

# Craft Safety Representative Program at the Waste Treatment Plant

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*September 15, 2010*



Bechtel National, Inc.



Washington Group International  
A subsidiary of URS Corporation

# Waste Treatment Plant Project

- First of its kind
- Equivalent to constructing two nuclear power plants
- More than 24 million craft hours to build
- PT facility has a footprint of nearly 3 football fields and will be 12 stories

***The Cornerstone  
of Hanford  
Cleanup***



## Construction Site Workforce

- 15 Union affiliates (Building Trades)
- 1,000 Skilled craft workers
- 41 Subcontractors (300 subcontract workers)
- 500 Non-manual employees



## Construction Workforce

- Construction mentality – “Get it done”
- Construction management wasn’t happy with the safety performance or the safety culture

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**Management had to develop trust and communication with the workers in order to get a buy-in for the safety culture**



Craft Safety program was created to bridge a communication gap between management and workers regarding safety concerns and perceptions



## Craft Safety Representatives (CSRs)

- Advocate for the various craft groups
- Act as a liaison between workers, management, and safety professionals
- Facilitate open lines of communication for safety
- Put a worker perspective on improving safety
- Communicate safety concerns that may not be identified through traditional means
- Help research, identify, evaluate, and implement efficient and effective resolutions to safety issues
- **Instill the value that safety is an unwavering commitment that does not change based on priorities**

## Building the Foundation

- Selection process led by craft groups to ensure no management favoritism or bias toward the candidates
- Five craftsmen selected from different disciplines
- One CSR assigned to each major area/building of the plant
- Roles and responsibilities established by management, safety committees (Voluntary Protection Program, Construction Safety Alliance), and the CSRs
- Report to the Safety Assurance Manager with daily direction from Area Superintendents



## Investment in the Program

- Empower CSRs with direct access to project management
- Training and education provided:
  - Safety Leadership Training
  - OSHA 510, General Construction (30 hour)
  - Human Performance Improvement (8 & 30 hour)
  - Fundamentals of Industrial Hygiene
  - Confined Space
  - Fall Protection
  - Excavation Safety
  - Event Investigation
  - Other safety processes and procedures (over 50)
- Rotate CSRs through each facility to expose them to a variety of processes



## What to Expect – Initial Growing Pains

- *“Bumps in the Road”*
  - After working in the field, re-define/clarify actual roles and responsibilities with safety assurance and line management
- *“Tug-of-War”*
  - Trust and credibility lacking between CSRs and safety assurance professionals due to differing perspectives and backgrounds



## Maturing the Program

- Weekly meetings between CSRs and senior safety managers
- Teambuilding exercises for CSRs and Safety Assurance personnel (highlight how different perspectives contribute to greater knowledge)
- CSR participation in event investigations
- CSR involvement in construction management meetings (Incident Review Board, Root Cause Analysis, Supervisor Safety meetings)
- Monthly meetings with DOE Facility Representatives to discuss opportunities for improvement and issue resolution



## The Pay Off



***Mutual trust and  
credibility achieved!***

- An integrated CSR/Safety Assurance team working towards the same goals
- Recognition of individual and team strengths – putting them to work for efficient and effective resolution of safety issues
- Workers feel they have access to the “Decision Makers” – opening the door to bring safety issues to senior managers



# WTP Injury Rates – CSR Effect

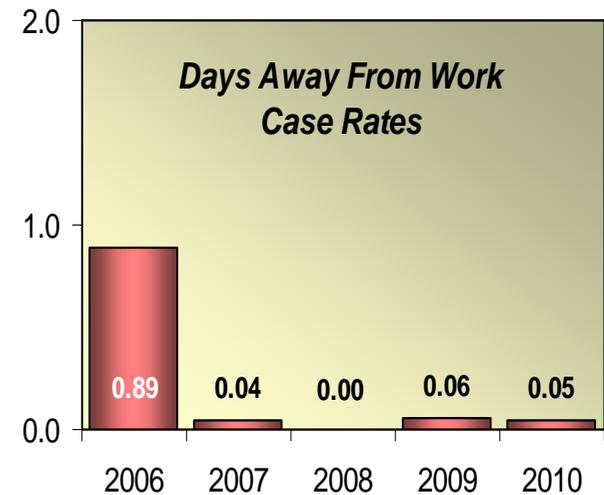
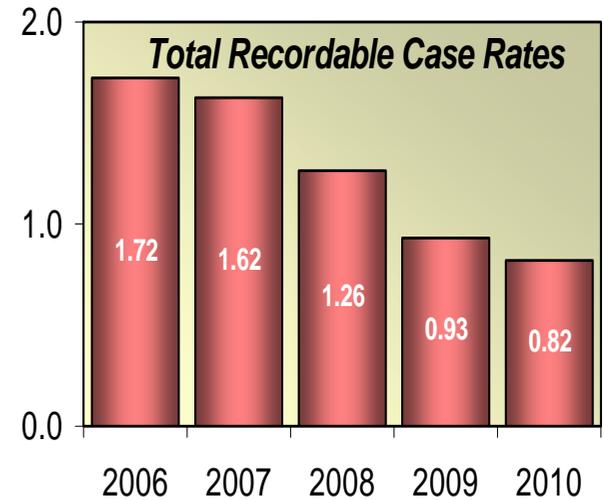
Safest large construction job in the DOE complex

2009 was WTP's safest year since the Project's inception

- **1 million hours** worked without a recordable injury for the first time since construction began in 2001
- **78 consecutive days** without a recordable injury at the construction site - the longest period in Project history
- Bechtel **Construction Team of the Year**

