

# UST Certification Refresher Altoona, IA November 21 & 22, 2013



**Leading the Way**  
in Fueling Innovation Worldwide



## OPW Global Mission

Improving fueling operations globally by optimizing safety, efficiency, reliability, and environmental sustainability through innovative fuel handling and information management solutions.





## Environmental Sustainability is a Cornerstone of OPW's Purpose & Product Offering

### Environmentally Safe Refueling Systems That Promote:

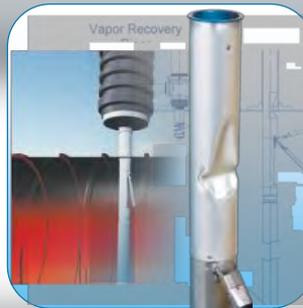
- Clean Air
- Clean Water
- Safe Consumer Environments



Vapor Recovery  
Products



Spill  
Prevention



Overfill  
Protection



Fuel Transfer &  
Containment



Tank  
Monitoring



CleanEnergy  
Fueling Products

**All Access – Able All The Time**

**Always:**

**Access – Able**

**Monitor – Able**

**Maintain – Able**

**Repair – Able**

**Replace – Able**

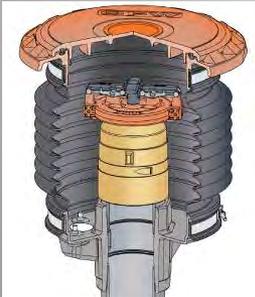
**WITHOUT BREAKING CONCRETE**



# New 1-2200 Spill Container

- ❖ New EPA Spill Containment Requirements:
  - Periodic Testing of Spill Containers
  - States Adopting Double Wall Spill Containers
- ❖ Over 500,000 direct bury spill containers in the ground that will have to be tested for the first time!
- ❖ Customers will migrate to an affordable, repairable replacement

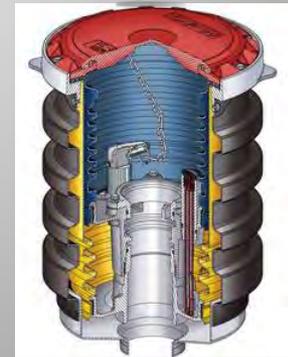
**1-2100**  
Industry Standard Direct  
Bury Spill Container



**Affordable Single  
Wall Repairable  
Spill Container**



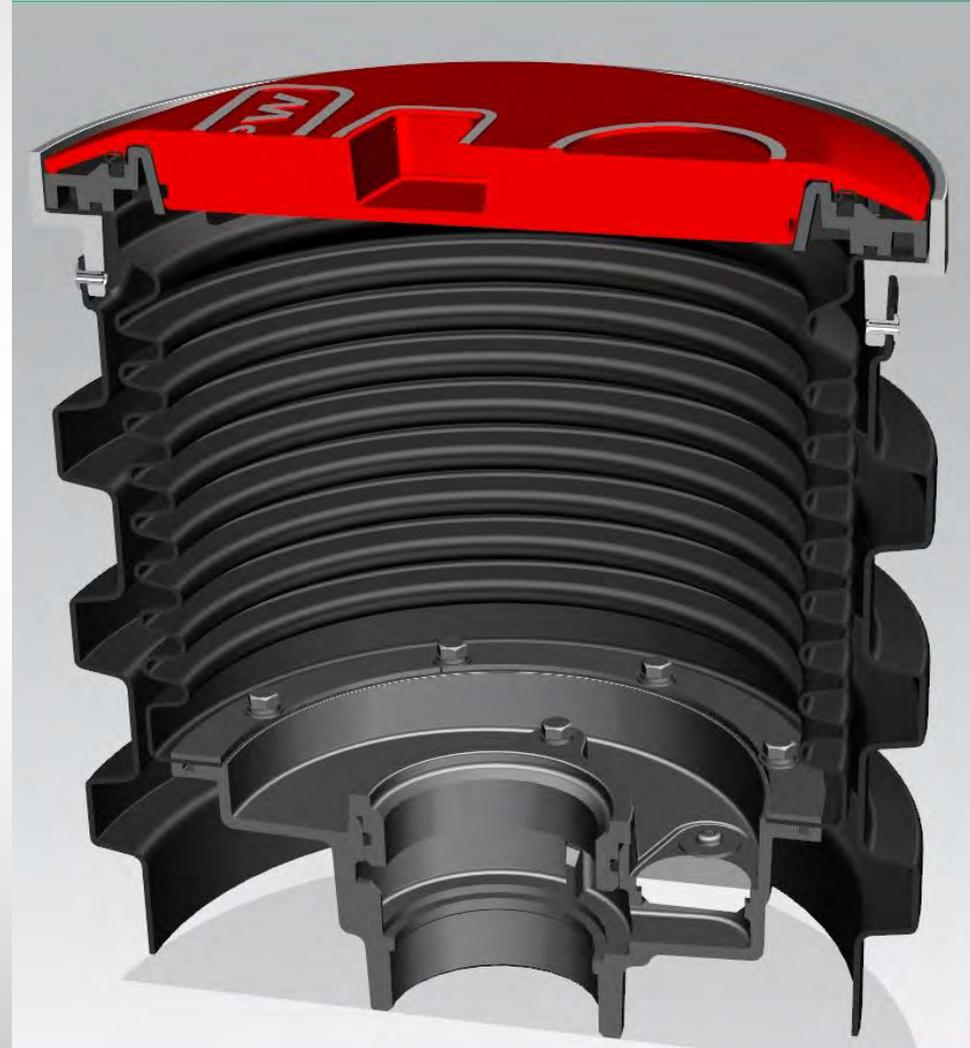
**EDGE (1-3100)**  
Best In Class Double  
Wall Replaceable Spill  
Container



