

Dredge Plant Instrumentation Plan Requirements

The DPIIP shall include the following as a minimum:

(DPIIP must have table of contents in the following order and tabs separating sections)

- Cover Page
 - Dredge Name
 - Date
 - Photo
- Table of Contents
- Contact Information (Address, Phone & E-mail)
 - On Site Personnel
 - Dredging Company
 - Dredge Monitoring System Provider
- Table of Dredge Characteristics
 - Dredging Method (Cutter, Dustpan, etc.)
 - Dredge Dimensions (Length, Width & Draft)
 - With & Without Idler Barge (if applicable)
 - Ladder Length
 - Minimum & Maximum Digging Depths
 - Minimum & Maximum Cut Width

- Number & Types of Pumps (i.e. 1 UW Pump, 2 Main Pumps)
- Minimum & Maximum Pump RPM
- Minimum & Maximum Slurry Discharge Velocity
- Inner Diameters of Suction & Discharge Pipes
- Method for Advancing Dredge (Spud Carriage, Walking Spud, etc.)
- Cutter Spin Direction
- Sensor Data Collection & Transmission Methods
 - Any Averaging Occurring in Data Collection
 - Data Route from Sensors to DQM Computer
 - Internet Connection Type & Provider
 - Sensor Installation, Repair, Replacement or Modification Methods
 - Procedure to Change Contract Number
 - Description of How the UTC Time Stamp is Collected
- Sensor Descriptions, Locations & Calibration Methods
 - Cutter/Suction Head Horizontal Positioning
 - Brand Name, Model & Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
 - Dredge Heading
 - Brand Name, Model & Accuracy
 - Any Calculation Done External to the Instrumentation
 - Cutter/Suction Head Depth
 - Brand Name, Model & Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions

- Calibration Procedure
- Slurry Velocity
 - Brand Name, Model & Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
 - Pipe Diameter at Velocity Instrumentation
 - Calibration Procedure
- Slurry Density
 - Brand Name, Model & Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
 - Pipe Diameter at Density Instrumentation
 - Calibration Procedure
- Pump RPM
 - Brand Name, Model & Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
 - Calibration Procedure
- Pump Vacuum
 - Brand Name, Model & Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
 - Calibration Procedure
- Pump Outlet Pressure
 - Brand Name, Model & Accuracy

- Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions
 - Calibration Procedure
- Manual & Calculated Parameters
 - Vertical Correction
 - Method of Obtaining Vertical Correction (Tidal or River Gauge)
 - Procedure for Updating Tide Station/River Stage Station Name
 - Pipeline Lengths
 - Method of Measuring Pipe Lengths
 - Procedure for Reporting & Updating Pipeline Lengths
 - Booster Pumps
 - Method & Procedure for Reporting Booster Pumps that are Added or Removed from Service
 - Dredge Advance
 - Method & Procedure for Calculating & Reporting Daily Dredge Advance.
 - Outfall Information
 - Method & Procedure for Reporting & Updating Outfall Location Description, Position, Elevation & Heading.
 - Outfall Positioning (if Instrumented)
 - Brand Name, Model & Accuracy
 - Any Calculation Done External to the Instrumentation
 - Sensor Location with Referenced Dimensions