4.5).
5. Whether or not spare parts are to be provided (Sec. 4.6.7.1).
6. Whether aeration system supplier shall have a representative on-site for the different stages of installation, testing, and initial startup (Sec. 5.1.1).
7. Whether factory testing of diffusers is required.
8. Whether any documentation required for permitting the aeration system is to be provided.
9. Whether or not an Affidavit of Compliance is required (Sec. 6.3).

III.B. *Modifications to Standard.* Any modification to the provisions, definitions, or terminology in this standard must be provided by the purchaser.

IV. Major Revisions. This is the first edition of this standard.

V. Comments. If you have any comments or questions about this standard, please call AWWA Engineering and Technical Services at 303.794-7711, write to the department at 6666 West Quincy Avenue, Denver, CO 80235-3098, or email at standards@awwa.org.



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ANSI/AWWA F130-22
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AWWA Standard

Aeration Systems for Biological Wastewater Treatment

SECTION 1: GENERAL

Sec. 1.1 Scope

This standard describes the minimum requirements for aeration systems and equipment used in biological wastewater treatment. This standard does not cover Aeration Systems in potable water applications, such as air strippers or degasifiers. This standard describes three specific categories of aeration systems: Diffused Air, Jet Aeration, and Mechanical Surface Aeration. Additional categories may be added to future versions of this standard.

Sec. 1.2 Purpose

The purpose of this standard is to provide a minimum set of requirements for aeration systems for biological wastewater treatment. This standard is intended to assist with the design, procurement, installation, and commissioning of aeration systems.

Sec. 1.3 Application

This standard can be referenced for design, procurement, installation, and commissioning of aeration systems equipment used for biological wastewater treatment.