## 1. Playground Safety Program Coordinator's role in establishing a comprehensive playground safety management and operations plan

The main goal for playground coordinator is to implement a comprehensive playground management and operation program that meets the owner's expectations.

This will require a team effort.

#### 2. Coordination begins with Leadership

Continue with existing playground inspections and maintenance but start with your new plan implementation as soon as possible.

- 1<sup>st</sup> outline your program step by step based on stated goals.
- Assess the skill sets necessary to complete a specific task as identified in your program outline
- Assess existing staff capabilities and resources and plan to address current knowledge and competence deficiencies.
- Create your Team to implement a Playground Safety Management and Operations Program and address identified deficiencies.
- Develop good job descriptions necessary to address each of your program steps.
- Hiring Competent Staff is no accident. It requires pre-planning.
  - Address training needs as necessary.

## 3. Part III Objective of the Coordinator We are going to focus on Assembling the Team

- Routine Visual Inspections followed immediately with timely effective corrective action will be the foundation of your overall program.
- Understand the differences between Routine Visual, Operational, Annual Main, and Post-Installation Compliance Inspections.
- Revisit the Coordinator's role in creating a knowledgeable trained staff each with specific roles in implementing the Playground Safety Management and Operations Program.
- Key Points of basic inspector training:
  - Best to do all custodial and minor preventive corrective action immediately upon identifying a problem.
  - Empower the inspectors to take immediate action, document the action.
  - Notify their supervisor for further action when a situation cannot be corrected.
  - Know how best to take an unsafe playground component, a play activity, or entire playground out-of-service.

## 4. Primary Functions of Playground Inspections & Maintenance

**Safety** – a reasonably safe play environment for users

**Utility** – keep equipment functioning as designed.

**Sanitation** – hygienically clean, litter free

Attractiveness – aesthetically clean, graffiti free

## Inspection and Maintenance Goal or Philosophy:

To be pro-active (prevent a problem)

Not reactive (only correcting problems)

## 5. Periodic Inspections & Maintenance: What is the purpose of routine and periodic inspections and maintenance:

The playground inspector and maintenance technician's job is to maintain the "Standard of Care" by identify all new hazards on existing playgrounds resulting from rapid or evolving changes, caused by;

- ☑ Environmental Exposure/Deterioration
- ☑ Excessive Wear from User Abrasion
- ☑ Man-made Litter and Organic Debris
- ☑ Missing or Damaged Components
- ☑ Vandalism, Graffiti, or Storm Damage
- ✓ *Most Importantly* Document all Actions

and then take immediate action to mitigate or eliminate those hazards.

#### 6. There are 3-Levels of Inspection Competence

Level 3 - Post Installation and/or Annual Main Inspections
 (Conducted Prior to 1st Use) Verifies play area, playground equipment, and IAS Compliance.

THIS IS NOT THE FOCUS FOR THIS PART OF A PLAYGROUND SAFETY MANAGEMENT AND OPERATIONS PROGRAM. WE WILL FOCUS ON LEVEL 1 AND 2 INSPECTIONS. THESE INSPECTIONS ARE REGULARLY SCHEDULED AND TYPICALLY INCLUDE MAINTENANCE, AND REPAIRS.

- Level 2 Operational and/or Annual Main Inspections (once per/year or periodically/less frequent)
- Level 1 Routine Visual Inspections
  (frequently reoccurring maintenance tasks)

#### 7. What Level of Inspections and Maintenance is enough? Depends on the Depth of Content

#### **Operational or Annual Main Inspection**

Because it is conducted less frequently it is more specific and in-depth.

**FOCUS:** Preventive Maintenance Tasks and Manufacture's Requirements and addresses all aspects of **Safety, Function, Sanitation, and Aesthetics** for entire area.

## **Routine Visual Inspection**

Because it is conducted more frequently it is very generic in scope.

**FOCUS:** Routine Maintenance Tasks Custodial Type Maintenance addressing rapid changes, and less technical maintenance and repairs.

