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**Audit of Parks and  
Recreation Division —  
Hazardous Materials**

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Orange County, Florida**

[www.occompt.com](http://www.occompt.com)



**Report No. 504  
October 2023**

## County Audit Division

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### Orange County Comptroller's Office

#### Mission

The mission of the Orange County Comptroller's Office is to serve the citizens of Orange County and our customers by providing responsive, ethical, effective, and efficient protection and management of public funds, assets, and documents, as specified in the Florida Constitution and Florida Statutes.

#### Vision

The vision of the Orange County Comptroller's Office is to be recognized as a highly competent, cohesive team leading the quest for continuing excellence in the effective safeguarding and ethical management of public funds, assets, and documents.

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**OFFICE OF THE COMPTROLLER**

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October 12, 2023

Jerry L. Demings, County Mayor  
And  
Board of County Commissioners

We have conducted an audit of the Orange County Parks and Recreation Division's (Parks) safe storage, handling, and management of hazardous materials. The audit period was from July 2020 through June 2021. We performed site inspections in November 2021.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Responses to our Recommendations for Improvement were received from the Parks Manager and are incorporated herein.

We appreciate the cooperation of Parks personnel during the course of the audit.

Phil Diamond, CPA  
County Comptroller

c: Byron Brooks, County Administrator  
Carla Bell Johnson, Deputy County Administrator  
Venerria Thomas, Director, Community and Family Services  
Matt Suedmeyer, Manager, Parks and Recreation Division



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## Why This Audit Is Important

The Parks and Recreation Division (Parks) has over 100 sites spread throughout Orange County. Parks has approximately 32 manned sites plus the Operations Support Facility. These sites may store multiple hazardous materials like paints, flammable aerosols, compressed gas cylinders, pesticides, fertilizers, sodium hypochlorite, muriatic acid and sulfuric acid. The proper storage and handling of hazardous materials is essential to providing a safe working environment for Orange County employees, contractors, and the public. Training, information, personal protective equipment, timely compliance with inspections and periodic internal safety inspections are necessary to identify hazards, monitor safety compliance, and ensure corrective actions are taken appropriately to foster a safe workplace.

## What We Found

### **Hazardous Materials Were Not Labeled Appropriately (Page 8).**

During inspections, Audit identified hazardous materials stored in containers with illegible, improper, or no label at all five sites inspected. This was a widespread issue at the Operations Facility.

### **Hazardous Materials Were Not Stored Appropriately (Page 10).**

During inspections, we identified fertilizers that were not stored according to Safety Data Sheet requirements at Blanchard Park and the Operations Facility. Additionally, chlorine was stored inappropriately at Bithlo Park. At the Operations Facility, we observed oxygen and acetylene tanks stored next to each other and an oxygen cylinder was not secured. Additionally, we noted various leaking or broken hazardous material containers at numerous facilities.

### **Fire Safety Cabinet Storage Was Not Always Appropriate (Page 9).**

Fire safety cabinet access was obstructed by work vehicles, tools, equipment or large chemical containers at these same sites. Additionally, we noted corroded containers inside a fire safety cabinet, materials on top of cabinets, rusted fire safety cabinets and one fire safety cabinet that was over capacity.



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**Safety Equipment Was Not Easily Accessible and Ready for Immediate Use (Page 12).**

We identified safety equipment that was not available, easily accessible or functional during inspections. For example, there was no fire extinguisher or eyewash station where corrosives were stored at two parks. We found various instances of limited or obstructed access to fire extinguishers and eyewash stations. We also noted instances where eyewash solution was not ready for immediate use at two sites. Additionally, the fire extinguishers at the Operations Facility had not been inspected for over 2.5 months. Nine fire extinguishers at Blanchard and Ft. Gatlin Parks had not been inspected within the month before our inspection.

**Corrective Action Was Not Timely Performed for Items Noted on Inspections (Page 13).**

Two of 15 (13.3%) deficiencies related to hazardous materials identified by Risk Management were not corrected and two other items were not timely corrected.

**Parks Did Not Have a Current Written Hazard Communication Program (Page 15).**

Parks did not have a current written hazard communication program. As a result, there was not a complete list of hazardous materials at Parks sites.

**Employees Were Not Adequately Trained (Page 16).**

OSHA's Hazard Communication Standard includes training requirements for employees working where hazardous materials are on site. We found that 20% of employees did not take at least one of the required new hire and refresher training classes.

**Overall Evaluation (Page 7)**

Based on the results of our testing, Parks and Recreation should improve the storage and handling of hazardous materials to comply with applicable regulations and the Orange County Health and Safety Manual.



## INTRODUCTION

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### Background

The Parks and Recreation Division (Parks) operates and maintains over 100 parks, preserves and trails encompassing over 14,000 acres. Amenities at various Parks locations include camps, playgrounds, pools, splash pads, and afterschool programs. Parks welcomes more than 9 million visitors a year. Parks has approximately 32 manned sites plus the Operations Support Facility (Operations). Various Parks locations store hazardous materials including paints, flammable aerosols, compressed gas cylinders, pesticides, fertilizers, sodium hypochlorite, muriatic acid and sulfuric acid.

