



H.R. LaBounty Safety Awards Nomination Form

Nomination Deadlines:

Spring Awards: February 1, 2021

Fall Awards: September 1, 2021

Agency: San Luis & Delta-Mendota Water Authority

Project/Initiative Title: Permit Required Confined Space Rescue Team

Implementation Date: May 2021

Cost to Implement: \$40,000

Staff Time Required: 40 hours

Number of Employees/Facilities Impacted: 50

Employee/Department/Committee Nominated:

Name(s): Frank Ramos, Safety Officer and the SLDMWA Rescue Team

Job Title/Department: Maintenance and Operations

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.

Overview: San Luis & Delta-Mendota Water Authority (SLDMWA) O'Neill Pumping Plant maintenance workers enter Permit Required Confined Spaces (PRCS) to perform annual maintenance inspections and repair work. The plant supervisor ensures that employees follow the Facility High Energy Control Plan (FHECP) Clearance procedures, Permit Confined Space Program requirements, and Job Hazardous Analysis for eliminating and/or controlling assessed hazards.

Problem: The SLDMWA Safety Officer assessed the PRCS entry operations and determined SLDMWA O'Neill Pumping Plant employees were entering Permit Required Confined Spaces without a required trained rescue standby person. Without a Rescue standby person to be immediately available to provide rescue and emergency services in the event an employee becomes injured this creates an unsafe working condition and violates CA/OSHA Title 8 Section 5157.

"CA/OSHA Title 8 Section 5157 (k) Rescue and emergency services. The employer shall ensure that at least one standby person at the site is trained and immediately available to perform rescue and emergency services."

Potential Hazard: The PRCS work was performed by employees in the tight configuration of the discharge bowl of the pump assembly making it extremely difficult for a person to exit from the interior of the bowl if they become injured or have a medical emergency.

Reason for initiating corrective action: SLDMWA was unintentionally violating CA/OSHA Title 8 Section 5157 and creating an unsafe work condition by not providing a rescue standby person or persons during Permit Required Confined Space Entry Operations.

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.

Actions taken to correct PRCS Rescue Standby problem:

The Safety Officer provided management with an initial assessment report.

The Safety Officer requested and approval was given to acquire a Permit Required Confined Space expert to provide a detailed Hazard Assessment Report.

The contractor presented the assessment report to management stating that the Water Authority was violating the CA/OSHA regulations by not providing a Rescue Standby and was placing employees at risk. A recommendation to correct the situation was presented to management that the Water Authority create a certified PRCS Rescue Technical Team among the personnel at the O'Neill Pumping Plant so that they would be immediately available during PRCS Entry Operations.

Management agreed and approved the creation of a in-house rescue team and gave the Safety Officer the responsibility of coordinating the training, purchasing equipment and creating rescue plans.

Eight SLDMWA employees were trained in the PRCS Rescue Technician Certified level 40 hour course.

Rescue equipment including rescue harnesses, PPE, ropes, rescue hardware such as tripods, carabiners, pulleys, were purchased using the SLDMWA purchasing process

Rescue equipment is being stored in a converted cargo trailer and located at the O'Neill Pumping Plant.

SLDMWA PRCS Procedures revised to require a member or members of the Rescue Team will be on hand for any PRCS work.

An annual rescue drill will be conducted for the SLDMWA PRCS Rescue Team in January 2022 in order to keep the rescue team's Technician Certification current.

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 hazard of working in a difficult Permit Required Confined Space was reduced by engineering, administrative work procedures and PPE:

Rescue equipment was purchased and permanent anchors for rescue pulley systems to be engineered at various locations.

Rescue plans were developed for specific PRCS spaces with the requirement that a rescue team be on scene.

Rescue systems to be in place prior to workers entering PRCS spaces.

Portable radios will be used by entrants, attendants and the rescue team.

Emergency Response Procedures incorporated in the JHA to be discussed and on hand.

Employees are required to wear the following PPE when entering PRCS work areas: Rescue style hard hats with lights, fall protection harnesses with rescue trauma straps, gloves, and hearing protection.