## 8. What are the Variables that Affect the Inspection Frequency

#### **Use Factors:**

- Extent of playground use
- Ages of children using playground
- Vandalism patterns

## **Development Factors:**

- Type of surfacing materials
- Materials used to manufacture.
- Age and type of equipment

## **Environmental Factors:**

- Soil/drainage conditions
- Climatic/Atmospheric conditions

## Plus, any Manufacturer's Requirements

## 9. Purpose of different types of Inspection Forms

#### All Inspection Forms and Processes Provide,

- Consistency and Uniformity
- Document deficiencies and corrective actions in writing
- Require signatures, dates, start and finish time, plus notifying management of unaddressed site conditions.
- Be reviewed and signed by management.

## **Routine Visual Playground Inspections**

- Generic Form should suffice for all.
- · Conducts general assessment and necessary maintenance of entire play environment.
- Notify management of any conditions that cannot be addressed at this time.
- Notify supervisor of any major safety concerns that may require additional immediate corrective action.

## **Operational or Annual Main Inspections**

- **Specific Unique Form** for each playground.
- Evaluate each piece of play equipment and each type of playground protective surfacing on site. (Field Drop Testing)
- Incorporates all manufacture's requirements.
- · Documents all corrective action.
- Identifies major safety concerns that require immediate action and notification of your supervisor when the problem cannot be corrected.

#### 10. Level 2 - Operational and/or Annual Inspections Maintain Owner's Standard of Care.

#### Inspector: Supervisor/Crew Leader/Trades Level and CPSI

This level of inspection focuses more on preventive actions to maintain the safety, appearance, function, and performance of the playground equipment and IAS.

- Inspection requires more technical knowledge, skill, training, and experience of both equipment and IAS.
- **Level 2 Inspection** is based on the site-specific play equipment and protective surfacing, local environmental conditions, local geography, unique site conditions, and specific manufacturer's requirements.
  - A comprehensive "Master Checklist" would be helpful in achieving consistency and conformity of results due to the diversity of play equipment, IAS, and site amenities from one playground to the next.
  - The "Master Checklist" should include most common maintenance problems associated with each type of play equipment, IAS, and site amenities commonly found in a playground environment.
    - (A Master Checklist will be very helpful with inspector on-the-job training)

Such a checklist for conducting a playground maintenance needs assessment is available in; *Playground Safety Is No Accident, 6<sup>th</sup> Edition, 2021, International Playground Safety Institute www.internationalplaygroundsafetyinstitute.com* 

#### 11. Sample Master Checklist Item:

## Maintenance Needs Assessment for a Playground Amenity - Fencing

**Item:** Special situations may require fencing for the safety and control of children. Fencing should be checked during periodic maintenance inspections.

## **Inspection Process:**

- 1. Visually inspect the entire fence paying close attention to top and bottom edges, all fence posts, fasteners, and gates.
- 2. Grasp and rock each post in all directions to ensure they are well-anchored.
- 3. Operate all gates for proper opening and closing of gate hardware.
- 4. The following undesirable conditions should be corrected.
  - Any fence post not well-anchored to the ground.
  - Fencing mesh fabric not secured to the posts, rails, or tension wire.
  - · Loose or missing fasteners or other parts.
  - Presence of sharp edges or protrusions.
  - Fencing material is broken, damaged, or deteriorated.
  - End caps missing on tubular posts or rails.
  - Gate latches or hinges broken or malfunctioning.
  - Inspector repairs deficiencies or notifies supervisor and documents actions.

#### 11. Continued - Sample Master Checklist Item:

## Maintenance Needs Assessment for <u>Playground Equipment</u> – <u>All Types</u> Operational and Annual Main Playground Inspections:

Requires a standardized checklist to be used for each inspection. Checklist identifies essential conditions that must be evaluated along with the most common maintenance problems likely to be encountered during the inspection.

- Process must include specific tasks required by the equipment or surfacing manufacturer.
- Whenever possible maintenance items should be performed during the inspection process.

## **Inspection Process: General Conditions**

During the process conditions that could affect structural integrity will be identified, such as:

- · Damaged or cracked mountings or footers,
- Missing, loose, badly worn, or deteriorated fasteners, connectors and connecting fasteners,
- Broken, damaged, or deteriorated materials.
- Always assess the condition of the protective surfacing within the equipment use zone
- Inspector repairs deficiencies or notifies supervisor and documents actions.

