Equipment Relocation Checklist

There are a host of challenges to deal with when relocating an entire plant or production lines—either within the U.S. or between one country and another. This checklist may serve as a guide to all the factors that make for a successful relocation. For additional information or assistance in managing the effort, contact Douglas Hazen (email link).

- **Plan Ahead for Operational Readiness**
  - Often the project team concentrates on the physical aspects of engineering and relocating the equipment early, but does not begin planning the activities required to operate the equipment until it is too late. It is important to integrate operational readiness into the overall planning.
  - Hire the people who will operate the equipment as early as possible; it is ideal to have them involved in the dismantling, procurement and installation activities so they become familiar with the equipment before they need to be operating or maintaining it.
  - Develop a plan and budget for provision of consumable materials that will be used in the start-up, test and commissioning process.
  - During design phase, address Employee Health and Safety (EHS) compliance to reduce costly changes later in the process.
  - Plan for testing and commissioning early to avoid long, drawn-out commissioning periods. Define acceptance, qualification, commissioning and verification targets. Assign resources and separate responsibilities from project initiation.

- **Define the Procurement Process**
  - Develop a stand-alone procurement plan that outlines the procurement process.
  - Prepare a procurement flow chart.
  - Identify the participants and authorization figure.
  - Communicate the plan and process to the project team as well as to individuals who will participate in the program but are not directly assigned to it.

- **Define Engineering Requirements**
  - Clearly define project requirements and scope of work in a request for proposal to engineering firms.
  - Establish construction and installation supervision and on-site participation needed from the beginning through the end of the project and make it part of the request for proposal.
  - Include in the engineering contract the documents that will need to be delivered and the dates they will be required.
  - Avoid open-ended reimbursable costs and over-use of allowances.

- **Allow for Design Input From Key Players**
  - In the Schematic Design Phase, involve the key players in your organization to make important decisions early rather than after installation when the ideas can be costly and time-consuming to implement. This may include:
    - implementing a planning session for the layout of your equipment
    - brainstorming the many ideas your team has to make your production run more efficiently
  - To the extent possible, set the design scope in stone and move forward with implementation.

- **Pre-qualify Contractors**
  - Select contractors that have the experience with the kind of work you are performing and a successful track record. Interview previous clients and visit work completed.
Look for contractors who prefer to work as a partner with you to meet your objectives. Talk to the individuals who will be assigned to your project, not just to senior management. Look for experience and a positive attitude.

**Plan Your Work and Work Your Plan**
- The plan starts with the schedule; define the program from start to finish with sufficient detail that someone outside your group will understand how the project will be completed.
- Assign the task for creating and monitoring the schedule to an individual in your group or to the engineer, contractor or to your program manager.
- Insist on regular review of the schedule and recovery plans for activities that are falling behind.
- Summarize the schedule on one page for reporting to senior level management.

**Define and Coordinate Equipment Layouts**
- Define the equipment layout and procure the equipment arrangement early (for both new or relocated equipment).
- Leverage the design departments of your vendors. Many conveyor companies, for example, can provide substantial layout work for your equipment while they are designing conveyor arrangements.
- Coordinate between your facility and your equipment manufacturer. If key equipment connections are left undefined and must be generated when the equipment arrives on site, there will be costly delays and added costs.
- Refurbished equipment can often be installed by the company performing the refurbishment; this can often accelerate the overall schedule and improve coordination during start-up.

**Focus on Transportation/Importation Logistics**
- With equipment, tools and materials coming from all over the world, logistics can make or break your schedule. Work with experienced companies that can provide efficient transportation and importation, minimizing cross-border hold-ups.

**Plan for Hazardous Material Handling**
- Identify hazardous materials and assign the management resources within your group to make your equipment safe for shipment and installation. Remediation efforts can be costly and take time.

**Establish a Plant Disposition Plan**
- For programs that involve the reconfiguration or closure of existing plants, establish a plan for the engineering and construction work required.
- Assign team members specific responsibilities for the disposition work, so it gets the attention it deserves.

**Assign Accountability**
- Because of the many individuals and entities involved, it is important to assign a project manager with adequate time and staff to manage the various elements of the relocation and with decision-making authority to keep activities moving forward. If internal resources are lean, consider the use of a Program Manager or consultant to assist in implementing the plan and communicating and coordinating with all the players.

For more information, contact Douglas Hazen, Kitchell Mexico, 1707 East Highland Avenue, Suite 125, Phoenix, Arizona 85016, U.S.A.  (602) 222-5300   www.kitchell.com