

SECTION 01730

GUARANTEES AND WARRANTIES

1.01 GENERAL WARRANTY

- A. The Contractor shall warrant all equipment, materials, products, and workmanship provided by the Contractor under these Contract Documents for a period of twelve (12) months after the date of final acceptance of the work by the OWNER.
- B. If, during the warranty period (a) any equipment, materials or products furnished and/or installed by the Contractor are found to be defective in service by reason of the Contractor's faulty process, structural and/or mechanical design or specification, or (b) any equipment, materials, or products furnished and/or installed by the Contractor are found to be defective by reason of defects in material or workmanship, the Contractor shall, as soon as possible after receipt of written notice from the OWNER, repair or cause to be repaired such defective equipment, materials or products, or replace such defective equipment, materials, or products.
- C. In the event of multiple equipment failures of major consequence prior to the expiration of the one-year warranty described above the affected equipment shall be disassembled, inspected, and modified or replaced as necessary to prevent further occurrences. All related components which may have been damaged or rendered non-serviceable as a consequence of the equipment failure shall be replaced. A new twelve (12) month warranty against defective or deficient design, workmanship, and materials shall commence on the day that the item of equipment is reassembled and placed back into operation. As used herein, multiple equipment failures shall be interpreted to mean two (2) or more successive failures of the same kind in the same item of equipment or failures of the same kind in two (2) or more items of equipment. Major equipment failures may include, but are not limited to, cracked or broken housings, piping, or vessels, excessive deflections, bent or broken shafts or structural members, broken or chipped gear teeth overheating, premature bearing failure, excessive wear, or excessive leakage around the seals. Equipment failures which are directly and clearly traceable to operator abuse, such as substitution of unauthorized replacement parts, use of incorrect lubricants or chemicals, flagrant over or under lubrication and using maintenance procedures not conforming with published maintenance instructions, shall be exempted from the scope of the one-year warranty. Should multiple equipment failures occur in a given item or type of equipment, all equipment of the same size and type shall be disassembled, inspected, modified or replaced, as necessary, and re-warranted for one year.
- D. Neither the foregoing paragraphs nor any provision in the Contract Documents, nor any special guarantee time limit implies any limitation of the Contractor's liability with the law of the place of Construction.
- E. Submit guarantees for manufactured materials or units used in this project.

1.02 START-UP OF OPERABLE COMPONENTS

- A. Because of the need to maintain operation during construction, it will be necessary to accept and start-up operable components of the project at various times prior to the completion and final acceptance of the entire project.
- B. A component of the project, as used herein, shall mean a complete process subsystem and shall include all associated structures, equipment, piping, controls, etc.
- C. When a component of the project has been completed, checked out, field tested, and made ready for operation, the Contractor shall notify the ENGINEER in writing that the component is substantially complete and request an inspection for substantial completion. The ENGINEER will schedule the inspection within 10 days of the Contractor's request. If he concurs in the Contractor's statement, the ENGINEER will notify the Contractor in writing that the component is accepted as Substantially complete. At the same time, the ENGINEER will submit to the Contractor a list of items that must be completed or corrected before final acceptance can be given.
- D. If a component of the project is needed in order to maintain operation during construction and if it has been accepted as substantially complete, the Contractor shall start up the component when directed by the ENGINEER. Once the component has achieved stable and satisfactory operation (minimum 95 percent availability over a 7-day period), the Contractor shall request beneficial occupancy by the OWNER. The OWNER, if he concurs in the Contractor's statement that stable and satisfactory operation has been achieved, will notify the Contractor in writing within 10 days that he is assuming beneficial occupancy of the component.
- E. On the date that the OWNER assumes beneficial occupancy, the following shall occur, if it is not contrary to the General or Supplemental General Conditions:
 - 1. The one-year warranties for the component specified in Part 1.01 of the Section will begin; and
 - 2. The OWNER will assume responsibility for operating and maintaining the component.

END OF DOCUMENT