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 Safety Officer was told SLDMWA employees have been entering permit required confined spaces for some time without the use of a rescue standby and that if someone becomes trapped or injured we would rely on the local fire department to respond to rescue our employees. The Safety Officer, having 29 years in the fire service w/rescue team training and experience, interviewed the local fire station staff and determined that the local fire department would not be immediately available for rescue. In addition, an incident involving an injured, trapped employee would possibly be a body recovery instead of a live rescue. The Safety Officer regarded this as an unacceptable way of doing business.

With the support and approval of SLDMWA's management, the Safety Officer was able to create an in-house Permit Required Confined Space technical rescue team that complies with CA/OSHA 5157 Permit Required Confined Space standard. It also creates a safer work environment and improves the safety culture for San Luis & Delta-Mendota employees.

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

Other: Work Procedures

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.

1. Safety Officer's Initial Assessment Report
2. RescueTech Assessment Report
3. PRCS Rescue Training curriculum
4. Rescue Training photos
5. SLDMWA PRCS Procedure
6. Rescue Technican Certificates

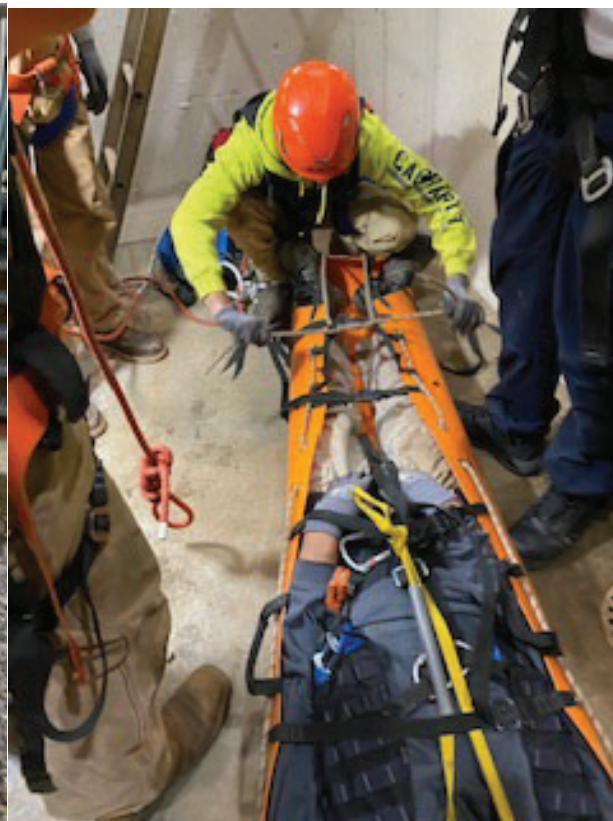
Nominated by: *Paulo Stiles*

Date: 08/30/2021

General Manager: *Pablo Arroyave*

Date: 08/30/21

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





SLDMWA Job Hazard Analysis Form

Submitted by:	Jimm Willyard	Sign:	Date:	
Approved by:	Jim Lenhardt	Sign:	Date:	

Work Description	OU- UNIT ANNUAL MAINTENANCE OR UNIT REHABILITATION			
Work Order No.				
Location of Work:	OPP			
Est. Start Date		Est. Duration		
Foreman	Jimm Willyard		Job Supervisor:	Jimm Willyard
Phone No.	209-826-0437		Phone No.	209-826-0144

Other Shops/Agencies

JPP OR CANAL MAINTENANCE MAY RE-ASSIGN EMPLOYEES TO ASSIST	

EMERGENCY CONTACTS

Control Room	X245, 209-832-6245	SAFETY	X250, 209-832-6250
Watermaster	X242, 209-832-6242	Other	
OPP	209-826-0144	Other	

If any Emergency occurs, medical or other; notify your supervisor and the Tracy Control Room as soon as practical

Emergency Services	Tracy Compound: 911	OPP/L.B.A.O: 911	Other Locations: 911
Location of Job	OU-		

Medical Facilities: Note: These are the medical facilities that the WA routinely uses. But an employee may go to the nearest medical facility if the employee feels that it is necessary.