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# Introducing the New 1-2200 Spill Container

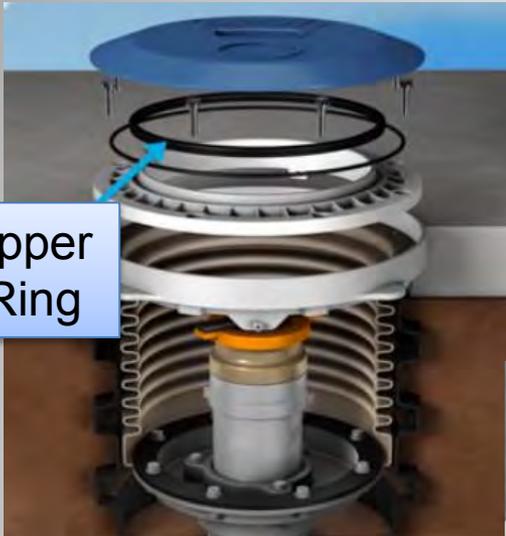
- ❖ Available by End of 2013
- ❖ Key Features:
  - Snowplow Ring-less Cover
  - Handle in Cover
  - Removable Bellows and Ring
  - Unique Flange Adapter Feature



# New 1-2200: Easily Replaceable Bellows

1

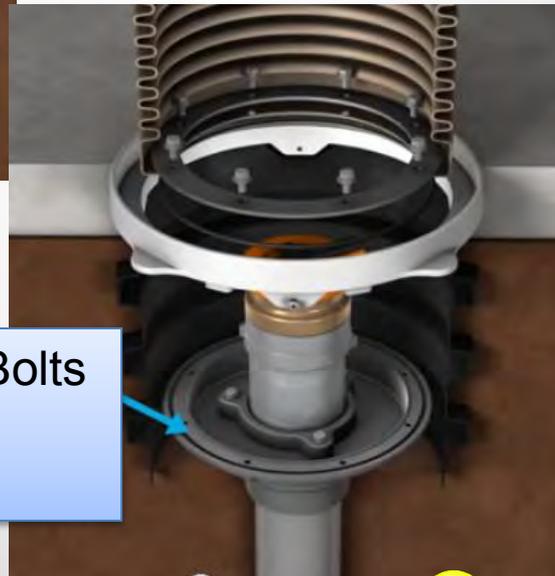
Remove Upper Bolts and Ring



Replace Bellows in 3 Easy Steps  
No Removal of Base Needed to Replace Bellows

2

Remove Lower Bolts and Ring and Remove Bellows



3

Replace Bellows, Reinstall Upper and Lower Rings



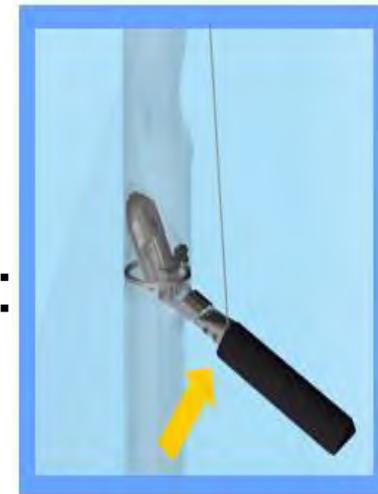
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# 71SO Testable Overfill Valve

## Overflow Prevention Valves: Testable Feature

- New Product Launched in October 2012
- Allows Overflow Valve to be functionally tested without removing from the ground:
  - Simple test avoids an hour of removal and reinstallation time for 2 techs
  - Eliminates opportunity to damage float mechanism and critical seals for vapor tightness
- In process of gaining EVR and DEQ approvals



