

## **Nomination Deadlines**:

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

**Agency**: West Stanislaus Irrigation District

**Project/Initiative Title:** Grate Lifting Adapter

Implementation Date: 4/1/24
Cost to Implement: \$12.00
Staff Time Required: 3 Hours

Number of Employees/Facilities Impacted: 12

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

Name(s): John Verissimo

Job Title/Department: Ditch Tender / Maintenance

## **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.

West Stanislaus Irrigation District's maintenance shop is equipped with a wash bay for the pressure washing of vehicles and equipment. The wash bay services all district vehicles and heavy equipment year-round. The wash bay has a catch basin for catching heavy debris and mud, the basin is covered by two large, very heavy, drain grates. The basin requires frequent cleaning and depending on the season can require cleaning weekly. Cleaning the drain requires the grates be removed to gain access to the catch basin. The bulky grates require at least two staff members to remove and even when taking appropriate precaution hazards still exist. Drain grates, in general, can be cumbersome and finding a safe and ergonomic way to lift presents challenges. Safety aids such as extension hooks are available for the lifting of heavy grates but still present an ergonomic lifting hazard, and in most cases require multiple people to perform the task. Items on the market for lifting assistance are exceedingly expensive and often as bulky and hard to move as the grate itself.

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.

John Verissimo, a WSID ditch-tender and maintenance technician, approached me with a simple solution to the pain staking task of removing the grates. He suggested the fabrication of a small removable bracket to fix to the grate that would allow our fork lift to do all of the heavy lifting. John explained his idea to me and we came up with a quick design. We were able to source the required steel material from our scrap pile and the additional hardware was purchased for \$12.00. John made quick work of the fabrication, welding, and completion of the new design. The product was tested, and safely removed and installed the grates at our wash bay location.





Proud of ourselves, we decided to do further testing and were pleased to see it also worked in other locations and on grates of varying sizes. The new product is relatively light weight, and small enough to store on a shelf. The adapter can easily be installed on a grate by a single staff member and with the fork-lift lifting the load any hazards from lifting, slips, trips, and falls ect. are greatly reduced.



John's initiative, receptive management, a safety-first mentality, and team work lead to a low cost and resourceful solution to aid in reducing workplace injuries by limiting ergonomic lifting hazards.

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.

Engineering controls.



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.

The use of this new product has been adopted by all members of our maintenance program and the adapter is now used regularly not only in the location it was designed for, but in other areas as well. The use of this product and how quickly it was adapted into our maintenance program results in a safer work place for the employees and a reduction in liability for the district.

West Stanislaus Irrigation District encourages employee participation and the development of this product demonstrates the importance of having open lines of communication and valuing your employees' suggestions.



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

General Manager: Robert Pierce	Date:4/18/24
Nominated by: Jesse Estrada, Supervisor	Date:4/18/24
List and attach any supporting materials that you feel are important for the nomination. Digital photos, supporting documentation, sample forms	
□Other:	
☐Emergency Readiness/Wildfire Prevention	
□Slip/trip/falls – falls from heights	
□Vehicle Operations	
⊠Office/Field Ergonomics	

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

## **Robin Flint**

**From:** Bobby Pierce <bobby.pierce@weststanislausid.org>

Sent: Wednesday, April 24, 2024 8:51 AM

**To:** Robin Flint; WSID Supervisor

Subject: RE: WSID H.R. LaBounty Safety Award Grate Lifting Adapter

The weakest links on the apparatus are the lifting hooks. The lifting hooks are ½" in diameter and grade 5. Minimum yield strength for grade 5 is 92 ksi. Being ultra conservative, I used the yield strength of mild steel at 36 ksi in my calculation.

The area of one ½" bolt is 0.196 in.^2. Using a 70% safety factor and another 50% wear and tear factor, the tool can easily pick up grates weighing 5,000 lbs. WSID has no grates that come close to that weight.

Let me know if this response suffices. If not, I'll provide a more detailed response.

BP

From: Robin Flint <rflint@acwajpia.com> Sent: Tuesday, April 23, 2024 5:15 PM

To: WSID Supervisor <wsid.supervisor@weststanislausid.org>; Bobby Pierce <bobby.pierce@weststanislausid.org>

Subject: WSID H.R. LaBounty Safety Award Grate Lifting Adapter

Hi Jesse and Bobby,

What a great safety award nomination.

Roughly four years ago, the JPIA re-tooled this award with a focus on results-oriented nominations that enhance a member's safety programs. I believe each nomination does this and my goal for this email request is to strengthen each nomination. Can WSID review my question/suggestion below and provide additional supporting documentation it would be a great addition to the nomination.

1. On the forklift pocket lifter (grate lifting adapter) since it was fabricated can Bobby (being a P.E.) review and share if the fabricated pocket lift is designed/made to lift the exceeded weight of the grate being lifted?

The JPIA doesn't need your official P.E. sign-off only an email review/authorization.

Let me know if you have any questions, thanks.