#### Hazardous Materials

Occupational Safety and Health Administration (OSHA) developed a Hazard Communication Standard to “ensure that the hazards of all chemicals produced or imported are classified, and that information concerning the classified hazards is transmitted to employers and employees.” The Hazard Communication Standard includes regulations for labeling, safety data sheets (SDS), employee information and training. The Hazard Communication Standard states the hazard information must be provided by employers to employees through a written hazard communication program that details:

- A list of the hazardous chemicals known to be present in the workplace;
- Explanation of the labels received on shipped containers and the workplace labeling system used by their employer;
- The SDS, including the order of information and how employees can obtain and use the appropriate hazard information;
- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area;
- The physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area; and
- The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.

## INTRODUCTION

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### Pesticides

The Environmental Protection Agency (EPA) regulates pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The EPA regulated labels are legally enforceable. The storage and handling requirements on the EPA regulated labels supersede SDS requirements.



THE LABEL IS THE LAW

### Audit Scope

The audit scope was limited to procedures for safe storage, handling, and management of hazardous materials. The audit period was from July 2020 through June 2021. We performed site inspections in November 2021.

### Audit Objectives

The objectives of the audit were to ensure the Parks and Recreation Division:

- Has a current written hazard communication program (HCP);
- Provides employees proper information and training in accordance with the OSHA Hazard Communication Standard and the Orange County Safety and Health Manual;
- Ensures applicable employees maintain Public Applicator Pesticide Licenses;
- Corrects inspection issues timely related to hazardous materials;
- Stores hazardous materials properly based on applicable OSHA Regulations, SDS and EPA regulated labels.

### Audit Methodology

To meet the audit objectives, we performed the following procedures:

- Confirmed the existence of a written HCP;





## INTRODUCTION

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- Reviewed the content of employee trainings to ensure they included OSHA required elements and reviewed records to verify such trainings were timely provided to employees;
- Confirmed that applicable employees obtained and maintained Public Applicator pesticide licenses.
- Requested and evaluated supporting documentation to determine whether inspection issues noted by Risk Management were corrected timely; and
- Observed select Parks sites to validate whether hazardous materials were stored and labeled appropriately, proper safety equipment was available for immediate use, and SDS were available at the workplace for a sample of chemicals.

### Overall Evaluation

Based on the results of our testing, Parks and Recreation should improve the storage and handling of hazardous materials to comply with applicable regulations and the Orange County Health and Safety Manual.

**1. Management Should Ensure that Hazardous Materials Are Handled Appropriately.**

In order to verify that Parks complied with OSHA regulations, our office inspected five Parks locations with the assistance of a professional environmental consulting firm (Consultants) at:

- Operations Support Facility (Operations)
- Blanchard Park (Blanchard)
- Bithlo Community Park (Bithlo)
- Ft. Gatlin Recreation Complex (Ft. Gatlin)
- Kelly Park/Rock Springs (Kelly).

Inspections included, but were not limited to, reviewing whether:

- Hazardous materials were appropriately labeled;
- Hazardous materials were stored per applicable regulations;
- Safety equipment was available, easily accessible, and in good working condition; and,
- Emergency plans included required elements per applicable regulations.

Several areas of improvement were identified during the inspections and are summarized below.

**Labeling**

OSHA’s Hazard Communication Standard includes labeling requirements for hazardous materials. All five sites inspected had hazardous materials stored in containers with illegible, improper, or no labels at all.



**Containers with illegible, improper or no labels**

Additionally, labels affixed to some hazardous material containers did not include the hazardous contents — either in words or pictograms. The majority of the

improperly labeled containers were secondary containers.<sup>1</sup> Improperly labeled hazardous materials were a pervasive issue at Operations. When container contents are unknown it is difficult (if not impossible) to identify appropriate storage requirements or respond to an accidental release.

**Flammable Materials**

There were fire safety cabinets to store flammable materials at all inspected sites. However, during the inspections, we noted the following issues related to flammable materials:

- A cart holding flammable cleaning materials was stored in the Bithlo kitchen next to the stove. A warning label on at least one of the cleaning products indicated that the container should be stored away from hot surfaces.
- Items were stored on top of fire safety cabinets at four of the five sites. Most of those items were combustible. Additionally, corroded containers were stored inside one fire safety cabinet.
- One cabinet was over capacity at Blanchard. Two cabinets were rusted at Kelly Park.



**Cardboard on top of flammable cabinets**



**Flammable materials  
stored next to stove**

- Access to fire safety cabinets was obstructed by work vehicles, tools, equipment, or large chemical containers at four of the five sites.

<sup>1</sup> After contents are transferred from one container to a second container, the second container is called a “secondary container”.