*The easiest, quickest, and most cost efficient way to ensure that your overfill valves will operate when called upon....verifiable without removing them from the tanks.*

## Testable 7150-T Overfill Prevention Valve



**Loosen Test Plug**



**Lift Float with Cable to Simulate Fill**



**Validate Proper Poppet Operation**



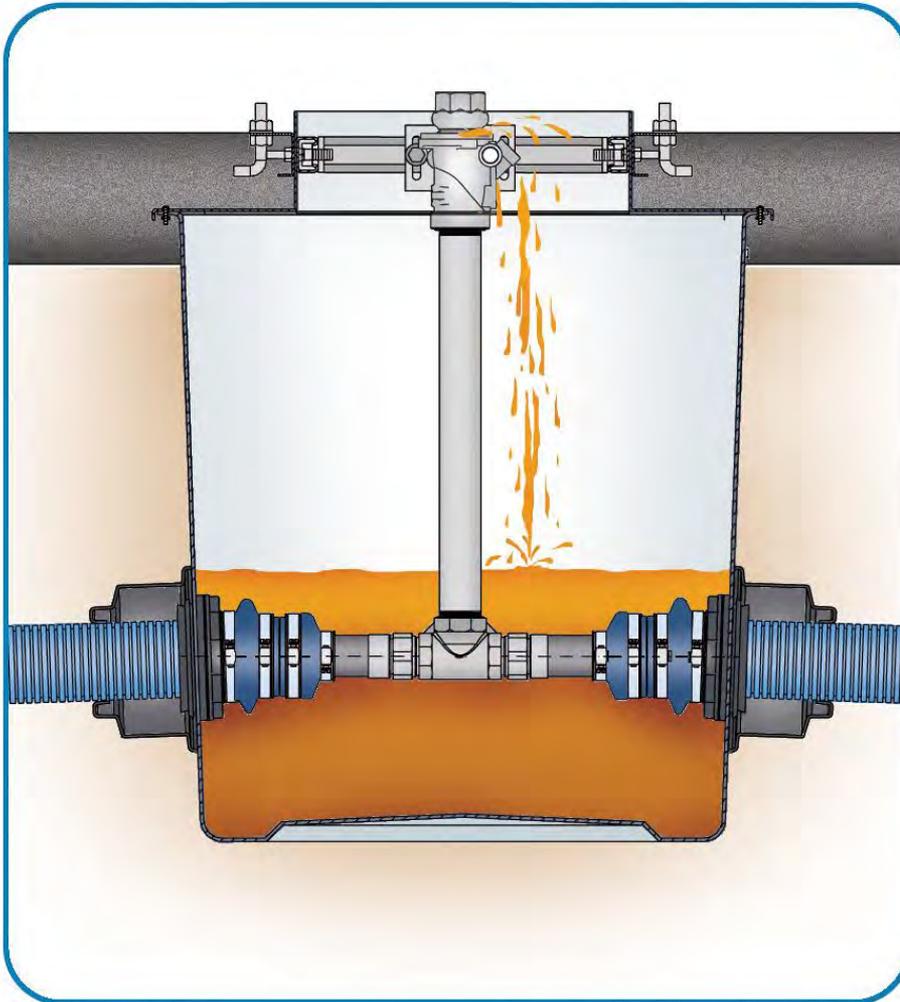
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# The 10 PLUS Emergency Shut-Off Valve



## This Can Be Prevented



**Undetected low-impact shear-groove leaks can fill sumps with fuel at an alarming rate to create a potentially dangerous situation for customers and the environment.**

## 10 PLUS - A HIGHER LEVEL OF PROTECTION

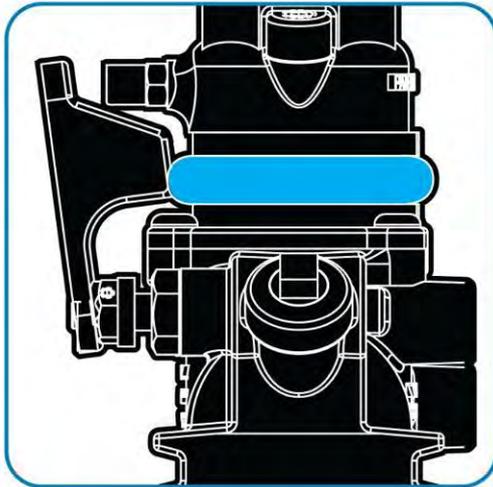


The highest level of protection and peace-of-mind in the industry against:

