FOCUS on FACILITIES
Diocese of Cleveland Facilities Services Corporation

Safety & Maintenance on the Playground

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INTRODUCTION TO PREVENTIVE MAINTENANCE
Those responsible for preventive maintenance of playground equipment know that being proactive in maintaining this equipment will inherently extend the useful service life, as well as their financial investment in serving the children.

First and foremost, with playground equipment, is the need to make sure it is safe for children to use because faulty equipment presents a hazard to the user and a liability for those responsible for the maintenance of the playground area.

TYPES OF PLAYGROUND EQUIPMENT
There are basically four types of playground equipment:

1. Metal material/construction, e.g., jungle gyms, horizontal ladders, etc.
2. Reinforced plastic or fiberglass material/construction, e.g., slide, see-saw boards, etc.
3. Wooden and trek composite material/construction, e.g., fortresses, playhouses, bridges, etc.
4. Ropes and ladders made from heavy rope or chain material.

The plot of land playground equipment is placed on will most likely be covered/filled with pea stone and recycled material (usually 12 inches deep) or safety-tested rubber or rubber-like materials. The condition of the grading should be part of a maintenance visual checklist inspection to ensure the grounds are well kept, the grade is level, and the appearance is appealing.

SAFETY
A "**Visual Inspection Tour**" checklist should be created for use when completing a routine inspection. This routine walk-through visual inspection should be performed, at a minimum, weekly if not daily with each inspection documented on the "Visual Inspection Tour" checklist and filed for future reference.

The focus of this tour versus a preventive maintenance checklist is to ensure the surrounding area is safe and the playground equipment is in good operating condition. From a safety point-of-view, questions including the following, should be asked:

- Is there signage raising awareness to being cognizant of security concerns, e.g., "Playground is not to be in use between the hours after sun set and before sun rise?"
- Is there signage cautioning the use of each specific piece of equipment, e.g., "Please maintain a safe distance from swings that are in use? "
- Is there signage for emergency situation, e.g., "Call 911 in case of injury or security?"
- Is there a potential for tripping hazards?
- Do raised platforms have handrails to prevent tripping and/or falling?
- Are there sharp objects and sharp edges on the surface of this equipment?
- Verify spaces that could trap children, such as openings in guardrails or between ladder rungs, measure less than 3.5 inches or more than 9 inches.

https://www.cpsc.gov/safety-education/safety-guides/playgrounds/public-playground-safety-checklist

https://www.playgroundequipment.com/playground-maintenance-guide/#wlf

PREVENTIVE MAINTENANCE (PM) CHECKLIST

From a maintenance point-of-view there should already be in place a PM checklist document for unscheduled PM assignment, as well as regularly scheduled PM checklists to be issued in early spring, mid-summer, and early fall.

The "**unscheduled**" PM checklist should note the following:

1. Visual inspection notes identifying the deficiency that requires immediate attention, e.g., broken swing seat.
2. PM checklist including:
   - Special instructions for PM of the equipment., e.g., equipment manufacturer's repair instructions.
   - General instructions, e.g., tools, materials, etc. to bring when performing preventive maintenance work on the piece of equipment.
   - Tasking to be performed
   - Complete notes, when applicable, e.g., part(s) needed

The "**scheduled**" PM checklists should follow a similar format as "unscheduled" PM checklist with each checklist falling into the following categories:

1. Metal material/construction, e.g., jungle gyms, horizontal ladders, etc.
2. Reinforced plastic or fiberglass material/construction, e.g., slide, see-saw boards, etc.
3. Wooden and trek composite material/construction, e.g., fortresses, playhouses, bridges, etc.
4. Ropes and ladders made from heavy rope or chain material

CLICK HERE for Playground Safety & Maintenance Checklist.

For further information on PM checklists please refer back to our facility management columns, August 2019 "What a Preventive Maintenance Checklist Includes", October 2020 "A Facility Maintenance Checklist", and November 2020 "Embracing Checklists for Your Job description".

RECORD-KEEPING

Record-keeping is a critical task when maintaining playground equipment and the playground itself. This on-going documentation is essential to maintain a paper-trail noting observations made, as well as to notify others associated with this outdoor equipment.

Children will use playground equipment whether it is new, existing and in good shape, or existing and possibly broken. A routine visual inspection can be a relatively quick, effective, and timely means to inspect existing equipment that show signs of damage. For these reasons safety should be #1 priority when it comes to maintaining this equipment because "with responsibility comes liability".

An organized PM checklist system created from an outdoor equipment database should be established either as a manual/paper process or a computerized spreadsheet. If the facility has a computerized maintenance management software (CMMS) system, the outdoor playground equipment can be inputted into the system and the scheduling of PM checklists can be managed along with other assets requiring routine inspection and preventive maintenance.

Howard McKew is a registered engineer and president of Building Smart Software. Howie has a ton of experience to draw from the various industry jobs he's held and often writes about that experience in his columns in Engineered Systems Magazine. He is the author of 3-books, contributor to other author's books, lectures, and is an active member and Fellow in ASHRAE.

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