**Combustible items on top of fire safety cabinets and obstructed access to cabinets**

**Improper Hazardous Material Storage**

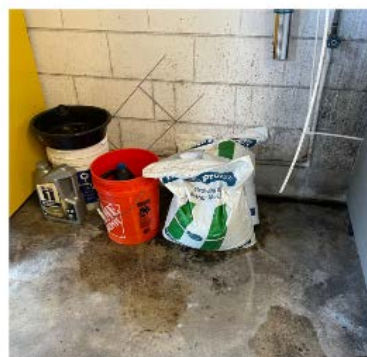
We also identified instances of improper hazardous material storage:

- According to SDS requirements, fertilizers were stored inappropriately at two sites.
  - At Blanchard, fertilizer was stored on top of a puddle of water.
  - At Operations, multiple pallets of fertilizer required to be locked up were not locked up.
- Water treatment chemicals were stored inappropriately. Chlorine should not be stored with any acid. Chlorine was stored with sulfuric acid at Bithlo Park.



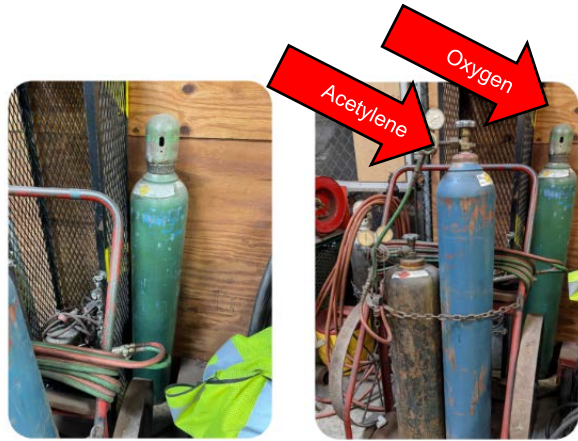
**Chlorine stored with acid**

**Fertilizer on top of water puddle at Blanchard**



In addition, numerous hazardous material storage issues were noted at Operations, including:

- Oxygen and acetylene tanks not in use were stored next to each other.<sup>2</sup>
- An oxygen cylinder was not chained/secured to prevent it from falling.<sup>3</sup>
- Leaking or broken hazardous materials containers:
  - Gas and/or oil was leaking on the floor of a warehouse bay,
  - A pallet of disinfectant included a stained box indicating that the box contents may have been leaking,
  - Broken insecticide containers, and;
  - Several bags of dry fertilizer and dolomitic limestone were ripped and spilled on the ground.



**Oxygen cylinder was not chained/secured**

**Oxygen and acetylene cylinders were stored within 20 ft.**



**Gas or oil leak on Operations floor**



**Fertilizer spill at Operations**

Improper storage of hazardous materials could result in accidents, injuries, fires, or chemical reactions. Fertilizer spills increase the risk of health hazards.

<sup>2</sup> OSHA requires a minimum of 20 feet between oxygen cylinders and combustible materials like acetylene.

<sup>3</sup> “Cylinders shall be kept in racks or stands, set in an upright position, and chained or otherwise secured, to prevent their being knocked over” per the Orange County Health and Safety manual.



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### **Recommendation No. 1:**

Parks and Recreation employees should ensure hazardous materials are stored appropriately according to OSHA and Safety Data Sheet requirements. Additionally, appropriately trained personnel should periodically inspect locations to identify potential hazards and clean up any spills identified appropriately.

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### ***Management's Response:***

*Concur. See [Appendix](#) for full response.*

### **2. Management Should Ensure Safety Equipment Is Accessible and Adequately Maintained.**

OSHA requires safety equipment to be readily accessible for immediate use in case of an emergency. We identified instances where safety equipment was not available, easily accessible or functional during the inspections. Specifically, we identified:

- No fire extinguisher or eyewash station was available at the Bithlo splash pad storage area or in the Operations outdoor fertilizer storage area. In addition, no eyewash station was available at the Ft. Gatlin garage area. Corrosive materials are stored in these locations.
- There was limited or obstructed access to safety equipment like eyewash stations and fire extinguishers. For example, the eyewash station was located in the restroom at two parks which could limit access during an emergency.
- Eyewash solution was not ready for immediate use. We identified eyewash solution that had expired more than 2.5 years before our inspection at Bithlo. At Kelly Park, we identified one eyewash station with no solution.



**Eyewash station with obstructed access at Operations**



Although fire extinguishers are supposed to be inspected monthly as indicated on the attached tag, we identified numerous instances where fire extinguishers were not inspected as required. For example, inspection records at Operations indicated that its fire extinguishers had not been inspected in over 2.5 months. Additionally, nine fire extinguishers at Blanchard and Ft. Gatlin were not inspected within the last month — one had not been inspected in over 4 months.

Safety equipment should be available and accessible in case of an emergency to reduce the impact of incidents and injuries. Additionally, fire extinguishers should be inspected monthly to ensure they are in appropriate working condition.

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### **Recommendation No. 2:**

Parks and Recreation management should:

- A) Identify all areas where hazardous materials are stored and ensure applicable safety equipment is accessible for immediate use in case of an emergency; and,
- B) Ensure fire extinguishers are inspected monthly and inspection tags are timely updated.

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### ***Management's Response:***

*Concur. See [Appendix](#) for full response.*

### **3. Corrective Actions Should Be Timely Completed.**

Risk Management currently performs Parks site inspections throughout the year. These inspections review walking surfaces, fire safety, emergency exits, first aid/medical supplies, ladder safety, hearing protection, electrical safety, compressed gas cylinders, material handling, machine guarding, written procedures, and hazardous chemicals. Inspection reports are prepared after inspections are performed. The reports are sent to Parks management, Risk Management and the applicable site supervisor.

