Utilizing an Engineer for Additional Requirements

Additional information based upon specific circumstances at each facility may be best obtained by utilizing the services of a professional engineer. Typically the following components of a Program 3 RMP require the services of a qualified professional engineer. Depending on your specific facility additional services may be required.

1. **Piping & instrument diagrams (P&IDs)** - For equipment in the process you must provide piping and instrument diagrams (P&IDs). P&IDS are to be used to describe the relationships between equipment and instrumentation as well as other relevant information that will enhance clarity. Computer software programs which do P&IDS or other diagrams useful to the information package may be used to help meet this requirement.

2. **Block Flow Diagram** - For process technology you must provide a block flow diagram or simplified process flow diagram. A block flow diagram is used to show the major process equipment and interconnecting process flow lines and show flow rates, stream composition, temperatures, and pressures when necessary for clarity.

3. **Mechanical Integrity Program** - Elements of a mechanical integrity program include the identification and categorization of equipment and instrumentation, inspections and tests, testing and inspection frequencies, development of maintenance procedures, training of maintenance personnel, the establishment of criteria for acceptable test results, documentation of test and inspection results, and documentation of manufacturer recommendations as to meantime to failure for equipment and instrumentation.

4. **Review** - Have the professional engineer review your Risk Management Program for completeness, feasibility and adequacy.