Medical Facilities:	Sutter Tracy Hospital 1420 N. Tracy Blvd. Tracy, CA 95376 209-835-1500	Los Banos Hospital 520 West I St Los Banos, CA 93635 209-826-0591	Tracy Family & Occupational Medicine 644 W. 12th St, Tracy CA 95376 209-832-8984
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POTENTIAL HAZARDS (Mark all that apply)

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Flooding/Engulfment	X	High Noise Level	X
Sharp Edges	X	Skin Irritants	
Evacuation Hazard	X	Haz. Chem./MSDS	
Fall Potential	X	Elevated load or work	X
Electrical Shock		Release of stored energy	X
Toxic Materials	X	Inadequate Ventilation	X
Adjacent Work		New/Temp Employees	X
Overhead Power Lines		Lifting Hazards	X
High Ambient Temperature	X	Traffic Hazards	
Difficult/Limited access/Work in awkward position	X	Fire/Explosion Hazard	
Confined Space	X	Shoring Needed (Engineer approval req'd)	
Compressed gas/liquid under pressure		Welding/Cutting/Grinding	X
Underground conduits, cables, power, fiber optic, comm		Underground water lines, drain lines, sewage lines	
Chance of spill into DMC or other environmental damage		Slip/Trip Hazard: Working on loose/wet material or on a grade	X
Venomous Snakes/Spiders	X	Muscle Strains	X
Flying Objects			
Rotating Machine parts			

Safety Practices (Mark all that apply)

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Hot Work Permit	X	Confined Space Entry Permit	X
Clearance Required	X	Mechanical Material Handling Means considered	X
Rescue/Retrieval equipment		Review of EAP	
First Aid Kit Location	X	Communications	X
Live Electrical Work Permit		HECP Lockout/Tag out	X
Adequate Lighting	X	Evaluate if any limit switches or protective devices need to be bypassed	
Underground Utilities marked		Review of previous similar work. Any problems	X
Hazardous Waste Transportation and Disposal		Heat Illness Prevention Plan reviewed	
Electrical Hazard Assessment Form		<i>Work area blocked off to outsiders</i>	X

PPE Required (Mark all that apply)

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Hard Hats	X	Gloves (What Type)	any and as needed	X
Eye Protection (What Type)	Z87	Hearing Protection		X
Adequate Drinking Water	X	Face Protection		X
Steel Toed Shoes	X	Rubber Boots		X
Reflective Vests		Welding Leathers		X

Safety Equipment (Mark all that apply)

Safety Equipment (Mark all that apply)

Forced Breathing Air		Oxygen/Gas Monitor	X
Personal Protective Grounds		Respirators	
Arc Flash Clothing (What Level)		Pollution Prevention Measures on hand if a spill is possible	
Fall Protection	X		

Tools/Vehicles/Equipment/Misc.

Hand and Portable Power Tools Needed:	X
Hose, pressure washer, various hand tools	

Shop Equipment/Truck Mounted(or trailered) Equipment (Mark all that apply)

Band Saw		Barricades	X
Drill Press		Forklifts	X
Lathe		Mobile or Gantry Crane	X
Milling Machine		Test Equipment	X
Cutoff Saw		Service Trucks	
Shear		Tractor and low bed trailer	
Brake		Dump Truck	
Welders	X	Grader	
Gas Cutting/Brazing	X	Excavator	
Rigging Gear	X	Tractor	
Building Cranes/Hoists	X	Backhoe/Loader	
Insulated Tools	X	Bobcat	
Electrical Test Equipment (Hazards Associated with each type being used)		Water Truck	
Vehicle Logs(For USBR Work)		Air Compressor	X

JOB STEPS

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|---|---|
| 1. List and discuss the basic job steps | 3. Provide recommendations to eliminate or reduce the hazards |
| 2. Identify the Potential Hazards for each step | 4. Revise as conditions change during the job |