#### 11. Continued - Sample Master Checklist Item:

# Maintenance Needs Assessment for <u>Specific Equipment Conditions by Type</u> Example: of Common Maintenance Problems - <u>Freestanding Slides</u>

- Perform a maintenance needs assessment on the different materials used in slide construction.
- Check for missing, loose, badly warn or deteriorated fasteners or couplings.
- Check steel fasteners, weld points, or other metal parts are badly corroded.
- Component protective coatings may be blistered, peeling, or chipped.
- Non-metal slide beds may crack or break (Plastic will become brittle due to UV) metal slides may develop sharp edges or break at welds or seams.
- Footers may become exposed or have insufficiently covering.
- IAS in the use zone of slide may be insufficient, especially at the base of ascent or at slide exit use zone.
- Slide bed exit region may project above the horizontal plane causing it to collect litter and moisture
  - This is often caused by improper installation or freeze thaw cycles causing the footer to rise out of the ground.
- Perform any additional maintenance inspections and tasks as specified by manufacturer.
- Inspector repairs deficiencies or notifies supervisor and documents actions.

#### 12. Basic Playground Training Program Curriculum

- Basic knowledge about the benefits of play and causes of playground injuries
- · Introduction to standards and public entity general liability
- Understanding the "Diamond of Care"
   (Knowledge-Inspection-Corrective Action-Documentation)
- Understanding the causes of material biological and mechanical deterioration (Concrete-Wood-Plastic-Metal)
- Understanding how to inspect, maintain, and when to replace hardware; (fasteners-connectors-connecting fasteners)
- Understanding maintenance/repair of surfacing types- loose-fill and unitary.
- Introduction to different types of playground inspections.
- Review importance of record keeping and documentation.
- Introduction to effectively taking something out-of-service.
- Review most common playground area maintenance problems. (Master Checklist)
   (Site Amenities Total Play Environment playground equipment All AIS types)

## 13. Focus of Playground Routine Visual Inspections

#### Verify required signs are present and legible

(intended user age-supervision statement-entanglement warning-hot equipment or surfacing warnings)

#### Signs must send appropriate, concise, and understandable message

(pictograph or universally accepted symbols work best)

## 14. Focus of Routine Playground Inspections - IAS

- Benchmark Finished Grade for all Loose-fill Surfacing Material
- Inspect for foreign materials especially within equipment use zones and remove any extraneous materials that could cause injury, infection, or disease.

CPSC says falls on improper impact attenuating surfacing accounts for over 70% of all serious playground injuries and are the  $2^{nd}$  leading cause of death.

## 15. Focus of Routine Playground Inspections – IAS

- Inspect and maintain proper depth of loose-fill surfacing.
- (CPSC suggest minimum of 9.0 inches for most common organic surfacing materials and good subsurface drainage system)

## 16. Focus of Routine Playground Inspections

Inspect for unstable equipment and loose footings.

## 17. Focus of Routine Playground Inspections

- Identify Missing Parts or Fasteners (repair or remove-from-service)
- Use manufacturer's Parts unless otherwise directed by manufacturer in writing.

## 18. Focus of Routine Playground Inspection

- Inspect and replace worn fasteners, fastening connectors, and connectors.
- (Max. 30% wear rule)

#### 19. Focus of Routine Playground Inspections

Know how to effectively take an entire playground, a piece of defective play equipment, or a broken play component out-of-service.

- When might yellow caution tape versus orange plastic crowd control or snow style fence versus a more permanent and higher chain link fencing or some other method appropriate?
- Notifying management and public?
- Effective signage?

#### 20. Inspect and Assess all Landscaping

## Look for Dead Limbs within Striking Distance of the Play Area

- Dead trees and/or tree limbs and other landscape materials in and around the playground that could cause serious harm should falling limb strike a user.
- Inspectors should evaluate the situation and immediately report dead plant material to proper authorities responsible for the plant material in question.

## 21. A Final Thought . . .

Not all playground accidents "just happen".

They may occur because the proper actions that could have minimized the user's exposure to the unsafe condition were ignored and resulted in an accident.

Who failed in their responsibility to properly maintain the playground on behalf of the children?

#### Don't let this be you.

#### And Remember

"Maintenance, like fine art, is 90% knowing how, 8% preparation, and 2% execution."

Monty Christiansen 2010 Forward to Maintaining Child's Play ©PDRMA 85/165.046