

1.8 SYSTEM SUPPLIERS

- .1 The supply and installation of instruments, ICPs and control system hardware, and control system application programming, including testing, calibration, commissioning shall be performed as a complete package by an experienced, Instrumentation and Control contractor (I&C contractor).
 - .1 The I&C contractor shall be required to have full in-house capability to engineer, design, fabricate, test all equipment and systems, as well as have the capability to commission the equipment in the field.
 - .2 Submit for review and acceptance by the Departmental Representative the qualifications of the proposed I&C contractor prior to the Preconstruction Meeting. Only the related shop drawings submitted by such an accepted I&C contractor shall be considered for the required work. Delay in submitting the I&C contractor qualifications or by submitting shop drawings from other than an I&C Subcontractor that is not qualified shall not be grounds for requesting an extension of time.
 - .3 The I&C contractor shall have procedures in place for standard project methodology for developing an automation plan, system functional specifications, implementation methods, test plans, integration, testing, staging, installation and startup.
 - .4 Submit the name and qualifications of the I&C Subcontractor for this section of the specification.
 - .5 Provide list of staff that will be working on the project. Provide staff qualifications.
- .2 Include for service technicians qualified by the manufacturers. Unless otherwise specified, only the manufacturer's technicians are acceptable where analyzers, gas detection system, or flow meters are concerned. This includes subcontracting main suppliers and their services as necessary, and especially if called for in the Specification.
- .3 All on site control and instrumentation work shall be performed under the direct supervision of a qualified and experienced supervisor employed by the Instrumentation and Control contractor.
- .4 All equipment shall be designed and installed in full conformity with the drawings, specifications, engineering data, written instructions and recommendations of the manufacturer.
- .5 The Instrumentation and Control contractor shall identify the specific staff members, including system engineers, maintenance engineers that will be responsible for the control system works

specified herein.