

Nomination Deadlines:

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

Agency: El Dorado Irrigation District

Project/Initiative Title: Camp Creek Safety

Implementation Date: 2/07/2024

Cost to Implement: \$5,455 Staff Time Required: 4 hours

Number of Employees/Facilities Impacted: 9/2

Employee/Department/Committee Nominated:

Name(s): Pre Deitchman

Job Title/Department: Water Treatment Operator/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.

The District operates a diversion structure called Camp Creek. This structure has two manual gates to control the flow of water for Camp Creek as well as divert water from Camp Creek into Jenkinson Reservoir. The gates are extremely heavy, requiring reduction gear boxes to be operated manually. During the year, these gates are operated regularly to comply with water rights management. Operators are tasked with the operation of the gates. The gates can require more than 400 turns from fully open to fully closed. The placement of the gear box requires operators to be bent over at the waist for a long period of time while manually turning the gearbox. This extreme posture, coupled with repetitive motion, is not conducive for proper industrial ergonomics.

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.

Pre Deitchman identified this problem and began to research a solution. Ultimately, Pre discovered a Milwaukee-manufactured portable cordless hydrant and valve exerciser. Although this unit was not specifically designed for this use, Pre worked internally to compare the design criteria of the gates and the portable unit. Pre also had an adapter fabricated by the District's welders to fit the portable actuator to the gear box.

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.

With the new equipment in place, the operator now simply attaches the lightweight portable actuator to the gearbox to open and close the gates. This new procedure eliminates the need to repeatedly bend over at the waist while cranking, promoting proper industrial ergonomics.

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.

Pre was able to identify a safety issue that existed since the diversion structure was constructed in the late 1950's and that many other employees have overlooked. There was not a "one size fits all" solution, and Pre worked through the obstacles to manage this project and achieve great results. Pre communicated well within his team and garnered everyone's enthusiasm for this safety solution.

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

This project addressed an ergonomic issue identified in the JPIA Commitment to Excellence Program. This project utilized the preferred method of engineering controls to design a method to prevent extreme postures, repetitive motion, and excessive force by utilizing mechanical assistance.

oject utilized the preferred method of engineering controls to design a mes, repetitive motion, and excessive force by utilizing mechanical assista 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 import the nomination. Digital photos, supporting documentation, samp	
Camp Creek figure 1, Camp Creek figure 2, Camp Creek fi	gure 3, Camp Creek figure 4
Nominated by: Daniel Newsom	Date:04/04/2024
General Manager: Jim Abercrombie	Date:04/04/2024

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



Camp Creek Figure 1



Camp Creek Figure 3



Camp Creek Figure 2



Camp Creek Figure 4



INJURY & ILLNESS PREVENTION PROGRAM (IIPP) CONSTRUCTION CODE OF SAFE PRACTICES (COSP)

POST THIS DOCUMENT IN A CONSPICUOUS LOCATION WHERE EMPLOYEES REPORT TO WORK.

Safety is our first operational priority. The IIPP Construction Code of Safe Practices establishes safety expectations to prevent serious injury, illness, or death. Construction supervisory staff include managers, supervisors, and Senior Construction Maintenance Workers, who are responsible for posting, communicating, implementing and enforcing the Code in their respective area of responsibility.

All District staff performing work at construction jobsites shall understand and follow the Code of Safe Practices. If an employee has a question about a safety practice listed, he or she shall be responsible for immediately contacting construction supervisory staff. Reporting near-misses, injuries, illnesses, exposure, and property damage as soon as possible the day of occurrence is required and is an essential element in achieving the District's Guiding Principle of 100% Safety.

A. Core Supervisory Staff Responsibilities

- 1. Pre-plan jobs to identify, evaluate, and render hazards safe.
- 2. Portable toilets shall be provided to stationary/non-mobile crews unless other facilities are available within 10-minutes.
- Document the completion of scheduled and unscheduled safety inspections at least monthly to identify hazards and unsafe conditions. Correct identified conditions and unsafe conditions based on hazard severity.
- 4. Provide prompt first aid within 4-minutes and timely medical transport within 30-minutes if serious or life-threatening injuries were to occur. Non-serious injuries requiring medical attention shall be treated by a District authorized medical facility. Serious or life-threatening medical assistance shall be provided by the nearest hospital.
- 5. Conduct a "Tool Box Talk" safety briefing at each jobsite daily to review known job hazards, safety procedures for protection from injury, and first aid procedures in the event of injury. Confirm the briefing by using the jobsite safety bulletin.

B. General Safety

- 1. Report to work fit-for-duty and ready to work safely.
- 2. When you see or become aware of a hazard, fix it or stop work, notify supervisory staff, and do not resume work until supervisory staff determines it is safe.
- 3. Wear appropriate and approved personal protective equipment (PPE): hard hat, hearing protection when loud equipment is in use, safety footwear, eye and face protection, hand

- protection, ANSI-approved high visibility outer garment, and specific personal protective equipment required by product safety labels and/or Safety Data Sheets.
- 4. Inspect and maintain all construction-approved first aid kits and fire extinguishers daily. Keep access to conspicuously located first aid kits and fire extinguishers clear at all times.
- Provide fresh and suitably cool drinking water in clean and dedicated storage containers sufficient to provide at least one quart per employee per hour (2 gallons per employee per day). Replenish water during the shift to maintain required quantities. Provide clean cups for drinking.
- 6. Provide one or more fully shaded areas for employees to sit in a normal posture when temperatures exceed 80 degrees Fahrenheit. When temperatures reach or exceed 95 degree Fahrenheit construction supervisory staff shall offer a 10-minute cool down period every two hours, monitor worker for alertness, and signs and/or symptoms of heat illness.
- 7. Practice good jobsite housekeeping. Organize jobsites to ensure safe conditions and eliminate hazards to other workers or the public.
- 8. Cover or eliminate impalement hazards, such as exposed ends of rebar or protruding nails immediately.

C. Tools and Equipment

- 1. Power equipment and tools are only operated by trained and qualified staff authorized by the supervisor.
- 2. Inspect and use proper tools and equipment for the task to be performed. Immediately remove damaged or faulty tools from service. Ensure guards and protective devices on tools and equipment are fully functional, in place, and are not modified or removed.
- 3. Follow specific work procedures to control visible hazardous dust known as respirable crystalline silica. If work involves unapproved work practices, stop work and contact your immediate supervisor.
- 4. Use impact wrenches or wrenches with long handles instead of using "cheater bars" or handle-extensions on wrenches whenever possible.
- 5. Use punch, chisel, and file handles whenever possible.
- 6. Protect electrical cords from physical damage. Electric tools and equipment shall have a ground on the plug and/or be double insulated. Remove damaged cords and equipment from service.
- 7. Render air hoses safe before disconnecting to prevent hose whip and ≥ 30 psi air contact with skin.

8. Never push wheelbarrows on unguarded elevated surfaces (i.e., on top of pipes or unguarded elevated crossings or jobsite access paths).

D. Heavy Equipment and Vehicle Operation

- 1. Heavy equipment is only operated by trained and qualified staff authorized by the supervisor.
- 2. Do not allow workers to be underneath loads handled by lifting or digging equipment, or in danger areas of equipment operation (i.e., backhoe swing radius).
- 3. Perform pre-trip inspections on all construction vehicles and heavy equipment as required by the DOT.
- 4. Inspect slings, wire rope and chains prior to use for damage or defects, and remove damaged equipment from service.
- 5. Wear seat belts when operating equipment and vehicles at all times.
- 6. Never stand in between the wheels and between any parked truck and attached trailer. This is to prevent struck-by accidents.
- 7. Have four wheel chocks available for towing equipment without air brakes, and install all chocks; 2 facing forward and 2 facing rear with 2 on the right side and two on the left side.
- 8. Establish clear and effective hand signals between an operator and signalperson when work requires and prior to starting work (i.e., when backing a vehicle or operating heavy equipment).

E. Traffic Control and Personal Safety

- 1. Face traffic unless there is a clear reason for doing otherwise. Plan an escape route in case an errant vehicle enters the work zone.
- 2. Park vehicles as a barrier between oncoming traffic and the work location whenever possible.
- 3. When required to cross traffic lanes on foot, provide enough time to walk across the lanes safely. If necessary, walk back to the beginning shoulder. Do not run tripping can be deadly.
- 4. Do not work in or within 6 feet of a traveled way without proper signage or a lane closure. Exception: Brief operations may be conducted without using a lane closure or signage if the following three conditions are met:
 - A. Parking or working is limited to no more than 20 minutes.
 - B. Traffic volume is light.
 - C. Sight distance is at least 300 feet in each direction.