	Sequence of Job Steps	Potential Hazards and Consequences	Recommendations to Eliminate or Reduce the Hazards
1	VERIFY UNIT CLEARANCE IN PLACE AND ALL WORKERS ARE LOCKED ON		THIS JHA SHALL COVER ALL UNIT REHABILITATIONS AND ANNUAL MAINTINANCE
2	REMOVE/INSTALL (NOT PART OF ANNUAL MAINTENANCE) INSPECT SPEED HEAD AND DISTRIBUTOR VALVE	PINCH POINTS, SMASHED APPENDAGES OVERHEAD LOADS, SLIP, TRIPS OR FALLS FROM MOTOR HOUSING/LADDERS AND MUSCLE STRAIN	USE OF CORRECT TOOLS IN THE CORRECT MANNER FOR THE JOB IT WAS INTENDED, INCLUDING SPECIALTY TOOLS. THIS RULE STANDS FOR ALL ASPECTS OF OVERHAUL OR ANNUAL MAINTINANCE. MAKE GOOD USE OF MACHANICAL LIFTING DEVICES AS POSSIBLE. USE PROPER RIGGING WHEN USING CRANE OR HOISTS. USE SPOTTERS AND SIGNAL PERSONS AS NEEDED AND UTILISE TAG LINES FOR CONTROL OF LOADS. WEAR HARD HATS DURING USE OF CRANE. BE AWARE OF MATERIALS, HOSES AND ELECTRICAL CORDS, THESE CAUSE TRIPPING HAZARDS. CLEAN AS YOU GO.
3	REMOVE/INSTALL OF DECK PLATING OR GENERATOR DECK (IF NEEDED)	PINCHED, SMASHED APPENDAGES OVERHEAD LOADS, SLIPS AND FALLS FROM RAISED POSITIONS AND MUSCLE STRAIN	THE USE OF BARRICADES CAN ONLY BE USED AFTER DECK PLATES ARE REMOVED, USE TEMPORARY BARRICADE AS POSSIBLE. USE MECHANICAL LIFTING DEVICES AS MUCH AS POSSIBLE TO REDUCE STRAIN. WHEN ALL PATES ARE REMOVED INSTALL HARD BARRICADE. FOLLOW FALL PROTECTION PROTOCOL WHEN INSIDE THE BARRIER.
4	REMOVAL/INSTALLATION OF UNIT MOTOR (NOT PART OF THE ANNUAL MAINTINANCE) INSPECTION OF UNIT MOTOR	PINCHED SMASHED APPENDAGES OVERHEAD LOADS FALL FROM MOTOR DECK MUSCLE STRAIN	A CRITICAL LIFT PLAN IS REQUIRED BEFORE THIS TASK IS PERFORMED AND SHOULD BE COMPLETED BY THE ENGINEER. SE OF CORRECT TOOLS IN THE CORRECT MANNER FOR THE JOB IT WAS INTENDED, INCLUDING SPECIALTY TOOLS. THIS RULE STANDS FOR ALL ASPECTS OF OVERHAUL OR ANNUAL MAINTENANCE. MAKE GOOD USE OF MECHANICAL LIFTING DEVICES AS POSSIBLE. USE PROPER RIGGING WHEN USING CRANE OR HOISTS. USE SPOTTERS AND SIGNAL PERSONS AS NEEDED AND UTILIZE TAG LINES FOR CONTROL OF LOADS. WEAR HARD HATS DURING USE OF CRANE. BE AWARE OF MATERIALS, HOSES AND ELECTRICAL CORDS, THESE CAUSE TRIPPING HAZARDS. CLEAN AS YOU GO. ALL OIL SHOULD BE DRAINED BEFORE DISASSEMBLY OF SERVO.