The reports document issues, including:

- Pictures,



- References to unmet standards,
- Hazard class assigned by Safety Analyst,
- Required action, and
- Corrective action deadlines based on hazard class.

According to the following inspection report excerpt, there are four different hazard classes. Correction deadlines are based on the type of hazard shown below:

| <b>HAZARD CLASS</b>        | <b>COMPLIANCE SCHEDULE</b> |
|----------------------------|----------------------------|
| <b>A</b> – IDLH*           | On – site correction       |
| <b>B</b> – Imminent Danger | Immediately                |
| <b>C</b> – Serious         | 15 Days                    |
| <b>D</b> – Non-serious     | 30 Days                    |

\*Immediately Dangerous to Life or Health

Although deficiencies are assigned compliance dates (not to exceed 30 days) based on the hazard class, we noted issues identified by Risk Management that were not corrected within the required timeframe. For Risk Management inspections performed during 2020 and 2021 at seven sites, 15 issues related to hazardous materials. When reviewing the corrective actions performed in response to the 15 hazardous material issues, we found:

- Two of 15 (13.3%) items were not corrected. One of the issues at Ft. Gatlin was identified in 2020 and was not corrected because the Site Supervisor disagreed with the issue identified by the inspector. The other issue from 2021, identified a faded label on a liquid bleach tank at Dr. Phillips Community Park. During our inspections, we identified numerous instances of unlabeled containers.
- An additional two of the 15 issues were not corrected timely. One item was corrected 8 days late and the other was corrected 38 days after the due date.

Items not corrected timely could result in an avoidable accident or injury.



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### **Recommendation No. 3:**

Parks and Recreation management should ensure Risk Management inspection items are timely corrected. Additionally, Parks should work with Risk Management to implement consistent procedures for communicating with Risk Management and documenting compliance.

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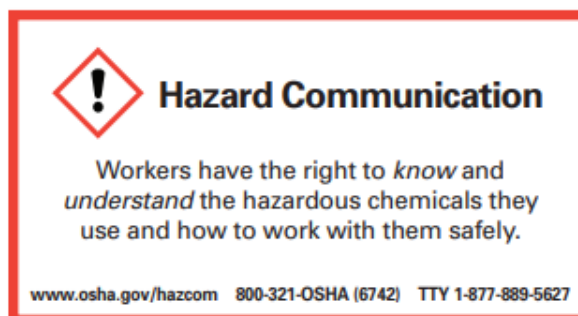
### ***Management's Response:***

*Concur. See [Appendix](#) for full response.*

#### **4. Parks and Recreation Should Develop a Written Hazard Communication Program and Ensure Employees Are Adequately Trained.**

##### **Hazard Communication Program**

According to OSHA's Hazard Communication Standard, employers are required to develop, implement, and maintain a written hazard communication program at each workplace. The Program should include a list of hazardous materials and describe how labels, SDS, and employee information and training will be provided to employees.



Parks did not have a written hazard communication program at the time that we requested it. Since there was no hazard communication plan listing the hazardous chemicals in the workplace, we attempted to identify any other lists of hazardous chemicals. Although Parks maintains a list of fertilizers and pesticides at Operations, the list was not complete and did not include all hazardous chemicals.

Management promptly developed a hazard communication program after we brought this issue to their attention. We reviewed that hazard communication program and determined it included all OSHA required elements.

## **Training**

OSHA's Hazard Communication Standard also requires employers to provide employees with effective information and training on hazardous chemicals in their workplace when employees begin working at Parks and whenever a new chemical hazard is introduced. Employee training must include:

- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
- Physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as unclassified hazards, in the work area;
- Measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used;
- Explanation of the labels received on shipped containers and the workplace labeling system used by their employer; and,
- SDS.

During the audit period, Parks used the Business and Learning Resources platform (BLR) to provide initial and annual training to employees. The BLR platform includes trainings covering the above elements. However, Parks only required employees to take three of the seven BLR modules even though all seven contained OSHA requirements. As a result, employees were not adequately trained regarding workplace hazards.

Additionally, we reviewed the BLR training records for the required courses. We reviewed a sample of new hire and refresher training and found that eight of 40 employees did not take at least one required class. Seven of these eight employees were part-time temporary employees. According to management, only full-time employees were required to take BLR courses. However, all employees at risk of hazardous material exposure in the workplace should receive training regardless of employment status.



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### **Safety Data Sheets**

OSHA's Hazard Communication Standard also requires employers to maintain readily accessible copies of the SDS in the workplace. We reviewed a sample of SDS at five sites and found that only seven of the 23 hazardous materials selected had any type of informational sheet available on-site. Additionally, five of the seven information sheets on-site were outdated material safety data sheets (MSDS).<sup>4</sup>

Therefore, 21 of the 23 hazardous materials reviewed did not have an adequate SDS — as required by OSHA.

In order to ensure chemical safety in the workplace, employees should be informed of relevant chemical hazards. Employees unaware of the hazardous chemicals present in the workplace, or how to protect themselves from exposure to such chemicals, could cause harm to themselves and others.

