

Section 01782

OPERATIONS AND MAINTENANCE DATA

PART 1 GENERAL

1.01 SUMMARY

This Section includes submittal requirements for equipment and facility operating and maintenance manuals.

1.02 MEASUREMENT AND PAYMENT

No separate payment will be made for this item under Unit Price contracts.

For Stipulated (Lump Sum) contracts, the value of approved equipment operations and maintenance manuals is 5 percent of individual equipment value as indicated in Schedule of Values.

1.03 REFERENCES (NOT USED)

1.04 SUBMITTALS

- A. Conform to requirements of Section 01330 – “Submittal Procedures”. Submit list of operation and maintenance manuals and parts manuals to be provided.
- B. Submit two copies, bound in 8½- x 11-inch text pages, three-ring/D binders with durable plastic covers and one CD in PDF format for each manual.
- C. Prepare binder covers with printed title “OPERATION AND MAINTENANCE INSTRUCTIONS,” title of project and subject matter of binder when multiple binders are required.
- D. Internally subdivide binder contents with permanent page dividers, logically organized as described in Item E below; with tab titling clearly printed under reinforced laminated plastic tabs.
- E. Contents: Prepare Table of Contents for each volume, with each Product or system description identified.
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system. For each category, identify names, addresses, and telephone numbers of subcontractors and suppliers. Identify following:

- a. Significant design criteria
 - b. List of equipment
 - c. Parts list for each component
 - d. Operating instructions
 - e. Maintenance instructions for equipment and systems
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents
3. Part 3: Project documents and certificates, including following:
- a. Shop drawings and product data
 - b. Air and water balance reports
 - c. Certificates
 - d. Photocopies of warranties
- F. Within 1 month prior to placing equipment or facility in service, submit operation and maintenance and parts manual for review.

1.05 RELATED REQUIREMENTS

Section 01330 – “Submittal Procedures”

Section 01770 – “Closeout Procedures”

Section 11303 – “Chemical Analyzers”

1.06 QUALITY ASSURANCE (NOT USED)

1.07 SYSTEM DESCRIPTION

A. Equipment Operation and Maintenance Data

Furnish operation and maintenance manuals for equipment. Operation and maintenance manual must contain all information required for the Owner to operate, maintain, and repair equipment. Manual must be prepared by equipment manufacturer, furnished to Project Manager and, as a minimum, contain the following as applicable:

1. Equipment functions, normal operating characteristics and limiting conditions
2. Assembly, installation, alignment, adjustment, and checking instructions
3. Operating instructions for start-up, normal operation, regulation and control, normal shutdown and emergency shutdown
4. Lubrication and detailed maintenance instructions. Maintenance instructions are to include detailed drawings giving location of each maintainable part and lubrication point and detailed instructions on disassembly and reassembly of equipment
5. Troubleshooting guide
6. Outline, cross-section, and assembly drawings; engineering data; wiring diagram
7. Test data and performance curves
8. Detailed drawings giving location of each maintainable part prepared by equipment manufacturer
9. Complete spare parts list with predicted life of parts subject to wear, lists of spare parts recommended on hand for both initial start-up and for normal operating inventory and local or nearest source of spare parts availability.

1.08 – 1.13 NOT USED

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION