

AIGA 2006 Meeting

TRANSPORTATION

SAFETY



Asia Industrial Gases Association

12-13 September 2006
Shanghai

Professional Product Driver Certification

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Professional Product Driver Certification



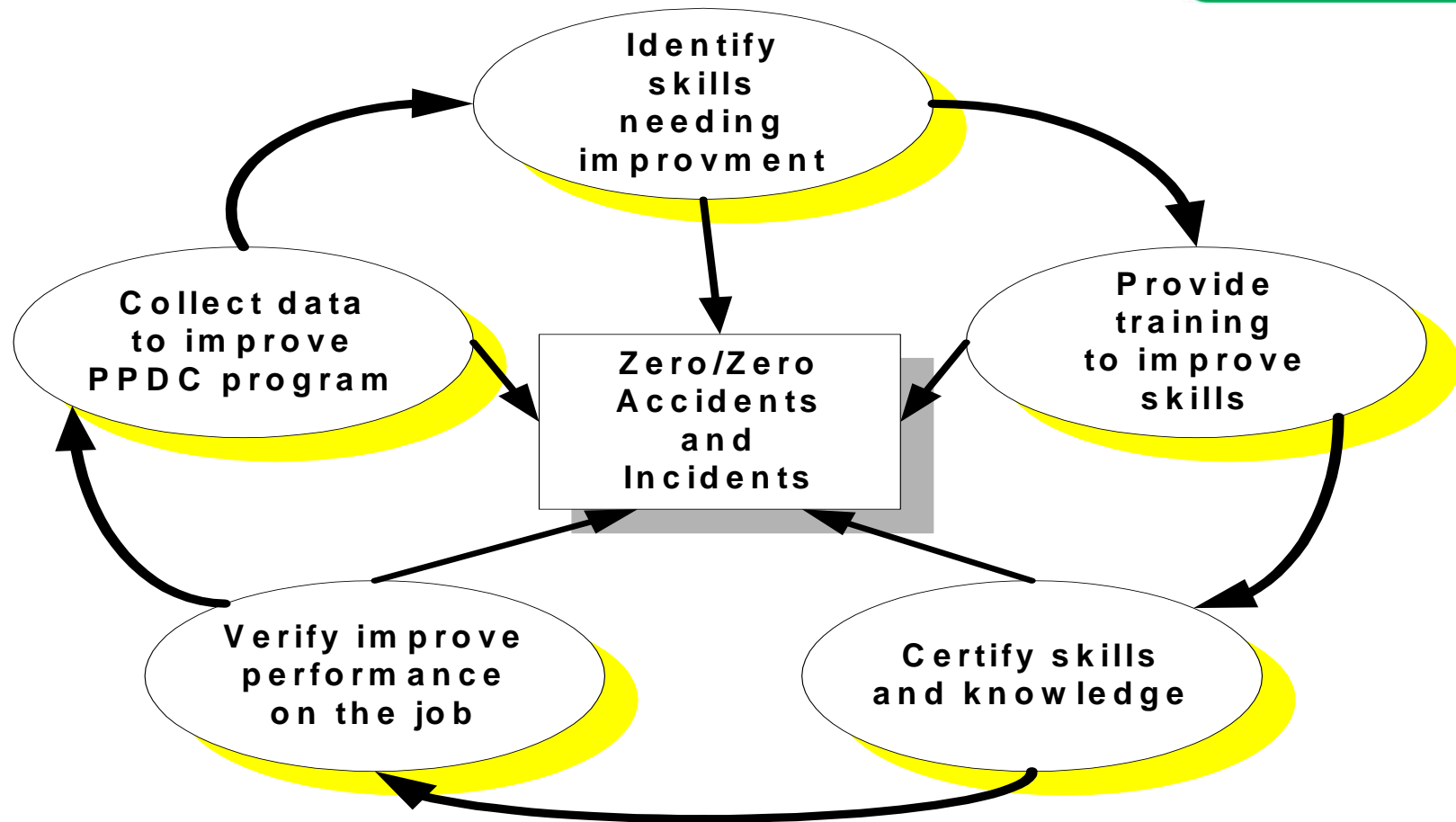
Why a Certification Program?