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### **Recommendation No. 4:**

Parks and Recreation management should continue to make sure employees are aware of workplace hazards by:

- A) Periodically reviewing and updating the newly developed Hazard Communication Program which includes a list of all hazardous materials in the workplace;
- B) Ensuring employees are aware of and review the Hazard Communication Program;
- C) Training employees on all OSHA required elements; and,
- D) Maintaining current and complete safety data sheets for all hazardous materials at every site.

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### ***Management's Response:***

*Concur. See [Appendix](#) for full response.*

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<sup>4</sup> In 2012, OSHA changed the requirement from MSDS to SDS. MSDS do not meet the current OSHA requirements.



## ACTION PLAN

| NO. | RECOMMENDATIONS   | MANAGEMENT'S RESPONSE |                  |               |
|-----|---|-----------------------|------------------|---------------|
|     |   | CONCUR                | PARTIALLY CONCUR | DO NOT CONCUR |
| 1.  | Parks and Recreation employees should ensure hazardous materials are stored appropriately according to OSHA and Safety Data Sheet requirements. Additionally, appropriately trained personnel should periodically inspect locations to identify potential hazards and clean up any spills identified appropriately. | ✓                     |                  |               |
| 2.  | Parks and Recreation management should:   |                       |                  |               |
| A)  | Identify all areas where hazardous materials are stored and ensure applicable safety equipment is accessible for immediate use in case of an emergency; and,  | ✓                     |                  |               |
| B)  | Ensure fire extinguishers are inspected monthly and inspection tags are timely updated.   | ✓                     |                  |               |
| 3.  | Parks and Recreation management should ensure Risk Management inspection items are timely corrected. Additionally, Parks should work with Risk Management to implement consistent procedures for communicating with Risk Management and documenting compliance.   | ✓                     |                  |               |
| 4.  | Parks and Recreation management should continue to make sure employees are aware of workplace hazards by:   |                       |                  |               |
| A)  | Periodically reviewing and updating the newly developed Hazard Communication Program which includes a list of all hazardous materials in the workplace;   | ✓                     |                  |               |
| B)  | Ensuring employees are aware of and review the Hazard Communication Program;  | ✓                     |                  |               |
| C)  | Training employees on all OSHA required elements; and,  | ✓                     |                  |               |
| D)  | Maintaining current and complete safety data sheets for all hazardous materials at every site.  | ✓                     |                  |               |



The below table describes the criteria used during inspections performed in November 2021.

| Inspection Criteria                                       |                       |  |
|---|-----------------------|--|
| Issue   | Source                | Criteria   |
| <b>Hazard Communication Program</b>                       |                       |  |
| Parks did not have a current hazard communication program | OSHA<br>1910.1200 (e) | <p>(e)(1)<br/><i>Employers shall develop, implement, and maintain at each workplace, a written hazard communication program which at least describes how the criteria specified in paragraphs (f), (g), and (h) of this section for labels and other forms of warning, safety data sheets, and employee information and training will be met, and which also includes the following:</i></p> <p>(e)(1)(i)<br/><i>A list of the hazardous chemicals known to be present using a product identifier that is referenced on the appropriate safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas); and,</i></p> <p>(e)(1)(ii)<br/><i>The methods the employer will use to inform employees of the hazards of non-routine tasks (for example, the cleaning of reactor vessels), and the hazards associated with chemicals contained in unlabeled pipes in their work areas.</i></p> <p>(e)(2)<br/><i>Multi-employer workplaces. Employers who produce, use, or store hazardous chemicals at a workplace in such a way that the employees of other employer(s) may be exposed (for example, employees of a construction contractor working on-site) shall additionally ensure that the hazard communication programs developed and implemented under this paragraph (e) include the following:</i></p> <p>(e)(2)(i) <i>The methods the employer will use to provide the other employer(s) on-site access to safety data sheets for each hazardous chemical the other employer(s)' employees may be exposed to while working;</i></p> <p>(e)(2)(ii) <i>The methods the employer will use to inform the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies; and,</i></p> <p>(e)(2)(iii)</p> |









|   |                              |   |
|---|------------------------------|---|
|   |                              | <i>The methods the employer will use to inform the other employer(s) of the labeling system used in the workplace</i>   |
| <b>Container Labeling:</b>  |                              |   |
| Materials were stored in containers with no labels, improper labels, or illegible labels.                   | OSHA<br>1910.1200 (f)<br>(6) | <i>Workplace labeling. Except as provided in paragraphs (f)(7) and (f)(8) of this section, the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with either: 1910.1200(f)(6)(i) The information specified under paragraphs (f)(1)(i) through (v) of this section for labels on shipped containers; or, 1910.1200(f)(6)(ii) Product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.</i>  |
| Several containers were observed with no labels showing the hazard contents, either in words or pictograms. |                              |   |
| <b>Training and Handling:</b>   |                              |   |
| Multiple employees did not complete initial or refresher training   | 1910.1200 (3)                | <i>Training. Employee training shall include at least: (i) Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.); (ii) The physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area; (iii) The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and, (iv) The details of the hazard communication program developed by the employer, including an explanation of the labels received on shipped containers and the workplace labeling system used by their employer; the safety data sheet, including the order of information and how employees can obtain and use the appropriate hazard information."</i> |
| Only full time employees were required to undergo training.   | 1910.1200                    | <i>Employers shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new chemical hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g.,</i>  |



