

## Scow DPIP Requirements

Black – Basic Requirements for all profiles

Blue – Add these items to the basic requirements for Monitoring Profile

Green – Add these items to the Monitoring Profile requirements for and Ullage Profile

Purple – Add these items to the Ullage Profile requirements for the TDS Profile

The DPIP shall include the following as a minimum:

*(DPIP must have table of content in the following order)*

1. Dredging Company
  - a. Dredge Point of Contact
  - b. Telephone Number
  - c. Email address
2. Scow Monitoring System Provider
  - a. Scow Monitoring System Point of Contact
  - b. Telephone Number
  - c. Email address
3. Scow ID
4. Sensor repair, replacement, installation, modification or calibration methods
5. Data reporting equipment
6. Procedure for providing sensor data/computed data to DQM Database via e-mail
7. System Power Supply
8. System Battery Charge Method
9. Documentation on how the contract number be changed if the system is left on past the end of the contract
10. System telemetry
11. Dimensioned Drawings of the Scow
  - a. A typical plan and profile view of the scow showing:
    - i. Bin cross sections
    - ii. Locations of required sensors referenced to:
      - (1) fore and aft perpendicular
      - (2) bin length, depth, width, zero reference
      - (3) external hull draft markings (latitudinal, longitudinal, keel)
      - (4) each other
    - iii. overall scow dimensions
12. Criteria and method used to increment trip number
13. Description of how the UTC time stamp is collected
14. Positioning system
  - a. Brand name and specifications
  - b. Sampling rates for data acquisition (standard vs. disposal)
  - c. Scow heading instrumentation brand name and specifications
  - d. Instrument used to calculate COG

- e. Any calculation done external to the instrumentation
  - f. Certificates of calibration and/or manufacturer certificates of compliance
  - g. A description of how scow speed is determined
15. Hull status
- a. Instrumentation brand name and specifications
  - b. Certificates of calibration and/or manufacturer certificates of compliance
  - c. Any calculation done external to the instrumentation
  - d. Criteria for determining hull open/closed
16. Drafts:
- a. Instrumentation brand name and specifications
  - b. Certificates of calibration and/or manufacturer certificates of compliance
  - c. Any calculation done external to the instrumentation
  - d. Criteria used to determine draft
17. Displacement:
- a. Method used by Contractor to calculate displacement based on fore and aft draft
  - b. Tables listing (fresh and salt water) displacement as a function of draft provided by a licensed marine surveyor/ naval architect independent of the contractor (ft and tenths of ft)
  - c. These methods and tables must be an accurate reflection of the current configuration and displacement
18. Bin Ullage:
- a. Sensor brand name and specifications
  - b. Certificates of calibration and/or manufacturer certificates of compliance
  - c. Any calculation done external to the instrumentation
  - d. Criteria used to determine ullage
19. Volume:
- a. Method used by Contractor to calculate bin volume based on fore and aft bin ullage
  - b. Table which lists the bin volume as a function of bin ullage provided by a licensed marine surveyor/ naval architect independent of the Contractor (ft and tenths of feet).
  - c. These methods and tables must be an accurate reflection of the current configuration and volume
20. TDS (Tons Dry Solid)
- a. Method used by Contractor to calculate lightship
  - b. Method used by Contractor to calculate TDS
21. Refractometer
- a. Brand
  - b. Resolution and minimum accuracy
  - c. Method of calibration
22. Contractor Data

- a. Backup frequency
  - b. Backup method
  - c. Post processing
- 23. Archive capability
- 24. Documentation of verification that the reported values are applicable for the sensor and application
- 25. Log of sensor performance and modifications
- 26. Log of Contractor data backup as per Section 3.2.6
- 27. Quality Control Plan as per section 3.5
  - a. Name of Quality Control Systems Manager
  - b. Procedures for checking collected data against known values
  - c. Procedures for verifying telemetry is functioning