The trend continues in 2010

- Awarded DOE VPP Star status in July 2010
- **Over 6 million hours (370 days)** without DAFW
- TRC rate shows a steady decline – over 50% since 2007





# Resolved Issues

## Resolved Issues

- Air quality in LAW building increased requested by craft and supported by I
- Aluminum ramp for material and tool c
- Glove matrix: Hex Armor, Anti-Vibe, V
- Peltor ear muffs, used under PAPR in protection.
- UV block on windows of heavy equip
- Improved and modified training.
- Help facilitate heat stress control by p all areas. Performing Wet Bulb Globe. Increasing heat stress awareness. Communicating to workers that they can, and should take a cool down breaks whenever they feel it necessary during extreme heat conditions.
- Cold stress advance
- Helping our fellow c procedure directions:
- Designated walkwa
- Blue room and com
- Smoke Eater trainin
- Vortex Fans acquire
- PPE special sizes, h
- Air wand changes to
- Bandana jugs securing from using as drinking water.
- Water shed quality sanitation and distribution improvements.
- Site traffic enhancement and implementation.
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- Ar

**Heat stress advancement, education and implementation of cool down stations and work rest regimen**

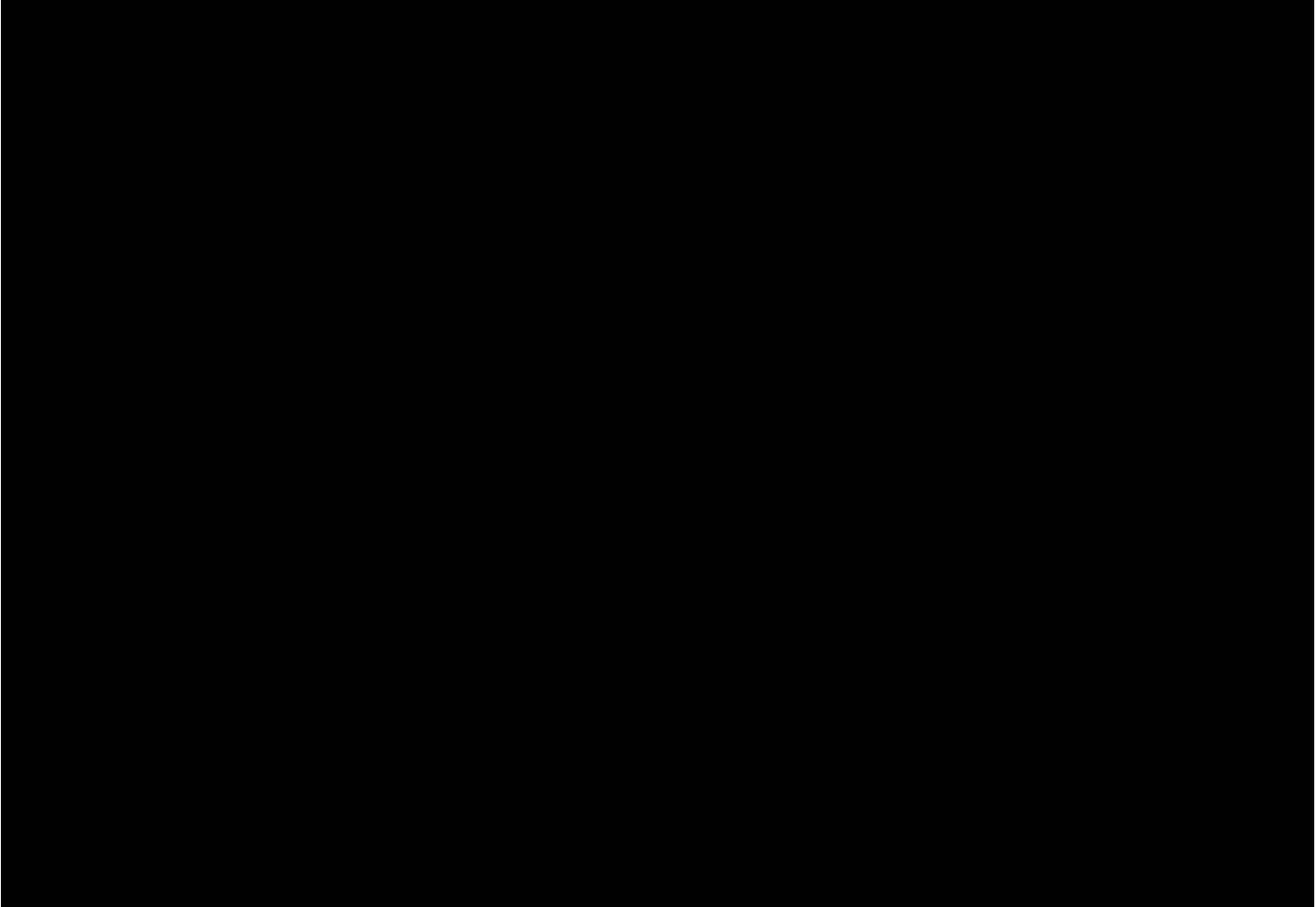
**Helping our fellow craft workers understand and follow the AJHAs and clarifying BNI procedure directions**

**Correcting at-risk behaviors of craft and resolving issues before they reach a management action level**

- Hard hat flash light procur
- Lift inspection improve
- Noise reduction barriers
- Horizontal rebar tie off te
- Heavy equipment seat
- Dumpster access landi
- A/C repair on heavy ed
- Identified unprotected
- Ladder installation on
- Hand holds installed
- Vending machines a
- Eye wash and safet
- HPI additions to fac
- STARRT card revis
- Work Control proc
- Defining tobacco
- VPP orientation,
- Individual portab
- Correcting at-risk action level.



# CSR Program Impact





**Questions?**