|  |   |   |
|--|---|---|
|  |   | <i>flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and safety data sheets.</i>  |
|  | Orange County Health And Safety Manual: Section 4 | <i>Specialized training in Hazard Communication Standards is often required.</i>  |
|  | Orange County Health And Safety Manual: Section 3 | <i>All employees shall be trained and capable of carrying out assigned tasks in a safe manner. Training for basic safety, inspection procedures, the correct use of personal protective equipment, hazardous chemicals handling, safety sensitive position requirements, etc., shall be conducted prior to an employee starting operations. Employees shall remain under close supervision until they have demonstrated competency. They shall then be monitored periodically, as needed.</i> |
| All five sites inspected did not have safety data sheets for all Hazardous Materials                     | 1910.1200 (g)(8)                                  | <i>The employer shall maintain in the workplace copies of the required safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access and other alternatives to maintaining paper copies of the safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)</i>                       |
| <b>Compressed Gas Storage:</b>   |   |   |
| Oxygen cylinder stored at one facility was not chained or secured to prevent the cylinders from tipping. | OSHA 1910.101 (b)                                 | <i>Compressed gases. The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tankcars, or motor vehicle cargo tanks shall be in accordance with Compressed Gas Association Pamphlet P-1-1965, which is incorporated by reference as specified in § 1910.6.</i>   |
|  | Orange County Safety and Health Manual, Section 7 | <i>Cylinders shall be kept in racks or stands, set in an upright position, and chained or otherwise secured, to prevent their being knocked over.</i>   |
|  | Best Practice                                     | <i>Gas cylinders should be properly secured at all times to prevent tipping, falling or rolling. They can be secured with straps or chains connected to a wall bracket or other fixed surface, or by use of a cylinder stand.</i>   |
| At one facility, oxygen and acetylene cylinders were stored within 20 feet of one another.               | OSHA 1910.253 (b) (4) (iii)                       | <i>Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet (6.1 m) or by a noncombustible barrier at least 5 feet (1.5 m) high having a fire-resistance rating of at least one-half hour.</i>   |
| <b>Flammable Material Storage:</b>   |   |   |
| Combustible materials were stored on top of fire safety cabinets at various facilities.                  | NFPA 30 Chapter 9.5.6.2                           | <i>Materials shall not be stored on top of cabinets.</i>  |





