

### Landfill Operations

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Landfill operations require large amounts of fuel and lubricants. Machinery must be fueled in a remote off-road location using a 3,000 gallon fueling truck. The actual fueling system employed is a “Wiggins” type “quick fuel” nozzle system capable of dispensing up to 150 gallons per minute. Due to the environment in which the fueling operation takes place system failures can occur resulting in fuel nozzle leaks and subsequent fuel spills.

It is vital for the safety of the operator and environment that the vehicle fuel system is operated and maintained properly. In the event that a leak is observed refer to the below check list of symptoms and troubleshooting procedures for proper corrective action.

Note: The fuel truck is equipped with a spill kit located in the toolbox on the driver’s side of the truck. In the event of a spill it is to be used to contain and to remove contamination. Any spill larger than (1) gallon must be reported to your supervisor as well as to the Hazardous Substance Enforcement Team promptly.

### SYMPTOM

#### Nozzle will not shut down on time

##### 1. CHECK FOR LEAKS IN THE FUEL TANK

Any air leak in the fuel tank will allow pressure to escape and reduce the system pressure which is required to shut down the fuel nozzle.

##### 2. CHECK THE VENT

The ball cage on the vent may have fallen off. The hollow balls in the vent may have become filled with fuel. The valve that is built into the vent may be worn out.

##### 3. CHECK FOR A WORN WIPER SEAL

A worn wiper seal at the front of the nozzle will allow fuel to leak out, reducing the pressure needed for shut off.

##### 4. CHECK FOR A WORN FUEL RECEIVER

A worn out fuel receiver will not fit properly with the nozzle. Improper fit causes air leaks.

#### Nozzle leaks from the front end

##### 1. CHECK THE WIPER SEAL AT THE FRONT OF THE NOZZLE

A worn wiper seal will allow fuel to leak through the front. These wiper seals can be purchased and should be replaced on a regular basis.

## Fuel Nozzle Leaks Standard Operating Procedure

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***Be sure that the front section of the nozzle is secured to the back end***

The ZZ9A1 Nozzle has two main sections. The front section is threaded into the back section. A thread locker (FEL-PRO or Loctite) is used to secure the two parts. If the parts become loose a leak can occur.

**2. CHECK FOR A WORN OUT FUEL RECEIVER**

A worn out fuel receiver will not fit properly with the nozzle. Improper fit can cause fuel leaks.

**Nozzle shuts down, then fuel spills out of the vent**

This is a normal occurrence when the fuel tank restores itself to its original dimensions after the tank is fueled. To prevent this, switch to a ZV10F or ZV11A Vent. These vents have a tube that is 3" longer than the standard vent, ensuring an earlier shut-down and fewer spills.

**Note:** The front end of the ZZ9A1 nozzle can be field repaired with the KR91 or KR92 repair kit.

**Consequence of Non-Compliance to Instruction:**

- Increased potential for diesel fuel impacts to soil, surface waters and vernal pools
- Regulatory violations and potential fines
- Operational impacts to fueling capability

**Benefit of Compliance to Instruction:**

- Reduce the risk of a fuel nozzle failure
- Elimination of fuel spills during refueling operations
- Minimize fueling operation impacts to the environment (soil, surface waters, vernal pools)
- Regulatory Compliance

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Environmental Management System (EMS) –ISO 14001

PROCESS MAP #: DO-1.4

**Reviewed by:** Dana Armstrong, Lorn Davies, Charles Hood, Kevin Keene (*Disposal Site Supervisors*)

**Approved by:** Kip Sturdevan, *Deputy Environmental Services Director, WRAD*

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