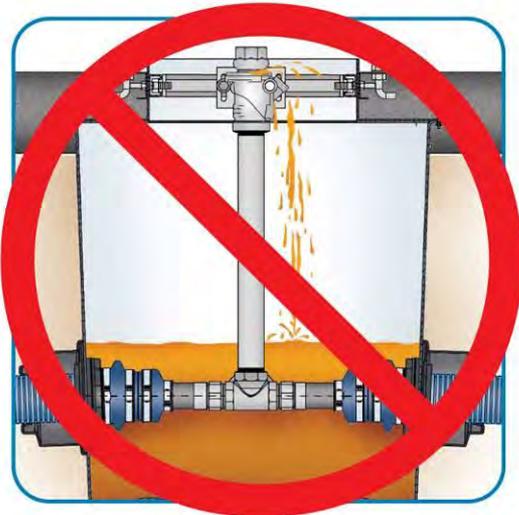
- **Low-Impact Breaks**
- **Dislodged Dispensers**
- **Dispenser Sump Fires**



## 10 Plus Emergency Valves



**The OPW 10 Plus is the only Emergency Shut-Off Valve in the industry designed to contain a shear groove leak and close the flow of fuel in the event of an undetected low-impact break**



Eliminates health, environmental contamination and fire hazards  
Prevents product loss  
Prevents costly clean-up

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## 10 Plus Emergency Valve

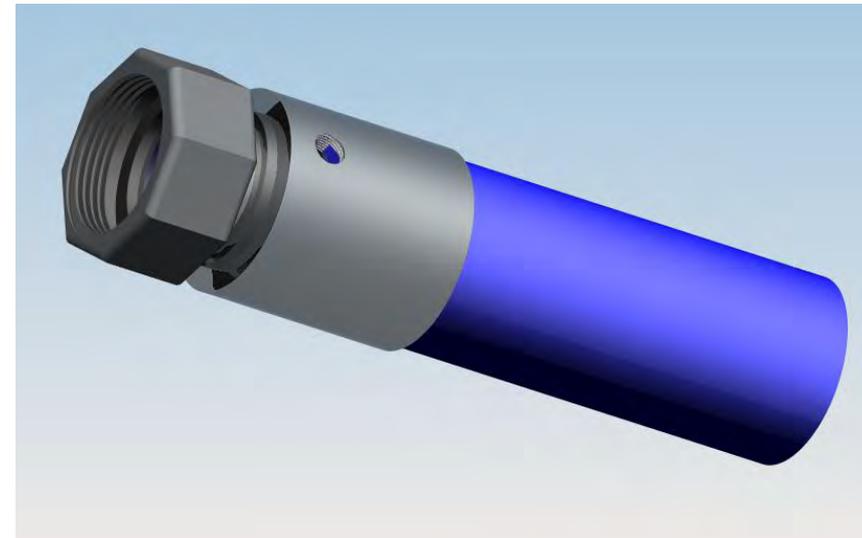
# *Flex***WORKS**

**BY OPW FUELING CONTAINMENT SYSTEMS**

*Innovative Fueling Solutions*

## DPC – Double Wall Pipe Couplings

- **No test boots required**
- **No trimming back of the secondary pipe jacket**
- **Provides quick and effective means to re-test secondary containment**
- **UL / ULC approved**
- **Quick and easy to install**
- **All stainless steel construction**
- **Available in sizes 1.5" – 3"**

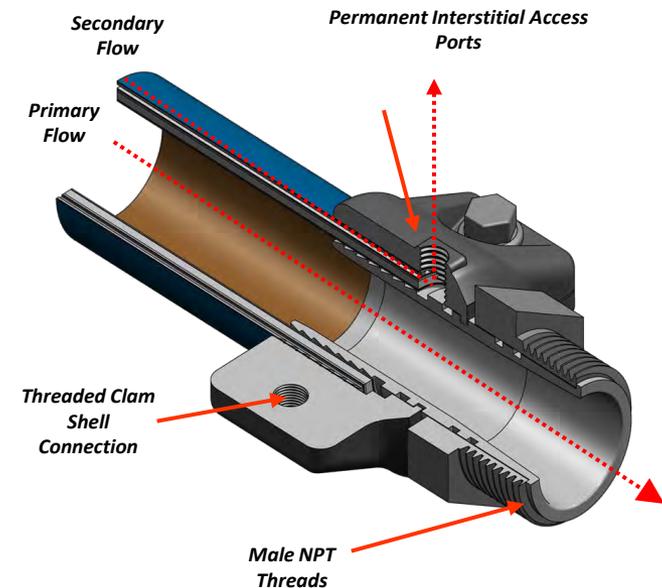


## Swivel Bolt-On Coupling

*A new generation double wall swivel barbed fitting that allows customers to receive the same great features as a swage on double wall fitting, but without the use of a coupling machine.*