5	REMOVAL/INSTALATION OF STUFFING BOX AND MEZZANINE DECK AND THRUST TUBES. (NOT PART OF THE ANNUAL MAINTINANCE) INSPECTION/REPAIR OF STUFFING BOX .	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE MECHANICAL MEANS TO LIFT AND MOVE THE STUFFING BOX, MEZZANINE DECK AND THRUST TUBES. TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS. HARD AHTS AND FALL PROTECTION MAY BE NEEDED DURING THESE TASKS.
	REMOVAL/INSTALATION OF INTERMEDIATE BEARING.	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE MECHANICAL MEANS TO LIFT AND MOVE THE INTERMEDIATE BEARING. TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS.
	REMOVAL/INSTALATION/REPAIR OF PUMP GUIDE BEARING.	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE MECHANICAL MEANS TO LIFT AND MOVE THE PUMP GUIDE BEARING. TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS.
6	REMOVAL OF INTERMEDIATE, PUMP SHAFTS AND ENCLOSURE TUBE. (NOT PART OF THE ANNUAL MAINTINANCE)	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE CONFINED SPACE PROCEDURE WITH FORCED VENTILATION AS NEEDED. USE NORMAL CRANE PROTOCOL AND FALL PROTECTION AS NEEDED.
7	REMOVAL INSTALATION OF DISCHARGE ELBOW. (NOT PART OF THE ANNUAL MAINTINANCE)	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE FALL PROTECTION AS NEEDED. NORMAL CRANE PROTOCOL
8	REMOVAL INSTALATION UPPER & LOWER TAPER SECTIONS. (NOT PART OF THE ANNUAL MAINTINANCE)	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE FALL PROTECTION AS NEEDED. NORMAL CRANE PROTOCOL
9	REMOVAL INSTALATION OF DISCHARGE BOWL (NOT PART OF THE ANNUAL MAINTINANCE)	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE CONFINED SPACE PROCEDURE WITH FORCED VENTILATION TO ENTER BOWL AND REMOVE PUMP GUIDE BEARING.USE FALL PROTECTION AS NEEDED. NORMAL CRANE PROTOCOL

10	REMOV INSTALL PROPELLER. (NOT PART OF THE ANNUAL MAINTINANCE)	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE FALL PROTECTION AS NEEDED. NORMAL CRANE PROTOCOL
11	REMOVE INSTALL PROPELLER HOUSING (NOT PART OF THE ANNUAL MAINTINANCE)	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE FALL PROTECTION AS NEEDED. NORMAL CRANE PROTOCOL
13	PENSTOCK AND FLOW TRANSMITTER EQUIPMENT INSPECTION. REMOVE INSTALL FLOW TRANSMITTER EQUIPMENT (NOT PART OF THE ANNUAL MAINTINANCE)	CONFINED SPACE, SLIPPING HAZARD, LOW OR NO LIGHTING	CONFINED SPACE PROCEDURE WITH FORCED VENTILATION, LOW VOLTAGE LIGHTING.
14	KINNEY STRAINER DISMANTALE INSPECT REPAIR AS NEEDED.	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE MECHANICAL MEANS TO LIFT AND MOVE THE STRAINER PARTS. TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS.
15	COOLING WATER PUMP DISMANTAL INSPECT REPAIR AS NEEDED.	PINCHED SMASHED APPENDAGES OVERHEAD LOADS MUSCLE STRAIN	USE MECHANICAL MEANS TO LIFT AND MOVE THE COOLING WATER PUMP PARTS. TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS.
16	UNIT 4160 UNIT CIRCUIT BREAKER INSPECTION CLEANING ADJUSTMENT.	PINCHED SMASHED APPENDAGES MUSCLE STRAIN	TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS.
17	WOODWARD CONTROL CABINET OIL FILTER REPLACEMENT	PINCHED APPENDAGES MUSCLE STRAIN	TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS.
18	UNIT EXCITER INSPECTION AND CLEANING	PINCHED SMASHED APPENDAGES MUSCLE STRAIN	TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS.
19	PENSTOCK INSPECTION AND REPAIRS	PINCHED APPENDAGES, SLIPS AND FALLS FROM WET OR SLICK SURFACES AND MUSCLE STRAIN	TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS.
20	SUSATINING PUMP, FISHER AND BAILY VALVE INSPECTION REPAIR AS NEEDED.	PINCHED APPENDAGES, SLIPS FROM SLICKOR WET SURFACES AND MUSCLE STRAIN	TAKE PERIODIC BREAKS TO STRETCH DUE TO AWKWARD POSITIONS NEEDED TO PERFORM THESE TASKS

IS "JOB STEPS CONT PAGE" USED (Mark "X" if Yes)

JHA Crew Review Conducted By		Sign and Date:	
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