

A New Way to Handle Scheduled and Unscheduled Plant Service and Turnaround Projects: *INTRODUCING ONE-CALL MANAGED SHUTDOWN SERVICES FROM RUDOLPH LIBBE GROUP*



An efficient, well-managed predictive maintenance program on your plant's process equipment keeps everything running efficiently and offers your best assurance against unscheduled outages, which can often result in safety, financial and operational downtime risks.

But do-it-yourself shutdowns have common issues, which is what Rudolph Libbe Group's One-Call Managed Shutdown Services solves.

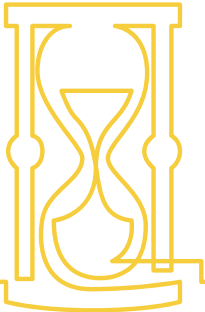
PROBLEMS WITH DO-IT-YOURSELF PLANT SERVICE PROGRAMS: ADDED COSTS AND SCHEDULING DELAYS

When faced with either planned or forced plant service issues, many plant or facility teams use a do-it-yourself approach, contacting multiple contractors and coordinating the work of each of these contractors during the project. However, there can be problems with this approach:

- **ADDITIONAL INTERNAL STAFF TIME:** The time spent calling, coordinating, and managing multiple contractors on a plant maintenance project is significant, and can amount to thousands of dollars of staff time added to the cost of the project.
- **LACK OF FOCUS ON CORE PLANT OPERATIONS:** The time your in-house team must spend managing multiple contractors for the project takes time away from more important production-related duties.
- **SCHEDULING AND DUPLICATION INCREASES SCHEDULE AND COST:** Since each contractor has its own plan for working a specific part of the project, and that plan could interfere with another contractor's work, dealing with multiple vendors increases complexity of safety, schedule and cost. Costs also increase with unnecessary duplication of equipment, which happens when contractors bring the same common equipment on site such as aerial lifts, cranes, or rigging equipment.
- **SELECTING CONTRACTORS NOT SUITED TO PLANT SHUTDOWN WORK:** Selecting contractors whose team and management are not accustomed to the tight schedules, rapid turnarounds, safety requirements and specialized expertise required for plant shutdown work can result in missed deadlines and expensive delays.



- **CONTRACTORS WHO LACK PRIOR EXPERIENCE IN YOUR PLANT:** Contractors who have previous experience working in your facility and with its specific process and manufacturing equipment, gain the experience and efficiency that can minimize downtime required during a shutdown. However, there's no assurance that any contractor will assign the same team members to your next shutdown. When this happens, a new team must re-learn your operation, eliminating the benefit of an experienced team.
- **NOT ENOUGH AVAILABLE TRADESPEOPLE FOR THE SHUTDOWN PERIOD:** Plant shutdown service projects usually require putting a large number of tradespeople on site for the short duration of a plant shutdown, often on a monthly or even weekly basis. For shutdown projects managed in-house, there's no assurance enough tradespeople will be available, and if not, then there may not be enough internal personnel available to complete the shutdown service on schedule.



Any of these problems encountered in a self-managed plant shutdown service project can result in deficient repair work, cost overruns, and additional delays, having a significant impact on plant production leading to financial loss.



[The RLG] crew deserves a big thank you for the work performed during our Central Utility Plant Shut Down. Each time I visited the work site, the crews were working safely and efficiently to finish the task. We were very happy with the amount of man power provided and the quality of the tradesman.

Kevin E. Hartman | Marathon Petroleum Company



The services provided by GEM made our hot dip galvanizing line one of the most efficient and highest output steel producers in the world. Due to GEM's predictive maintenance and millwright services, our downtime periods are scheduled with very few unplanned production outages.

Aaron Dearth | ArcelorMittal

Signs Your Process Equipment Maintenance Programs Need Improvement:

A HIGHER NUMBER OF UNEXPECTED OUTAGES IS OFTEN A SIGN THAT IMPROVEMENTS ARE NEEDED IN PLANT PROCESS EQUIPMENT PREDICTIVE MAINTENANCE.

Warning signs include:

- Higher occurrence of forced shutdowns due to repeated machinery breakdowns
- Utility failures—power losses, switchgear trips, water/gas leaks
- Lack of equipment service documentation



—THE SOLUTION—

RUDOLPH LIBBE GROUP'S PLANT SHUTDOWN SERVICE

ONE CALL FOR YOUR PLANT'S PROCESS EQUIPMENT PREDICTIVE MAINTENANCE

The Rudolph Libbe Group (RLG) Plant Shutdown Service team gives you one-call access to our experienced and safety-trained tradespeople, to save on cost and schedule for your next shutdown.