F. Lockout/Blockout/Tagout

1. Prior to work, prepare written Energy Control Procedures (ECPs) specific to the equipment, process, and energy being locked or blocked and tagged out.

- 2. Complete Lockout/Tagout Permits for each lockout/tagout/blockout application, or follow the Simple Lockout/Tagout procedure.
- 3. Authorized Employees (AE's) shall verify/review the isolation points listed in the ECP.
- 4. Individually keyed padlocks shall be applied by each Authorized Employee (AE's) involved in the lockout/ tagout/ blockout application with tags, and applied to energy isolations points or the lockout/tagout group box.

G. Fall Protection

- 1. Work performed above or below another worker requires prior hazard communication to prevent objects from falling to the lower level.
- 2. Block off edges and cover holes to eliminate fall hazards.
- 3. Use temporary guardrails, scaffolding, or an aerial work platform whenever a six foot falling hazard present.
- 4. Only use personal fall protection systems (e.g., fall restraint, rope access, and fall arrest) after the F.3 options above are determined to be infeasible.
- 5. Only trained employees are authorized to use personal fall protection systems (fall restraint and fall arrest systems).
- 6. Inspect the condition and confirm the stability of a ladder before use. Dispose of ladders with damaged rungs, rails, and feet.
- 7. Extension ladders shall extend at I eas t three feet beyond the upper landing surface to facilitate safe discharge. Secure and stabilize ladders to prevent movement.
- 8. Never stand on the top two rungs of an A-frame ladder, or the top three rungs of an extension ladder. Always face a ladder maintaining three points of contact when climbing.
- 9. Only use Type I (250# total load), IA (300# total load), or IAA (375# total load) ladders, and only non-conductive ladders shall be used in proximity to electricity.

H. Excavation and Trenching Safety

- 1. A competent person, designated and authorized by the supervisor shall implement the following:
 - A. Determine the exact location of subsurface installations in conflict with the excavation using hand tools, or following vacuum excavation procedures, before using power-driven excavation equipment when within the tolerance zone. A Tolerance Zone is determined according to one of the following field marking methods.
 - 24" from each side of the single marking.



• 24" plus one-half the specified size on each side of a sign marking.

 24" from each outside marking that graphically shows the width of the outside surface of the installation.



<u>Unable to locate a marked utility</u>: If the exact location of subsurface installation cannot be determined the competent person shall not proceed and contact the supervisor.

- B. Evaluate, monitor, and render atmospheric hazards safe (i.e., carbon monoxide from exhaust, hot work/welding, or job induced hazards), prior to allowing entry. If a potential hazardous atmospheric condition exists prohibit entry and contact the supervisor. Potentially hazardous atmospheric conditions require the supervisor to initiate confined space entry procedures.
- C. Classify the soil types using one manual test method and one visual test.
- D. Install a cave-in protective system according to the soil type and manufacturer's tabulated data, or approved benching and sloping methods.
 Tabulated data and configuration data shall be readily available at the jobsite.
- E. Complete an excavation permit and have it available at the jobsite whenever workers enter protective systems or benching and sloping configurations.
- F. Keep spoil piles at least two feet from the edge of a trench or excavation.
- G. Visually inspect unsupported excavation side walls before backfilling to ensure that it is safe to backfill.
- H. Document permitted excavation inspections at least twice during each shift, and before work begins each day. Additional inspections shall be documented when additional hazards are present such as accumulating water.
- I. Do not allow work under objects supported by chains or straps without protective blocking that will prevent injury if chains or straps fail.
- J. Any excavation greater or equal to 20 ft. in depth shall be designed by a registered engineer with a copy of the excavation plan available on the jobsite.

I. Helicopter Safety

1. Wear hard hats with chin straps under the chin and other appropriate PPE when working in the vicinity of helicopters.

2. Only employees briefed in the Contractor's helicopter safety plan are authorized to work around helicopters and their loads. An exception is when under the direction of Emergency Medical Services personnel (e.g., law enforcement or fire).