Organizational Drive to Improve Transportation Safety

- ✓ High Severity Accidents
- ✓ Rollovers
- ✓ Tractor/Trailer Uncoupling/Disconnect
- ✓ Product Transfer Accidents/Incidents
- ✓ Non Highway Maneuvering Accidents/Backing
- ✓ Environmental Spill Control (Spill Kit Use)
- ✓ Equipment Failure Incidents

Improvement Approach



Program Purpose



Purpose

- ✓ To change behaviors that contribute to driver accidents and injuries

Focus

- ✓ Certifying professional product drivers in the necessary skills and knowledge for delivering product in a safe and consistent manner

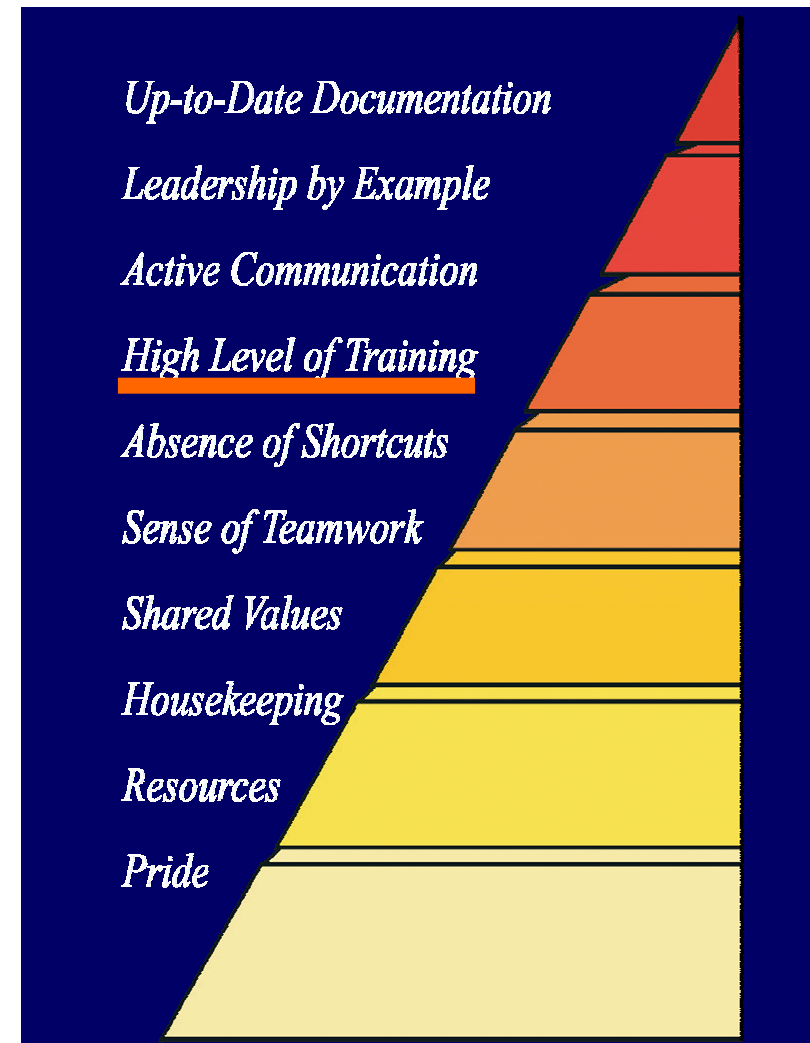
Changing Behavior



Operational Discipline

Doing the right thing every time!

The dedication and commitment by the organization to perform their work consistent with the requirements of the management systems and defined procedures.