### **This unique coupling offers the following benefits:**

- No trimming back of the secondary pipe jacket
- No test boot required
- Provides quick and effective means to re-test secondary containment
- NPT male thread allows fitting to be used with standard plumbing fittings.
- Quick and easy to install
- Currently available in 1-1/2" and 2"
- Compatible for E85 applications



# The Loop System



## Why?....The Loop System

### To Attain a Higher Level of Environmental Protection

- Enhance Long Term System Reliability
- Enhance the ability of contractors to attain a quality installation
- Enhance the ability of owners to inspect, maintain, monitor, identify and easily repair any potential problem that may develop before there is an environmental or safety issue.

## What?....The Loop System

**An evolutionary underground piping system that eliminates more than 50% of field fabrication and the associated problems.**

This unique fuel delivery system minimizes:

- ❖ Complexity of Piping Installation
- ❖ Site Assembly Labor
- ❖ Piping Connections (Leak Points)



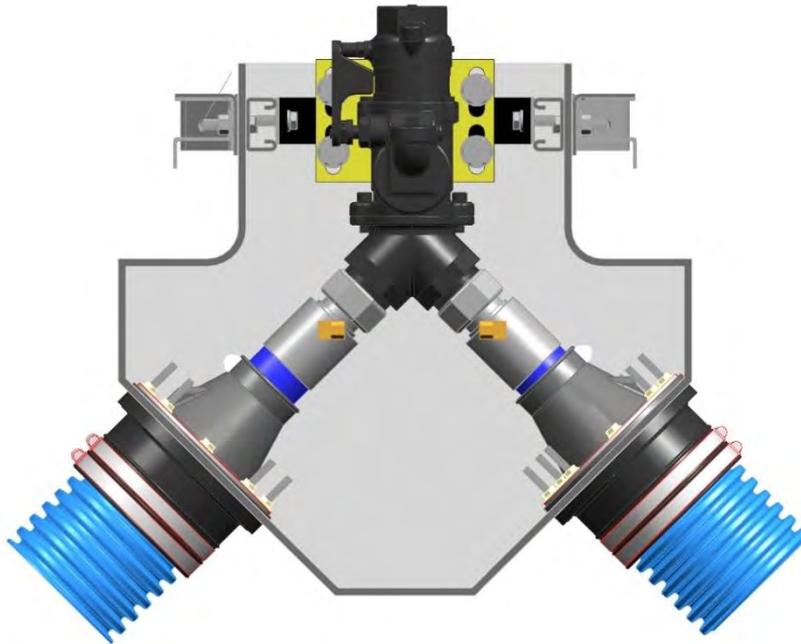
## How?...The Loop System

**Significant reduction in complicated field plumbing and assembly operations and the associated opportunities for installation errors:**

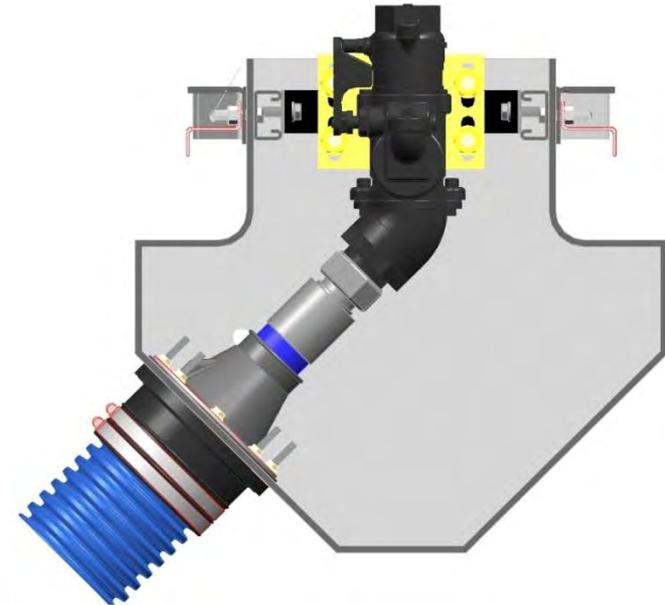
- Pre-Assembled Dispenser sumps with factory installed pipe entry boots, stabilizer bars, and OPW 10 Plus shear valves with low impact protection
- Elimination of the need to measure, cut, thread, and install steel or flexible riser pipes (more joints eliminated)
- Elimination of the need to ever remove the dispenser to inspect, repair, or replace pipe sections

