

Turnaround Discussion Questions – David Garbade, CITGO Petroleum, moderator

Questions which may be considered for discussion:

1. Coping with the shortage of craftsmen:
 - Have you changed your turnaround philosophy due to shortages of qualified craftsmen? For example:
 - Are you doing smaller turnarounds more frequently rather than stretching out the time between turnarounds and having larger turnarounds?
 - Are you doing turnarounds during the summer months or non-traditional seasons?
2. Utilizing international craftsmen:
 - Have you used craft resources from countries such as Canada or Caribbean or Asian countries?
 - How do you address housing international workers?
 - How many have experienced good success in doing this?
3. Is your company hiring more craftsmen, i.e. company employees?
4. Have you tried a unique approach to a turnaround that you would like to share with session attendees? Was it successful or did you encounter unexpected difficulties?

Other questions, if needed:

5. What is your opinion of the accuracy and value of independent, third-party pre-turnaround readiness reviews?
6. What are you doing to offset quality concerns and declines in productivity, if any?
7. What are you doing to address the inefficiencies resulting from stricter requirements for siting temporary facilities?
8. If you are using non-English speaking contract personnel, describe how you are managing this situation.
9. Do you have a documented workflow process that is followed rigorously and enforced?
10. Describe the impact of the new OSHA Chromium Standard on your turnaround work?.
11. How do you control the quality of work done in valve shops (for PSVs, block valves, control valves, etc.)? What is witnessed and what is not? Do you depend strictly on the outside shop for quality control?
12. Is your last PMI (positive material identification) done in the field after the material has been installed?
13. Do you use your usual in-plant contractor to do your turnarounds?
14. Describe your schedule update procedure.

15. Describe what you consider to be the right amount of scheduling. Give an example of how many activities you typically have on a \$10MM turnaround.
16. Turnarounds are costing more today than they did five years ago. What percentage of the increase would you attribute to new requirements for safety, industrial hygiene, environmental, security, etc. rather than actual work? Do you have any problems justifying these additional costs?
17. Describe your contingency planning process.
18. Are you using more union contractors today than you did five years ago?