| <p>Fire Safety cabinets access was obstructed at four sites.</p>   | <p>1910.106 (e)(9)</p>   | <p><i>Housekeeping (ii) Access. Adequate aisles shall be maintained for unobstructed movement of personnel and so that fire protection equipment can be brought to bear on any part of flammable liquid storage, use, or any unit physical operation.</i></p>   |  |  |   |                                    |  |  |  |   |  |   |  |  |  |  |  |
|--|--|---|--|--|---|------------------------------------|--|--|--|---|--|---|--|--|--|--|--|
| <p>Incompatible materials (Chlorine and sulfuric acid) were stored in the same area at one facility.</p>           | <p>Chemical segregation table (NIH.GOV)</p>  | <table border="1"> <thead> <tr> <th>Class of Chemicals</th> <th>Common Chemical Examples</th> <th>Additional Concerns and Storage Recommendations</th> <th>Common Incompatible Chemical Types</th> <th>Possible Reaction if Mixed/Health Concerns</th> </tr> </thead> <tbody> <tr> <td>  <p>Corrosive Acids-Organic</p> </td> <td>           Acetic Acid<br/>           Glacial Acetic Acid<br/>           Butyric Acid<br/>           Tetrafluoroacetic Acid<br/>           Picric Acid<br/>           Propionic Acid<br/>           Formic Acid         </td> <td>           Store in ventilated corrosives cabinet on protected shelving using secondary containment, keep away from water sources<br/>           * Do not store under the sink<br/>           * Do not store acids on metal shelving         </td> <td>           Flammable Liquids<br/>           Flammable Solids<br/>           Bases<br/>           Oxidizers<br/>           Inorganic Acids<br/>           Cyanides<br/>           Sulfides<br/>           Poisons/Toxins         </td> <td>           Heat<br/>           Gas Generation<br/>           Violent Reaction<br/>           * DO NOT POUR WATER INTO ACID         </td> </tr> <tr> <td>  <p>Corrosive Acids-Inorganic</p> </td> <td>           Nitric Acid<br/>           Sulfuric Acid<br/>           Perchloric Acid<br/>           Phosphoric Acid<br/>           Hydrochloric Acid<br/>           Chromic Acid<br/>           Hydrofluoric Acid         </td> <td>           Store concentrated Nitric acid (&gt;50%) and Sulfuric acid (&gt;93%) in a secondary container<br/>           Store in a corrosive cabinet labeled "Acid" or on shelving using a secondary containment<br/>           * Do not store under the sink<br/>           * Do not store acids on metal shelving<br/>           * Hydrofluoric acid should be stored in an area accessible only by authorized personnel; do not store in glass; use plastic containers and secondary containment         </td> <td>           Flammable Liquids<br/>           Flammable Solids<br/>           Bases<br/>           Oxidizers<br/>           Organic Acids<br/>           Cyanides<br/>           Sulfides<br/>           Poisons/Toxins         </td> <td>           Heat<br/>           Gas Generation<br/>           Violent Reaction<br/>           * DO NOT POUR WATER INTO ACID<br/>           * Perchloric acid vapor can form explosive compounds within fume hood ducts<br/>           * Hydrofluoric acid can result in severe burns to skin and lungs         </td> </tr> </tbody> </table> | Class of Chemicals   | Common Chemical Examples   | Additional Concerns and Storage Recommendations | Common Incompatible Chemical Types | Possible Reaction if Mixed/Health Concerns |  <p>Corrosive Acids-Organic</p> | Acetic Acid<br>Glacial Acetic Acid<br>Butyric Acid<br>Tetrafluoroacetic Acid<br>Picric Acid<br>Propionic Acid<br>Formic Acid | Store in ventilated corrosives cabinet on protected shelving using secondary containment, keep away from water sources<br>* Do not store under the sink<br>* Do not store acids on metal shelving | Flammable Liquids<br>Flammable Solids<br>Bases<br>Oxidizers<br>Inorganic Acids<br>Cyanides<br>Sulfides<br>Poisons/Toxins | Heat<br>Gas Generation<br>Violent Reaction<br>* DO NOT POUR WATER INTO ACID |  <p>Corrosive Acids-Inorganic</p> | Nitric Acid<br>Sulfuric Acid<br>Perchloric Acid<br>Phosphoric Acid<br>Hydrochloric Acid<br>Chromic Acid<br>Hydrofluoric Acid | Store concentrated Nitric acid (>50%) and Sulfuric acid (>93%) in a secondary container<br>Store in a corrosive cabinet labeled "Acid" or on shelving using a secondary containment<br>* Do not store under the sink<br>* Do not store acids on metal shelving<br>* Hydrofluoric acid should be stored in an area accessible only by authorized personnel; do not store in glass; use plastic containers and secondary containment | Flammable Liquids<br>Flammable Solids<br>Bases<br>Oxidizers<br>Organic Acids<br>Cyanides<br>Sulfides<br>Poisons/Toxins | Heat<br>Gas Generation<br>Violent Reaction<br>* DO NOT POUR WATER INTO ACID<br>* Perchloric acid vapor can form explosive compounds within fume hood ducts<br>* Hydrofluoric acid can result in severe burns to skin and lungs |
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| <p>Two fire safety cabinet were rusted</p>   | <p>Justrite.com (Safety Cabinet Manuf.)</p>  | <p><i>Always seal containers tightly before placing into a safety storage cabinet. Wipe any excess liquid from the container to prevent spills onto the shelves...</i></p> <p><i>Inspect cabinets for dents and rust and replace if necessary. Excessive rust reduces the metal thickness and compromises its fire resistance. Dents have the same impact.</i></p>  |  |  |   |                                    |  |  |  |   |  |   |  |  |  |  |  |
| <p><b>Fertilizer Storage:</b></p>  |  |   |  |  |   |                                    |  |  |  |   |  |   |  |  |  |  |  |
| <p>Fertilizer was improperly stored at multiple locations</p>  | <p>Various SDS storage instructions</p>  | <p>Various SDS storage instructions</p>   |  |  |   |                                    |  |  |  |   |  |   |  |  |  |  |  |
| <p><b>Safety Equipment:</b></p>  |  |   |  |  |   |                                    |  |  |  |   |  |   |  |  |  |  |  |
| <p>Many fire extinguishers had overdue monthly maintenance according to tags affixed to the extinguishers.</p>     | <p>OSHA 1910.157 (e)</p>   | <p><i>Inspection, maintenance and testing.</i></p> <p><i>(1) The employer shall be responsible for the inspection, maintenance and testing of all portable fire extinguishers in the workplace.</i></p> <p><i>(2) Portable extinguishers or hose used in lieu thereof under paragraph (d)(3) of this section shall be visually inspected monthly.</i></p> <p><i>(3) The employer shall assure that portable fire extinguishers are subjected to an annual maintenance check. Stored pressure extinguishers do not require an internal examination. The employer shall record the annual maintenance date and retain this record for one year after the last entry or the life of the shell, whichever is less. The record shall be available to the Assistant Secretary upon request.</i></p>   |  |  |   |                                    |  |  |  |   |  |   |  |  |  |  |  |