## Loop System Components

### *Quick Connect Dispenser Sumps*



**Junction Dispenser Sumps**

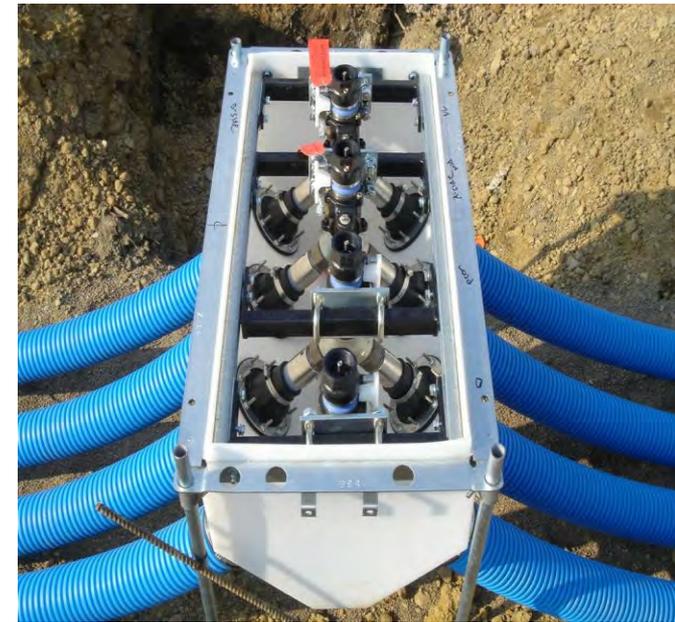


**Terminating Dispenser Sumps**

## Loop System Components

### ***Quick Connect Prefabricated Shallow Dispenser Sumps***

- *Shallow Dispenser Sumps – Minimize Water Table/Backfill Forces*
- *Adjustable Legs - Allow Grade Adjustment*
- All piping connections are contained within a sump
- All connections are visually and physically accessible from above ground without removing the dispenser



## The Loop System...What's in it for Me??

### Site Owner

- Less Contractor Dependent Installation + Top of The Line Components = Better Site Integrity and Performance
- Total Accessibility to all Underground Equipment without Excavation = Lower Cost of Ownership

### Contractor

- Reduced Installation Complexity + Quick Installation and Testing = Less Opportunity for Errors and Call Backs and more opportunity for a Profitable Job

### Regulator

- Better Installation + Better Components + Better Maintenance and Monitoring Capability = No Gas in the Ground

