

Maintenance (or sometimes referred to as facilities) workers are critical members of an organization. They are tasked with an array of responsibilities that keep the organization functioning by maintaining, repairing, and improving the property and associated systems. These employees are essentially the glue that keeps everything together. As you develop and implement safety programs for your organization, it is imperative to address the specific hazards associated with the tasks performed by maintenance workers and not just hazards associated with your industry. For example, many healthcare facilities have extensive programs established for patient handling, blood borne pathogens, chemical handling, workplace violence, and other hazards clinical workers experience. There is often a gap in their safety programs for the maintenance employees. This oversight is not done with ill-will, rather it can be attributed to several factors:

- The department can range from one person to a team of people, but often they make up only a small percentage of the total employee count.
- The work maintenance personnel typically performs is outside of the expertise of management. Going back to our healthcare example, leadership likely has a strong background in health practices but is less familiar with electrical work, as an example.
- Maintenance employees often work alone or remotely with no direct oversight by management as they perform job tasks that often have a higher potential for resulting in fatal and life-changing injuries such as electrical work, fall from height from using ladders, slips and falls from performing snow/ice removal, etc. The majority of good safety programs focus on protecting employees from their industry-related hazards, but a great safety program encompasses exposures to ALL employees.

Since maintenance personnel handle a variety of tasks that present specific hazards, it is important that the organization recognize the hazards, evaluates risks, and implements controls to protect the lives, livelihood, and loved ones of maintenance personnel.



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Identify Job Duties/ Tasks

First, collaborate with your existing maintenance employee or department to make a list of their job duties. If your organization is in the process of establishing a maintenance department, consider what tasks they would be assigned to perform. As you brainstorm, think through the following:

- What systems, equipment, or components of the facility do they interact with or maintain?
- What are routine job and non-routine job duties?
- Review previous work orders and projects.
- Assess the job description and consider how these tasks are completed – where are they done, how is the area accessed, what tools or equipment are used.
- Consider the work that is currently subcontracted out (i.e., high voltage work or electrical projects), either due to inherent hazards, complexity, scope, or scale, to determine if some of these tasks are still performed in-house by your own staff. For example, you may find that your maintenance person, who is not a qualified electrician, is actually opening 3 phase disconnects to replace cartridge fuses and is exposed to an arc flash hazard up until the point they have verified via a meter that the circuit is in fact de-energized and needs specific hazard training and PPE.

Examples of job tasks may include:

- Inspections of facility components, systems, or equipment
- Mechanical, Electrical, Carpentry and/or Plumbing Work
- Troubleshooting
- Moving, removing, assembling, or disassembling furniture
- Preventative Maintenance on HVAC
- Grounds-keeping
- Replacing or repairing broken fixtures, doors, light bulbs
- Snow and ice removal
- Drywall work and painting
- Using power or hand tools
- Work at heights on ladders or rooftops
- Working with chemicals
- Mobile equipment operations such as boom lifts, forklifts, mowers, etc.
- Driving to pick up supplies



The examples above are by no means all-inclusive, however, they do provide a good visualization of how diverse the job tasks can be which also results in diverse hazards for each that must be considered.

Evaluate Job Duties/Tasks

The next step is evaluating that worklist. To prioritize the list, look at the situations that increase the likelihood of fatal and life-changing injuries such as non-routine work, motor vehicle operations, work from heights, electrical, manual material handling, mobile equipment operation, and other high-energy tasks. As you review the tasks conducted, ask the following questions for each:

- What hazards exist?
- How are those hazards controlled?
- What residual hazards exist after controls?
- How have we established safe work practices? (Policies, Procedures, Job Hazard Analysis, Job Safety Analysis, etc.)
- Do we have the knowledge, competence, qualifications, licenses/certifications, and resources to complete the work safely? Competency and qualifications need to be verified!
- How have we prepared our employees to work safely? (Training, competent person, tools, equipment, etc.)
- What are the “stop work” conditions that employees should be able to identify when performing the tasks?
- How is safe work managed? (Pre-planning, work permits, observations, equipment inspections, etc.)



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Consider Transferring the Risk

Consider whether the work should be done internally or if risk transfer to a qualified and insured contractor is the best path.

- What are the limitations/capabilities of the in-house staff for completing these tasks? For some categories, such as plumbing or electrical, your organization should establish a threshold within that category in which the work can be done internally and at what point an outside contractor is to be called.
 - Job is too complex as it is beyond our technical abilities and skill set – employee is not qualified to do this level of work, such as not being a qualified electrician but may have done some similar work in the past, or think they can do the work because someone showed them how to do it once or twice before.



Maintenance Safety

- Job is too large to undertake with our current in-house resources related to equipment – maybe it requires work from elevated platforms or within a confined space.
 - Job is too large from a scale standpoint for our people to accomplish given other demands on their time – too many man hours away from routine operations, or additional short term help would be needed and finding this help would be a challenge, etc.
- Are employees educated on this threshold to know what is within their scope and when external resources should be utilized?

Pre-planning and Job Completion

Every project should go through a pre-planning process before undertaking the task at hand. This includes the routine and non-routine tasks. A Job Safety Analysis (JSA) and a Job Hazard Analysis (JHA) are good tools to use for this process.

- Have potential issues been addressed early so that specific hazards such as the need for respiratory protection, hearing protection, chemical exposures, etc. have been addressed before the employees begin work and as conditions evolve? Items to consider are:
 - The work to be done
 - The order of the work
 - How the work is to be completed
 - Who specifically will be doing each task
 - The possible hazards and how they are to be addressed
 - Resource availability
 - Limits of the planned task
 - Barriers and issues that need to be resolved
 - Stop work conditions
 - Special precautions or unusual circumstances.

As your organization works through this process, please remember Eastern Alliance's Risk Management department is available to assist. To access additional resources visit our website at www.easternalliance.com or contact your Regional office to speak with your Risk Management Consultant 1.855.533.3444.