MANAGED SHUTDOWN SERVICES SAVE TIME AND MONEY:

Combining both in-house tradespeople and a network of proven, trusted contractors, our team provides a total managed solution for any plant shutdown service work. A single phone call to RLG saves you and your plant's production team from coordinating and managing multiple vendors for your next shutdown.

A TURNKEY SOLUTION FOR SCHEDULED SHUTDOWN PROJECTS AND GUARANTEED ON-CALL RESPONSE FOR UNSCHEDULED SHUTDOWNS

FOR SCHEDULED SHUTDOWNS:

- We first conduct an on-site inspection of your plant, processes, and equipment, and safety requirements to create a detailed plan covering all equipment service, repair, and other site work as needed during the shutdown.
- Next, we develop a timeline and schedule for all needed work, including full coordination of contractors and tradespeople required on-site for the project.
- We then execute the plan and manage the shutdown service, taking full responsibility for on-site daily management of the project to complete it on or before the agreed completion date.

FOR UNSCHEDULED SHUTDOWNS:

- For shutdowns due to equipment failure or other causes, we can usually provide on-site service within 4 hours, or any other timeframe to meet your response requirements.



RLG'S MANAGED SHUTDOWN SERVICE:

- Process equipment and utility service
- Machinery service and rebuilding
- Air compressors and systems
- Mill, conveyor, and press service
- Equipment swap-outs and installations
- Electrical switchgear, plus equipment service and repair
- Utility tie-ins
- Building infrastructure: Chillers, boilers, cooling towers, HVAC

In either case, a single phone call to your assigned service representative gets our team in motion. Our experience working with a variety of the region's leading process and industrial manufacturers, automotive companies, and utilities on plant shutdown service has helped us establish a long record of successful projects, safely completed on time and on budget.



WE CREATE A DETAILED PLAN FOR THE SHUTDOWN PROJECT, THEN MANAGE THE PROJECT ON-SITE, SAVING YOUR PLANT STAFF THE EXTRA TIME AND COST OF SELF-MANAGING PLANT SHUTDOWNS, INCLUDING CALLING MULTIPLE CONTRACTORS, COORDINATING, AND MANAGING THE WORK DURING THE PROJECT.








OUR CURRENT CUSTOMERS EXPERIENCE HIGHER PRODUCTIVITY AND FEWER UNPLANNED OUTAGES

There are solid business benefits to improving your plant's performance with predictive maintenance service. It's a fact that many of our customers experience higher productivity and fewer unplanned outages. This translates to substantial, bottom-line business benefits for plant and facility owners, which are often greater than the initial savings gained from better cost efficiencies on each shutdown project.






COMPANIES UTILIZING RLG'S MANAGED SHUTDOWN SERVICE FOR THEIR PREDICTIVE MAINTENANCE OFTEN EXPERIENCE HIGHER PRODUCTION OUTPUT AND FEWER UNPLANNED OUTAGES.

Excess Cost Risk Comparison: DIY Shutdown vs. Rudolph Libbe Managed Shutdown Service

SELF-MANAGED PLANT SHUTDOWN SERVICE

-  Added personnel costs for plant team to self-manage shutdown project
-  Excess time spent by in-house staff to coordinate contractors and estimates
-  Project delays due to contractor reliability, availability or job site coordination problems
-  Added production downtime costs due to plant shutdown schedule delays
-  Added costs and scheduling delays due to insufficient contractor staffing or availability

RLG'S MANAGED SHUTDOWN SERVICES

-  Total day-to-day management of project on-site, eliminating in-house personnel cost
-  Responsible for all contact with tradespeople and contractors
-  In-house tradespeople and proven contractor team provide greater assurance of on-time project completion
-  Proven track record of on-time project completion to minimize risk of added production downtime costs
-  Guarantees adequate on-site staffing for project, to minimize cost risk of project delay



Rudolph Libbe Group's Managed Shutdown Service Team has the experience and knowledge to provide a one-call solution for your predictive maintenance needs. Working with one expert resource means less hassle, less time and less money ensuring your facility is up and running at all times.

For more information or to talk with an expert, email: [**solutions@gorudolphlibbe.com**](mailto:solutions@gorudolphlibbe.com)