

DEF Bulk Dispensing Equipment

2011 PEI DEF Session

- Kent Robinson, Director Fleet Products

Time to Consider DEF Bulk Dispensing



Recent Interviews

Site Owner:

“We have empty DEF jugs everywhere. They have become a real nuisance.”

Truck Driver:

“I never use jugs. Too much hassle. I always coordinate my fueling so I can fill up my DEF tanks from a bulk dispenser.”

DEF Bulk Dispensing Checklist

DEF Bulk Dispensing Considerations

- ☑ Match the Application
- ☑ Verify Dispenser Location
- ☑ Fit the Space
- ☑ Check the Climate
- ☑ Plan for Tomorrow

Match the Application



Retail ▶

- W&M sealable?
- Compatible in-dispenser payment terminal?
- Matching payment & dispenser communication interfaces?

Wayne
A GE Energy Business

◀ Fleet

- Compatible fleet system interfaces?
- W&M application?
- How many transactions per day?



Verify Dispenser Location



◀ User Convenience

- Know position of DEF tank
- Avoid excessive hose reach
- Do not disrupt traffic patterns

This bus depot layout is great for trucks, but bus DEF tanks are on opposite ends creating excessive hose reach

Maintenance Access ▶

- Allow access for maintenance

Tank against hose module blocked hose maintenance. Fortunately, the module on this model is reversible so it could be moved to the other side



COMPANY CONFIDENTIAL

Fit the Space

- Fuel islands within narrow canopy supports do not always have space for two dispensers



Standalone vs. Combination Factors

- Space
- Simultaneous fueling or sequential
- Differentiating products to avoid mistakes



- New Trend: Combination diesel DEF – two products in slightly more space
 - New or retrofit?



Wayne HS4/Vista 1+1 DEF Dispenser

Check the Climate

FACT #1: DEF freezes at 12F ▶

- Expands 7% - potential hydraulic component/piping damage
- Drives need for special hose and nozzle cabinets & heating



DEF < 12F - Crystallizing



DEF @ 7F - Solid



◀ FACT #2: Not all regions see temperatures \leq 12F

- New trend – customers looking for warm climate units
- No special hose handling cabinets
- Less equipment = more economical – can be 40% less \$

**Wayne D4/Vista Warm
Climate DEF Dispenser –
Retail or Fleet**

Plan for Tomorrow

- Size for Tomorrow
 - First adopters are already upgrading to larger equipment
- Piping
 - Allow for future piping to every fuel island
 - If piping underground do not pipe to the diesel sump
- Storage
 - Allow for delivery lead times
 - Calculate impact of freight costs
- Check with your local AHJ before installation



Range Anxiety



Photo: A. Smith, Brenntag