Organizational Discipline Regarding Training



Training Gaps

- ✓ Absence of skill verification
- ✓ Not everyone trained
- ✓ Training inconsistency
- ✓ Training materials not current with operations
- ✓ Budget sensitivity
- ✓ Not enough time—desire to compress training time
- ✓ Training at beginning and end of work shift

Ideal State

- ✓ Everyone is trained in everything they need to know; and it works
- ✓ Highest quality training in the best settings by the best instructors
- ✓ Verification of skills—hands-on demonstration
- ✓ Instinctive reaction

Organizational Behavior Toward Training



Implementing the Ideal State

- ✓ Create a culture of professionalism by raising the bar for performance and training
- ✓ Use measurement tools to verify skills and knowledge
- ✓ Use a combination of classroom, online and hands-on training
- ✓ Present a standard message and policies through qualified trainers



Training Disciplines and Advantages



Disciplines

- ✓ Dedicated, concentrated and uninterrupted training time
- ✓ Opportunity to completely understand material
- ✓ Consistent training
- ✓ Verification of skills and knowledge
- ✓ Network opportunities for drivers
- ✓ Policies and procedures explained

Advantages

- ✓ Environment conducive to learning
- ✓ Class room instruction—hands-on practice
- ✓ Uniform expectations
- ✓ Observation of skills and knowledge practiced
- ✓ Learning from each others experience
- ✓ Increased procedure adherence—reason for policy understood

Training Implementation



Professional Product Driver Certification

- ✓ Drivers allowed time away from routine work for training (2 1/2 days)
- ✓ Drivers from different facilities participate in training (10 to 20 drivers per session)
- ✓ Certified Skilled Trainers
- ✓ Classroom and hands-on rotation throughout training session
- ✓ Training materials updated and improved
- ✓ Training feedback and behavioral change monitored for effectiveness

Training—Praxair Asia



Program Training Modules



- ✓ Rollover Prevention
- ✓ Hazard Material Certification
- ✓ Fatigue Management
- ✓ Vehicle Inspection
- ✓ Tractor/Trailer Coupling and Fifth Wheel Operation
- ✓ Drivers Handbook—Policy and Procedure
- ✓ Transportation Security
- ✓ Defensive Driving
- ✓ Environmental Spill Containment
- ✓ Non-Highway Maneuvering/Backing

Training Feedback



Driver Feedback

- ✓ Extensive attention afforded drivers allowing input and dialogue
- ✓ Concentrated training away from facility
- ✓ Training not squeezed in before or after hours
- ✓ Network opportunities for employees
- ✓ Opportunities to provide feedback
- ✓ The “whys/reasons” of policies were explained
- ✓ Focus on job-related knowledge, skills and behaviors
- ✓ Effective hands-on training, testing and case study

Training Feedback



Management Feedback (Post Training)

- ✓ Drivers are better trained
- ✓ Drivers are confident in job skills
- ✓ Better adherence to policies, i.e.: purging, security, loading, backing with cones
- ✓ Observed changes to on-the-job behavior
- ✓ Sharing correct procedures with co-workers
- ✓ Better skilled drivers to assist in training and mentoring new personnel
- ✓ Product transfer function observed as consistent and procedural discipline
- ✓ More professional behavior

Program Results



- ✓ Program entering the fourth year starting 2007
- ✓ 425 North American Praxair Drivers certified as of 2006
- ✓ Program goes Global
- ✓ Feedback remains positive
- ✓ Reduced number high severity accidents
- ✓ Improved Operational Discipline

Summary



- ✓ Analyze transportation safety performance
- ✓ Evaluate organization training and identify opportunities
- ✓ Raise professionalism expectations of drivers and instill professional pride
- ✓ Implement operational discipline in high level of training
- ✓ Assure rigor in program and trainers
- ✓ Assure program current with policy and operational standards
- ✓ Measure performance and behavioral changes