

## **Nomination Deadlines**:

Spring Awards: February 1, 2024 Fall Awards: September 2, 2024

**Agency**: Mission Spring Water District

**Project/Initiative Title**: Clarifier scrubbing

Implementation Date: 10/01/2023

Cost to Implement: 500.00 Staff Time Required: 4 hrs.

Number of Employees/Facilities Impacted: 7

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

Name(s): David Weaver

Job Title/Department: Wastewater Treatment Plant Operator II

### **Nomination Summary**

Write a brief summary of your project/initiative. Clearly state the problem/hazard recognized by the nominee and the specific reasons that they initiated corrective action.

We as a staff would spend days scrubbing our clarifiers trying to get them clean to improve our sample quality for the compliance regulations. It would take two staff members two days to scrub our two largest clarifiers by hand causing soreness and fatigue. Making them unable to do other tasks during those days. Thus, causing a backlog of work and lingering soreness. This being a weekly task, we needed to find a way to clean them more efficiently and less strain on the operator.

Describe the specific actions taken to resolve the problem(s) or challenge(s). Share the best practices that made this initiative successful for the agency and its impact.

David began to look for scrapers that would cut through the algae build up and tried a couple of pole extensions but thought there has to be a more efficient way and suggested a hydro disk also known as a concrete floor scrubber. This Pressure washer attachment would make cleaning the clarifiers more efficient and less risk of repetitive movement injuries from scrubbing or scraping by hand. Buy utilizing this product the staff is now able to clean both clarifiers with ease and a more efficient clean as the hydro scrubbing cleans all the algae off in matter of minutes without much exertion from staff. Cutting the time and staff requirements down to 1 staff member 7 hr. from 2 staff members 16 hrs.

State whether the hazard was reduced with engineering controls, introduced a new administrative or work procedure, or relied on personal protective equipment to solve the problem.

The risk of injury was reduced by the new equipment purchased as well as ppe i.e., face shield and rain gear for any splashing that may happen. And it increases our productivity as well.

Describe any extraordinary circumstances that made this nominee's safety accomplishments significant.

Describe whether the nominee influenced safety in the workplace, encouraged employee participation in safety efforts, obtained organizational "buy in" to implement the solution.

David's want to improve the method of cleaning for safety purposes was the driving force behind purchasing the hydro disk. Staff now greatly appreciate the fact they are no longer going home sore for days after scrubbing the clarifiers only to do it again a week later. Staff have followed suite and is now always on the look out for more ways to be safer and more efficient in every task they perform at our plant.

Describe whether the project/initiative addressed a hazard or exposure included in the JPIA Commitment to Excellence Program.

⊠Office/Field Ergonomics
□Vehicle Operations
□Slip/trip/falls – falls from heights
□ Emergency Readiness/Wildfire Prevention

∟Other:			

List and attach any supporting materials that you feel are important for the reviewers to gain a complete picture of the nomination. Digital photos, supporting documentation, sample forms, etc.

Nominated by: David Weaver Date: 12/12/23

General Manager: Brian Macy Date:12/12/23

Please email this form with supporting documents and digital photos (jpg) to <a href="mailto:tlofing@acwaipia.com">tlofing@acwaipia.com</a>.

#### Email from David Weaver of MSWD (12/24/2023)

Here are the pictures of the equipment being used, there wasn't a job hazard analysis conducted, idea came from staff after manually scrubbing clarifiers with pool brushes multiple times

it has left them sore for days, but no injuries have been reported. but could be considered to be a repetitive movement injury risk due to duration of process and number of times performed on job.

Attached is a receipt for the purchase of the pressure washing disk. I was mistaken on the amount due to thinking the pressure washer itself was purchased as well but it was purchased for other tasks prior to disk.

At an estimated cost of \$77.83 per hour for an average operator.

without disk attachment (1 Operator x 8 hours of work to clean clarifier x 2 clarifiers x 52 weeks)

Estimated cost to district would be \$64,754.56.

With disk attachment (1 Operator x 1 hour of work to clean clarifier x 2 clarifiers x 52 weeks)

Estimated cost to district would be \$8,094.32.

Estimated time saved a year.

Without disk attachment (1 Operator x 8 hours of work to clean clarifier x 2 clarifiers x 52 weeks)

832 hours a year

 $\neg$  With disk attachment ((1 Operator x 1 hour of work to clean clarifier x 2 clarifiers x 52 weeks)

104 hours a year

Estimated time saved per year? 728 hours a year saved.

Estimated dollars saved per year?

\$56,660.24 cost saving per year.

I hope this is sufficient and I wish you a happy and safe Holidays.

My email to David asking a few questions (12/15/2023)

Hi David,

As I review your submission, can you please provide the following items. Photos of the equipment being used.

Cost of the equipment (i.e cost sheet, receipt...)

Was a Job Hazard Analysis conducted, if so, please provide a copy.

Did the prior process contribute to an injury/WC claim?

Once I receive this information, I'll be able to complete the review of the submission.

Thank you.





# **MISSION SPRINGS WATER DISTRICT**

Receipt # 667-4-46666

Invoice Number(s) # 3042540

## **In-Store Purchase**

Order Origin: #667, Rancho Mirage

#### Ordered

9/26/2023

Item Description	Qty	Unit Price	Discount	Net Unit Price	Pre Tax Amount
15 in. 3300 PSI Surface Cleaner for Gas Pressure Washer SKU 1003524641	1	\$87.97	\$0.00	\$87.97	\$87.97
10 in. Torque Lock Curved Jaw Locking Pliers with Durable Grip  SKU 1000044369	1	\$15.97	\$0.00	\$15.97	\$15.97
10 in. Torque Lock Curved Jaw Locking Pliers with Durable Grip  SKU 1000044369	1	\$15.97	\$0.00	\$15.97	\$15.97

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10 in. Torque Lock Curved Jaw Locking Pliers with Durable Grip  SKU 1000044369	1	\$15.97	\$0.00	\$15.97	\$15.97
10 in. Torque Lock Curved Jaw Locking Pliers with Durable Grip  SKU 1000044369	1	\$15.97	\$0.00	\$15.97	\$15.97
10 in. Torque Lock Curved Jaw Locking Pliers with Durable Grip  SKU 1000044369	1	\$15.97	\$0.00	\$15.97	\$15.97
	,			Subtotal	\$167.82
				Shipping	FREE
				Sales Tax	\$13.01
				Order Total	\$180.83

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