



National Dredging Quality Management Program (DQM)

DREDGE PLANT INSTRUMENTATION PLAN (DPIP) PUNCH LIST—SCOWS

The Dredge Plant Instrumentation Plan (DPIP) for scows shall include the following as a minimum.

Note: The DPIP must have a Table of Contents in the following order and tabs separating sections.

- Black—Basic Monitoring Profile requirements
- Underlined Red—Additional requirements for Ullage Profile

Cover Page

Dredge Name
Document Date
Photo of Plant

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Dredge Contacts

- Dredging Company
- Dredge Point of Contact On Site
- Phone Number
- Email Address

Dredge Monitoring System Provider

- Dredge Monitoring System Point of Contact
- Telephone Number
- Email Address

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Table of Dredge Characteristics

- Scow ID
- Scow Dimensions
- Bin Dimensions
- Scow Type / Disposal Method
- Bin Capacity
- Minimum and Maximum Draft
- Minimum and Maximum Displacement
- Minimum and Maximum Ullage
- Minimum and Maximum Volume

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Sensor Data Collection Method

- Any Averaging
- Transmission from Dredge to DQM Center
- Internet Connection Type and Provider
- Sample rates for data acquisition (standard vs. disposal)

Sensor Descriptions, Locations, and Calibration Methods

- **Positioning System**
 - Brand Name, Model, and Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
- **Scow Heading Instrumentation**
 - Brand Name, Model, and Accuracy
 - Any Calculation Done External to the Instrumentation
- **Hull Status**
 - Brand Name, Model, and Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
 - Calibration Procedure
- **System Power Supply**
 - Brand Name, Model, and Efficiency
 - Battery Charge Method
- **Scow Drafts**
 - Brand Name, Model, and Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
- **Bin Ullage**
 - Brand Name, Model, and Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
 - Calibration Procedure

Calculated Parameters

- **Displacement**
 - Method Used by the Contractor to Calculate Displacement
 - Tables Listing (Fresh and Salt Water) Displacement as a Function of Draft in Feet and Tenths of Feet
- **Bin Volume**
 - Method Used by the Contractor to Calculate Bin Volume
 - Table Listing the Bin Volume as a Function of Bin Ullage in Feet and Tenths of Feet
 - Description of the Datum for Ullage Sounding Measurements

Quality Control

- Description of the Contractor's Quality Control Process
- Log of Sensor Calibrations, Repairs, and Modifications

Appendices

- Certified Displacement and Volume Tables
- Legible Dimensioned Drawings of the Scow with Units in Feet
 - A Typical Plan of the Scow Showing the Following:
 - Overall Scow and Bin Dimensions
 - Locations of Required Sensors Referenced to Uniform Longitudinal and Transverse Reference Points
 - Distance Between the Draft Sensors
 - Distance Between the Ullage Sensors
 - Profile View of the Scow Showing the Following:
 - Overall Scow and Bin Dimensions
 - Distance Between the Draft Sensors and Draftmarks
 - Locations of Required Sensors Referenced to Uniform Vertical and Longitudinal Reference Points
 - Typical Scow Cross Section Through the Bin
- Sensor Manuals and Certificates of Calibration