



## Hanna Consulting Group, Inc.

1315 Farwell Drive, Madison WI 53704 Phone (608) 257-1922 or (608) 246-0221 Fax (608) 246-0614



*Presents on-Site Training*

# Cumulative Impact of Change Orders

**Dr. Awad Hanna, Ph.D., P.E.**

President, Hanna Consulting Group, Inc.  
Professor, University of Wisconsin, Madison

Hanna Consulting offers customized, integrated packages of training products designed to meet and exceed customer needs on-site.

Most contractors agree that one of the industry's most vexing problems is the change order. Changes, which significantly alter the nature of the work or the materials to be installed, are highly disruptive; so are substantial numbers of allegedly "insignificant" changes. Changes alter the sequence of scheduled activities. They require rework of installations which already been completed in order to accommodate the new design. Change orders usually divert some manpower and equipment needed for original contract work. Besides these expensive impacts on unchanged work, each change order is generally more expensive to perform than an equivalent amount of work in the basic contract.

Topics covered include:

*Recoverable Cost: Direct costs, overhead costs, and impact costs*

*Methods to quantify the cumulative impact of change orders*

- \* *Total Cost Method*
- \* *Modified Total Cost*
- \* *Measured Mile Method*
- \* *Hanna Method*

*Factor approach*

- \* *Overtime*
- \* *Over Manning*
- \* *Second Shift*

Tips for prompt recovery of change order costs

Tracking change orders costs by using manpower loading charts

**If you are interested please contact Hanna Consulting at (608) 513-9690 or (608) 246-0221**