Contractual Considerations

- Cost Estimating Tools
- Cost Plus, Rental, Fixed Price
- Bid Items & Combining Bid Items
Historic No. 2 Diesel Fuel Prices
source: U.S. Dept of Energy, Energy Information Administration

- Type of Contracts
- Bid Items
**Inspection & Oversight**

- Inspector Qualifications
- Authorities
- Critical Items & Processes

The Oversight Official is limited from performing the following activities:

- Shall not authorize any deviation from the project documents.
- Shall not undertake any of the responsibilities of the designer or contracting party.
- Shall not issue directions relative to, or assume control over, any aspect of the means, methods, techniques, sequences, or procedures of design.
- Shall not issue directions regarding, or assume control over, safety precautions and programs in connection with site visits by the designer.
- Shall not accept submittals from anyone other than the contracting party.
- Shall not participate in specialized field or laboratory tests or inspections conducted by others.

*From EPA Guidance for Scoping the Remedial Design (Mar 1995)*
Critical Items & Processes

Environmental Dredging Tips

The following comments come from lessons learned from more than 10 years of completing environmental dredging projects with Cable Arm Clamshell Buckets.

1. Communicate project goals to the entire dredging team, thoroughly explaining differences between environmental and navigational dredging.

2. Precision dredging requires a crane in top mechanical condition; precision instrumentation can be wasted on a poorly functioning crane.

3. When digging "to grade," remove soft sediment first with a Cable Arm Environmental Clamshell Bucket. For comparability, sample and test sediments using the same methods both before and after dredging. Determine sampling locations and depths precisely, before and after dredging.

4. Use a differential global positioning system, bucket and crane instrumentation, tide gauge, and dredging software (Clamvision) to track bucket location in 3 dimensions (X,Y, & Z) to control excavation. Be sure that your dredging software provides the operator with a current depth and a target depth for each bucket location.

5. Provide an accurate pre-dredge survey on a grid dense (3 to 5 ft) enough to provide...