J. Rope Access

- 1. Only rope access qualified persons can perform rope access work.
- 2. Only use rope access equipment for slope stabilization or suspended work using a 5,000lb anchor point or equivalent.
- 3. Use all Camp 5 equipment that has been inspected biannually. Inspect all equipment daily before use.
- 4. Always use at least two trained staff members.
- 5. Always maintain two-way communication. Communication systems to be used include: cell phone, radio, and verbal communication.
- 6. All qualified persons will attend an initial approved rope access training. Refresher training will take place annually on-site.
- 7. Rescue and emergency protocol shall be established before work commencing.
- 8. A Job Safety Analysis shall be established before work commences to ensure all site hazards are identified.

Authorized by:

Daniel Newsom

Safety & Security Officer

Jim/Abercrombie

Seneral Manager



AR 4015 Injury and Illness Prevention Program

Approved: June 16, 2009

District management recognizes the need to ensure a safe and healthy work environment for its employees, volunteers, contractors, visitors, and the public. An important element in meeting this goal is the District's Injury and Illness Prevention Plan (IIPP). The plan has been developed in accordance with the California Code of Regulations, General Industry Safety Order 3203, which requires IIPPs for California-based operations.

The IIPP clearly states expectations for safety responsibilities at all levels within the organization and provides personnel a reference for consistent safety compliance. It is implemented as a continuous improvement program and is reviewed—and revised, if needed—on an annual basis. At a minimum, IIPP specifies and addresses the following:

- 1. Name(s) and title(s) of personnel responsible for the program.
- 2. EID's system for identifying and evaluating workplace hazards, including scheduled periodic inspections to identify unsafe conditions and work practices.
- 3. EID's methods and procedures for correcting any unsafe or unhealthy work practices and conditions in a timely manner.
- 4. An occupational health and safety training program designed to instruct employees in safe and healthy work practices and in hazards specific to each employee's job assignment.
- 5. A procedure to investigate occupational injuries and illnesses.
- 6. EID's system for communicating with employees on occupational health and safety matters, including provisions designed to encourage employees to identify and report hazards at the work site without fear of reprisal.
- 7. EID's system for ensuring that employees comply with safe and healthy work practices, which may include disciplinary action for failure to comply.

A copy of the plan is available at http://peoplescope/Pages/Default.aspx or upon request from the Safety/Security Office.

IX. Safety and Security

A. Safe and Healthful Environment

Safety is given primary importance in every aspect of planning and performing all District activities. The District wants to protect employees against injury and illness, as well as minimize the potential loss of work productivity. Employees must adhere to the safety procedures contained in the District's Injury Illness Prevention Plan (IIPP), and any other safety regulations. Compliance is a condition of employment. Employees should report all potentially work-related injuries and illnesses, as well as anything that needs repair or is a safety hazard. to their supervisor immediately, no matter how slight or regardless of their intent to seek medical treatment. Supervisors will make the reporting form "Occupational Illness/Injury Report" available to employees on the same day of report. Employees are responsible for inspecting their own workplace and for promptly reporting any unsafe conditions to their immediate supervisor. Employees must notify their supervisor or the Human Resources Department if they are taking a medication or prescription that may affect job performance. Failure to report or a delay in reporting on any of these topics is grounds for disciplinary action.

Consistent with our commitment to maintain a safe and healthful workplace, the District's Safety and Security Officer maintains a comprehensive Injury and Illness Prevention Program (IIPP), designed to reduce injury and illness in the workplace. The program includes workplace inspections, hazard recognition, accident investigation, safety rules and procedures, employee training regarding safe work habits and behavior to ensure a safe and secure working environment at the District.

B. Vehicle Use

Prior to the start of employment, the District obtains from the Department of Motor Vehicles (DMV) a copy of the driving record of any employee who is authorized to operate vehicles on the District's business. Employees covered under this policy will be enrolled in the District's Employer Pull Notice (EPN) program.

If an employee's duties require driving a vehicle, the employee must maintain a driving record that will not cause the District's insurance rate to be increased or the employee to become uninsurable; the employee's driving record will be subject to review at least annually (via EPN program). Any violation of this these requirements may subject the employee to disciplinary action.