# The “REF” Rigid Entry Fitting

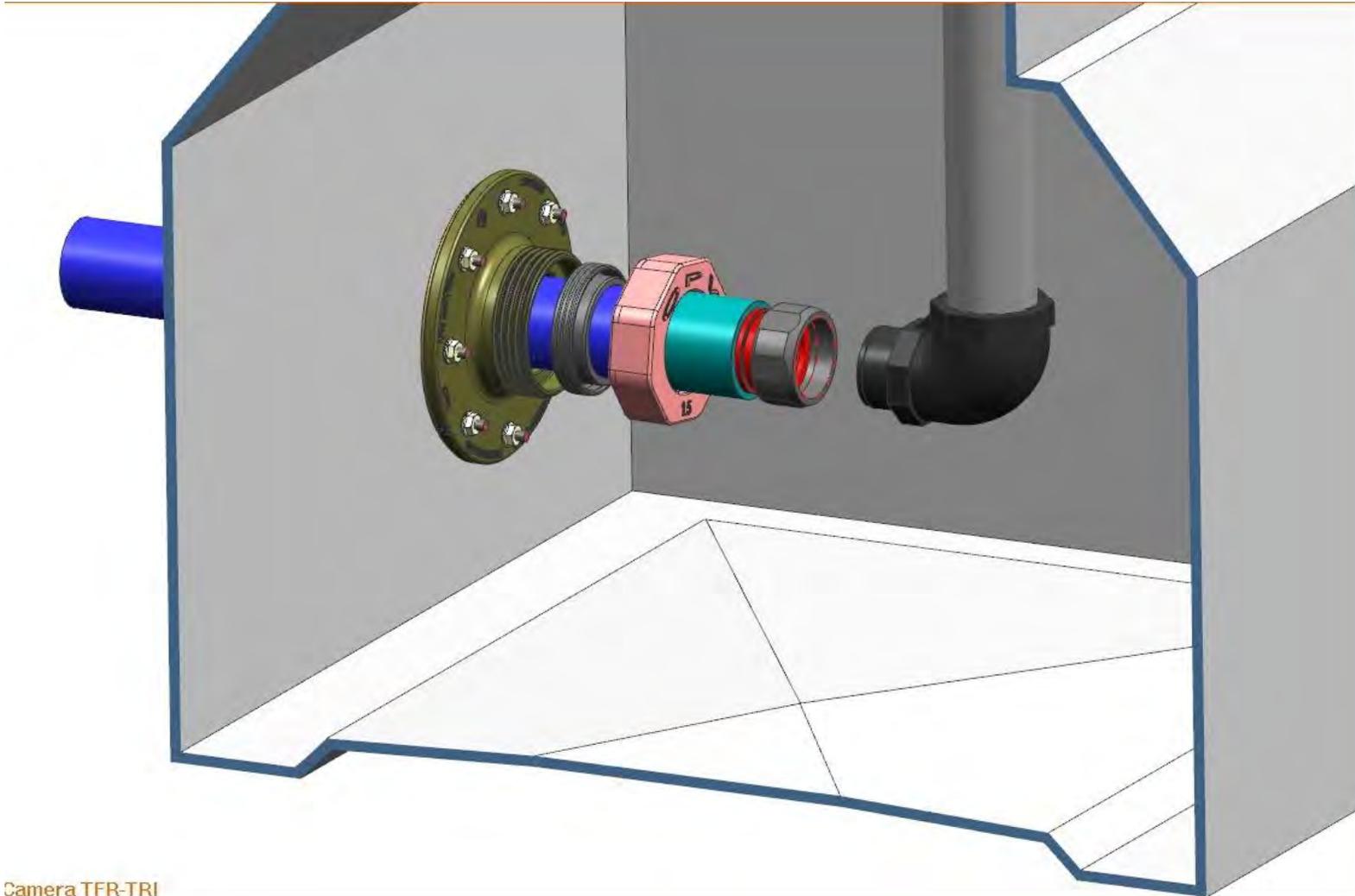
## The “REF” Rigid Entry Fitting

***Introducing...A Rigid Entry Fitting...with no exposed rubber... that accommodates for ground movement.***



- **Sealing redundancy throughout – Maximum containment and unmatched protection from water intrusion**
- **Preserves total accessibility - For maintenance, testing, and repair**
- **Maintains flexibility to accommodate pipe and ground movement**
- **Hard shell exterior - To weather the elements and abuse of the underground environment**
- **Available in ¾” and 1” conduit entry fittings and for 1½” and 2” primary pipe**

