

# HYDROCARBON PROCESSING®



Maintenance

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## Improving plant performance by changing a maintenance culture

As a leader in maintenance, would you like to have the following results:

- Increasing a maintenance mechanic's productivity by more than 20%?
- Reducing use of onsite continuous contractor labor by more than 20%?
- Coming in under budget for two consecutive years (if you have not done that for several years prior)?
- Eliminating internal maintenance barriers to better reliability performance, and building a solid partnership with operations to address additional improvements to reliability?

Over the last 2 yr, the plant maintenance department (PMD) at Eastman Chemical Co.'s Longview, Texas site produced these significant improvements to plant performance. Most of these results occurred due to a heavy focus on behavior and culture, and not just on processes and tools.

**The purpose of the journey.** In January 2016, the leadership team began a journey to enhance the credibility and value of the PMD. Business conditions were changing, and the approach that had been used was moving the department in the wrong direction. The feedback from the operations group was negative, a trend that could result in the elimination of the PMD.

The vision of the department was to re-engage the workforce so they could drive improved performance from the bottom up, and own that performance. A substantial cultural shift was needed in the PMD to solidify the message that the maintenance team cannot just ask operations for a partnership—they must earn the right to sit at the table.

**The challenge of a culture change.** When this journey began, the PMD's culture could be summed up in two sentences:

1. "I get paid the same if I work hard or not."
2. "Why get better if operations is not going to change?"

Not only had the PMD alienated operations, but they had created a culture of acceptance (e.g., "this is just how it is"). The PMD also had a history of attempted improvement efforts that were either quickly abandoned or failed to be sustainable. The credibility of the PMD leadership was on the line, because of a

past in which they had no part.

The department had three difficult goals to accomplish:

1. Improve the way it presented itself to the operations team.
2. Develop the leadership skills needed to lead the journey.
3. Manage the business of maintenance to sustain the gains.

**The approach to changing a culture.** The first step was to clean up the department's shop, both figuratively and literally. The PMD had existing processes but it had failed to implement and sustain them consistently. The maintenance facilities had also become cluttered, which made it difficult to work effectively. Armed with an aspirational vision statement, the PMD set out to build credibility within the organization and with the operations team.

The change began by redesigning four key customer interface processes:

- The planning process
- The scheduling process
- The daily execution of regularly scheduled jobs
- The optimization of large, complex jobs.

One stark difference in the approach was that the PMD used its own mechanics, planners and schedulers in designing, validating, refining and implementing these process changes. The department also engaged operations management in the effort, seeking and incorporating their feedback on the changes.

It was vital that these processes were tightly linked to reduce the silo effect that hampers so many organizations. This was accomplished by more frequent and structured interactions with the operations team in scheduling jobs. This process reduced the schedule churn that impeded the ability to meet commitments to operations—an essential component of earning a partnership.

The work day of mechanics and/or craftspersons were redefined, as well. Instead of starting at 7 am, their day began in the early afternoon of the previous day, when the PMD and the operations team agreed on a schedule of jobs for the next day. This process provided mechanics with an opportunity to review the job the day prior, identify any issues and be better

prepared when they arrived to execute the work the next day.

Large and complex jobs involving the PMD, multiple contractors and other refinery groups have a major impact on plant availability. The mechanics came up with an approach to greatly reduce—sometimes by up to 50%—the time to execute certain jobs. Not only did this approach greatly satisfy the operations team and increase the PMD's credibility, but it also began changing the behavior of many of the contractors.

**Preparing leaders to lead.** Expecting people to change without demonstrating your own willingness to change is a fool's errand. The leadership team spent a considerable amount of time learning about, and preparing for, the resistance that would come. This preparation included not only the resistance of employees, but the team's resistance to getting out of its comfort zone and actually intervening in the status quo. A commitment was made among the members of the PMD that backing down was not an option.

An outside consultancy<sup>a</sup>, which aided in this culture change, challenged the leadership team with two key thoughts:

- Embrace the journey; do not just endure it.
- If a person is not making themselves uncomfortable, then they are probably not making anyone else uncomfortable. If they are not making anyone else uncomfortable, then they are probably not changing anything, and are surely not leading anything.

Embracing the journey meant that by facing the many challenges and roadblocks, the leadership team would learn more and internalize it better. Ultimately, this would enable the team members to become better managers and leaders.

A key learning aspect was why people do, or do not do, certain things that seem to be logical. The PMD armed themselves with tools to understand how to affect change. Processes and tools will only take a person so far, and the ultimate success of

any change is in learning—and regularly practicing—effective leadership behaviors. Nothing else would matter without those foundational elements.

**Lessons learned.** By combining process improvement with improved tools and metrics, and continuing to practice and demonstrate effective leadership behaviors, the PMD has produced outstanding results. This practice has had positive affects on plant performance and has established the PMD as a partner with the operations team.

The leadership team accomplished something that it had never done before—lead a major cultural change at the facility. The PMD learned that the skills required to manage day-to-day operations are not the same as the skills required to change the way you manage day-to-day operations. They are complementary, but not the same. Changing people's underlying beliefs of how they do their work, overcoming their fear of *change* and allowing them space to learn for themselves (and permission to fail), allowed the PMD to step out of their comfort zone and try a new way of working. **HP**

#### NOTES

<sup>a</sup> Refers to Evolve Partners



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