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|--|---|--|
|  | Orange County Health And Safety Manual: Section 8 | <i>Portable Fire Extinguishers: All portable fire extinguishers shall be inspected by the division/department each month with the inspection date and inspector's initials recorded on the extinguishers inspection tag.</i>   |
| Two site did not have a fire extinguisher or eyewash station where corrosives were stored and another site didn't have an eyewash station.<br><br>In multiple sites, access to fire extinguishers and eyewash stations was limited due to location | OSHA 1910.151 (c)                                 | <i>Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.</i>  |
|  | OSHA 1910.157 (c)                                 | <i>General requirements. (1) The employer shall provide portable fire extinguishers and shall mount, locate and identify them so that they are readily accessible to employees without subjecting the employees to possible injury.</i>  |
| Expired eyewash solution or no eyewash solution was identified at multiple locations   | OSHA 1910.151 (c)                                 | <i>Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.</i>  |
| <b>General Housekeeping:</b>   |   |  |
| Corroded materials were identified in several areas.<br><br>Leaking or broken hazardous materials containers were found at one site.   | OSHA 1910.106 (9)                                 | <i>Housekeeping—(i) General. Maintenance and operating practices shall be in accordance with established procedures which will tend to control leakage and prevent the accidental escape of flammable liquids. Spills shall be cleaned up promptly. (ii) Access. Adequate aisles shall be maintained for unobstructed movement of personnel and so that fire protection equipment can be brought to bear on any part of flammable liquid storage, use, or any unit physical operation. (iii) Waste and residue. Combustible waste material and residues in a building or unit operating area shall be kept to a minimum, stored in covered metal receptacles and disposed of daily. (iv) Clear zone. Ground area around buildings and unit operating areas shall be kept free of weeds, trash, or other unnecessary combustible materials.</i> |
| At four sites, equipment or other materials were blocking access to safety equipment such as fire extinguishers or eyewash stations.   | ANSI Z358.1 5.4.2                                 | <i>"It is the installer's responsibility to ensure that eyewashes shall be in accessible locations that require no more than 10 seconds to reach. The eyewash shall be located on the same level as the hazard and the path of travel shall be free of obstructions that may inhibit its immediate use."</i>   |
|  | NFPA 10 7.2.2                                     | <i>"Periodic Inspection or electronic monitoring of fire extinguishers shall include a check of at least the following items:<br/>(3) Access to the fire extinguisher"</i>   |



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|--|----------------------|--|
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**PARKS AND RECREATION DIVISION**

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September 7, 2023

TO: Phil Diamond, Orange County Comptroller

THRU: Venerria L. Thomas, Director *Venerria L. Thomas*  
Community and Family Services Department

FROM: Matt Suedmeyer, Manager *M.S.*  
Parks and Recreation Division

SUBJECT: Response to Audit of Orange County Parks and Recreation Division  
Hazardous Materials

In regards to the audit of the Orange County Parks and Recreation Division Hazardous Materials during the period of July, 2020 to November, 2022 conducted by your office. Below you will find responses to the recommendations in the report. The Parks and Recreation Division has implemented all of the recommendations in the report.

Recommendation 1:

Parks and Recreation employees should ensure hazardous materials are stored appropriately according to OSHA and SDS requirements. Additionally, appropriately trained personnel should periodically inspect locations to identify potential hazards and clean-up any spills identified appropriately.

Recommendation 2:

Parks and Recreation management should:

- A) Identify all areas where hazardous materials are stored and ensure applicable safety equipment is accessible for immediate use in case of an emergency; and,
- B) Ensure fire extinguishers are inspected monthly and inspection tags are timely updated.

Recommendation 3:

Parks and Recreation management should ensure Risk Management inspection items are timely corrected. Additionally, Parks should work with Risk Management to implement consistent procedures for communicating with Risk Management and documenting compliance.

Recommendation 4:

Parks and Recreation management should continue to make sure employees are aware of workplace hazards by:

- A) Periodically reviewing and updating the newly developed hazard communication program which includes a list of all hazardous materials in the workplace;
- B) Ensuring employees are aware of and review the hazard communication program;
- C) Training employees on all OSHA required elements; and,
- D) Maintaining current and complete SDS for all hazardous materials at every site.



The Parks and Recreation Division concurs with the recommendations in the audit report and will ensure all recommendations are adhered to. Approximately three years ago when the initial inspection began, the division immediately updated their hazard communication program guidelines and retrained all staff. Included in the training was the importance of reviewing and periodically updating the hazard communication program with Safety Data Sheets (SDS) and hazard communication training for seasonal and part-time employees as well.

The division will continue to provide an in-depth hazard communication program to include periodic reviews to ensure safety data sheets are updated and staff are trained regularly to ensure employees are aware of and review the hazard communication program. The division will ensure hazardous materials are stored appropriately according to OSHA and SDS requirements.

Staff have been trained and will continue to be trained on the division's hazard communication program and will periodically inspect locations to identify potential hazards and clean-up any spills identified appropriately. In addition, staff will continue to ensure applicable safety equipment is accessible for immediate use in case of an emergency and fire extinguishers are inspected monthly and inspection tags are timely updated.

Parks and Recreation management will continue to work closely with Risk Management on hazard communication guidelines and ensure inspection items are corrected in a timely manner.

Lastly, safety of our citizens and employees is our highest mission and will continue to work towards ensuring the hazard communication program is adhered to.

cc: Byron Brooks, AICO, County Administrator  
Carla Bell Johnson, AICP, Deputy County Administrator  
Lavon Williams, Esq. AICP, Deputy Director, Community and Family Services  
Dr. Tracy Salem, Deputy Director, Community and Family Services