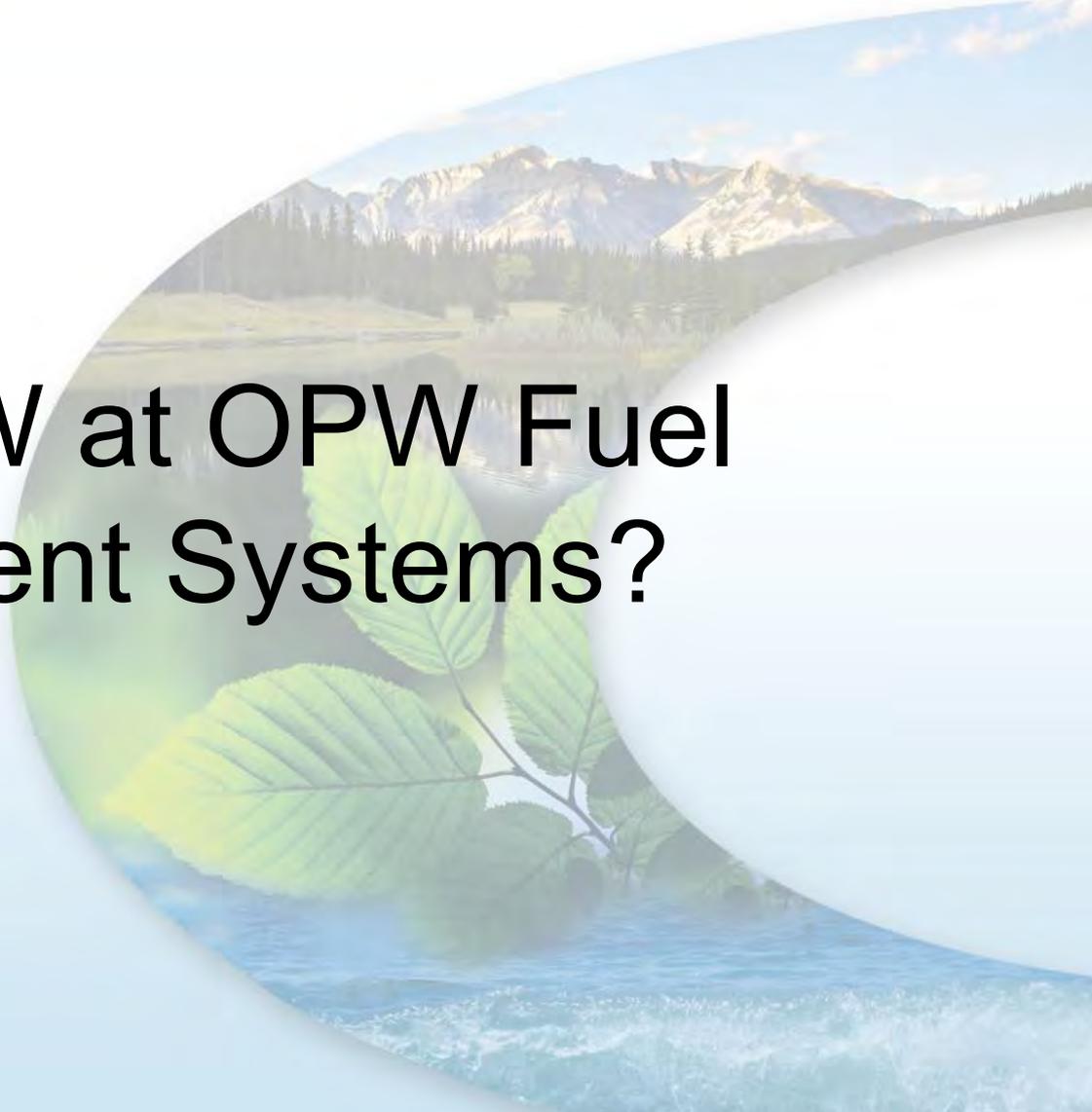
# The "REF" Rigid Entry Fitting



## REF – Rigid Entry Fitting







# What's NEW at OPW Fuel Management Systems?

## What are some of the potential **issues** in operating a commercial fueling site?

- ✓ **Lack of Accountability**
- ✓ **Accuracy Issues**
- ✓ **Accounting Issues**
- ✓ **Inventory Issues**
- ✓ **Lack of Overall Control**
- ✓ **Lack of Security**



## Questions to ask?

1. How are you currently managing your on site fuel?
2. What challenges do you experience with your current process (or lack of process)?
3. How would a secure fuel site and preventing unauthorized use impact your business?
4. If you had full accounting and recording of your fuel usage, how would that benefit your business and what information would you like to have?
5. How much could you save by implementing a fuel management system?



## Petro Vend 100

### Designed with an Integrated Fuel-Site Controller

- Controller is housed inside the Fuel Island Terminal
- Simple installation - “Out of the Box” ready
- Power only - no communication wiring

## Petro Vend 100™



- Fully automated stand-alone, turnkey system - **LOWER COST OF INSTALL**
- No attendant required - **REDUCED OPERATING COST**
- Cost effective for small to mid-sized fleet fueling operations - **AFFORDABLE IN LOWER END MARKETS**
- Security and accountability - **CONTROL**
- Ships ready-to-use with 50 pre-configured users - **READY TO USE**

## Petro Vend 100™



- Menu-driven configuration takes place at the terminal, eliminating the need for PC-required software
- Saves the expense of trenching and pulling wires for communications
- Menu-driven interface makes user management simple

## Petro Vend 100™



## Features:

- 5" monochrome graphic display
- Metal keypad
- Optional dual-head magnetic reader or HID proximity key fob reader
- Standard weather shield
- Heater
- Painted steel finish
- Standard USB interface

## Petro Vend 100™



## Features:

- Ability to capture transaction data even while running in bypass mode
- Ability to tie-in directly to the dispenser for power
- Controls up to 2 fueling points
  - Mechanical or electronic (cannot mix)
- Time-Outs
  - Handle, First Pulse, Missing Pulse (MPD), Total Fueling
- Configurable pulse-per-unit
- Hose-based quantity and product restrictions

## Petro Vend 100™

### STANDARD FEATURES:

- Single Hose Control
- Key-Pad Activation
- 50 users
- User selectable PINs, from 3 to 6 digits in length, allowing only authorized users to access fuel
- Hose-based quantity and product restrictions
- USB-retrievable pump and card totals
- Weathershield

### EXPANDABLE FEATURES:

- Dual Hose Control
- Magnetic Card Reader
- HID Reader
- Up to 100/250 proprietary cards or users
- USB key transaction reporting

## Petro Vend 100™

### Target Applications:



- Fleet Fueling Sites
- Distribution Center
- Public Works
- Small Municipalities
- Farm Fleets
- Gate Control
- Golf Courses
- Car Dealerships
- Lube Shops
- Tank Skid Fuel Control
- Direct FL6 Replacement
- Keeguard Replacement
- Budget-constrained Organizations

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**Thank You!**