

#### **Nomination Deadlines:**

Spring Awards: February 1, 2023
Fall Awards: September 1, 2023

**Agency**: Sacramento Suburban Water District

#### **Project/Initiative Title:**

Implementation Date: 8/24/2023

Cost to Implement: \$0

Staff Time Required: 2 hours

Number of Employees/Facilities Impacted: 6/1

### **Employee/Department/Committee Nominated:**

Name(s): Abel Ramirez

Job Title/Department: Distribution Operator II; Distribution

#### **Nomination Summary**

Abel developed a JHA for the installation of replacement meter boxes to complete his PDP steps. This is a very common process performed by the District and has many elements and hazards that require focus to properly complete. In the past, there have been injuries incurred during this process; the goal is to document and review the JHA with staff to identify risks and avoid future injuries.

The District Safety/Risk Officer worked with Abel to fully document the JHA of the meter box replacement process. Each step was documented and photographed through the process with tasks, risks, and controls. This detailed process review brought to light several steps that were not being regularly performed and clarified potential hazards while performing the process. These were further improved during the review of the JHA with staff. Their input and engagement during Abel's presentation led to 4 valuable additions to the final JHA.

The JHA is an administrative control that can be periodically reviewed with staff and also used for training new hires.

Abel is a significant contributor to our safety hazard recognition program and has identified many issues we have addressed to improve employee safety at the District. He realized the meter box replacement process was one of our most common and a detailed review of the process via a JHA could lead to improved safety.

The JHA for meter box replacement addresses several exposures and practices including ergonomics, equipment inspection, and other risk exposures. His review of this process will encourage other staff to perform JHAs and continue to build our proactive safety culture.

This program supports an expanded safety culture to engage District employees and their families.

⊠Office/Field Ergonomics
□Vehicle Operations
□Slip/trip/falls – falls from heights
☐Emergency Readiness/Wildfire Prevention
⊠Other: Safety Culture Development

JHA, Photos of JHA steps, Outline of JHA review with staff including recommended improvements, and attendance sheet for JHA review/training.

Nominated by: Ben Harris Date: 8/24/2023

General Manager: Date: 8/31/2023

Please email this form with supporting documents and digital photos (jpg) to tlofing@acwajpia.com.					

SACRAMENTO	
SUBURBAN	

DISTR	Sacramento Suburban Water District	JHA By: Abel Ramirez; Coworker Tom Fox	Location: 2354 Tyrolean Way
	Job Hazard Analysis (JHA)	Job or Activity: Install Meter Box	
	Department: Distribution	,	Date: 08/18/2023
NO.	STEPS Sequence of Basic Job Steps	Potential Job Hazards	CONTROLS  Recommended Actions and/or Procedures
1	Have necessary PPE for task	Proper PPE helps prevent injury or exposures	safety boots, high visibility shirt, work gloves, safety glasses, work gloves, high visibility vest & hard hat (if working in right of way), shade hat & pop up shade (if appropriate).
2	Gather tools needed for task; shovels, Grizzley Bar, meter box lid hook, new meter box and lid, bucket for spoils, marking paint, hammer. Prior to starting work inspect tools for safe condition.	Overexertion strain reaching and collecting tools from truck bed; dropping tools striking lower extremities causing injury	Pre work stretch recommended; make as many trips needed between truck and work area to avoid carrying too much at once. Tag out any damaged tools.
3	Remove existing meter box lid, disconnect and remove transponder. Inspect inside of box for hazards - bugs, critters, needles, etc.	Kneeling, bending, lifting and twisting.	practice proper lifting and body position to avoid strains. Change between kneeling and squatting as needed. Safely remove any hazards before placing hands in box.
4	place new meter box over old meter box as a template and spray paint outside of new box to mark outside perimeter of area to cut out of grass/soil to enable fit.	bending, paint fume exposure	bend at knees not back; try to stay up-wind of spray paint fumes
5	Use narrow spades to cut and dig out grass/soil around paint line and outside edge of existing meter box	strains, awkward body position; jarring impact from striking solid materials. Place tools so that thely are not a trip hazard when not in use.	be cautious when digging to minimize jarring impacts with gravel and roots. Avoid over reaching or strain when prying out spoils.
6	when able, loosen and remove existing box. Be sure not to damage service line if it is cut through box wall.	kneeling; bending and lifting; strain from shoveling and prying	cautiously pry and remove box; bend at knees when lifting
7	clean out spoils from area of meter and fresh cut out.	kneeling; potential for hand cuts/strains when removing spoils; lifting and twisting when placing spoils in bucket	change kneeling position occasionally; wear work gloves when clearing spoils; place spoils bucket in position that is easy to reach
8	Remove cutout area from end of new meter box to facilitate service line, as needed.	kneeling; struck by with hammer; flying debris from striking meter box wall with hammer	consider performing task on truck tailgate to avoid kneeling/bending; wear safety glasses to avoid debris in eyes; keep eyes on hands when striking box.
9	Temporarily set new meter box into cutout and assess fitment of box. Remove meter box then remove any excess spoils to finalize the fitment.	kneeling; lifting and twisting, reaching and lifting; potential for hand cuts/strains when removing spoils	change kneeling position occasionally; wear work gloves when clearing spoils; place spoils bucket in position that is easy to reach
10	replace the new meter box in the cutout, position in final place, and fill in with spoils around the outside of the box to secure it in place.	kneeling; lifting and twisting, reaching and lifting; potential for hand cuts/strains when removing spoils	change kneeling position occasionally; wear work gloves when clearing spoils; place spoils bucket in position that is easy to reach
11	Install transponder into the new meter box lid, connect to the meter, and install the new lid.	Kneeling, bending, lifting and twisting.	Practice proper lifting and body position to avoid strains. Change between kneeling and squatting as needed
12	Finish filling around the meter box with spoils and top with grass pieces saved from the cutout. Use shovel handle to tamp soil tight	strains, awkward body position; jarring impact from striking solid materials Place tools so that thely are not a trip hazard when not in use.	Be cautious when digging to minimize jarring impacts with gravel and roots. Wear work gloves when clearing spoils.
13	Clean up all spoils and grass debris from around work area and place in spoils bucket	kneeling; lifting and twisting, reaching and lifting; potential for hand cuts/strains when collecting spoils	change kneeling position occasionally; wear work gloves when clearing spoils; place spoils bucket in position that is easy to reach
14	collect tools, spoils bucket, and old meter box/lid from work area and place in truck.	Overexertion strain reaching and collecting tools from truck bed; dropping tools striking lower extremities causing injury	Make as many trips needed between work area and truck to avoid carrying too much at once

	Perform final inspection of work area and new meter box to be sure	
15	it is correctly installed and cleaned up.	

## **JHA Meter Box Replacement Photos**

**Photo Number Relates to Sequence on JHA** 





2.



4.

## **JHA Meter Box Replacement Photos (Continued)**

**Photo Number Relates to Sequence on JHA** 





5.



6.

## **JHA Meter Box Replacement Photos (Continued)**

**Photo Number Relates to Sequence on JHA** 







7., 8., 9.





11., 12

## **JHA Meter Box Replacement Photos (Continued)**

**Photo Number Relates to Sequence on JHA** 



13



15.

# Outline – Review/Training JHA for Meter Box Replacement 8/24/2023; 7:30 am; Walnut Meeting Room

- 1. Review JHA steps in process and discuss step and associated hazards
- 2. Review issues/concerns with process and equipment
- 3. Add recommendations for improvements to JHA into document
- 4. Add finished JHA to shared Distribution JHA folder on District network

#### **Recommended Edits to JHA**

- Add gloves to PPE list in JHA (Josh Taylor)
- Add Grizzley bar to list of required tools (Raul Palomar)
- Add to Perform tool inspection prior to work (Josh Tayor)
- Add to inspect existing box for hazards (bugs, critters, needles) prior to putting hands inside (Raul Palomar)

Recommendations incorporated in JHA after meeting 8/24/2023.

METER BOX REPLACEMENT JHA REVIEW PRESENTER: #BET RAMINEZ N DAGE: 8/24/2023 LOCATION . WALNUT YARD NAME Josh Lahour MARK TAYLOR Tom tox PANC PANOMANZ BEN HARRIS **CTOPS**