Dealing With Excessive Liquid Fuel in Vapor Return Hoses Equipped with Liquid Removal Devices

Phase II vapor recovery hoses often include a liquid removal device (LRD) that is designed to prevent the accumulation of fuel in long vapor hoses. Hoses equipped with LRD have “nozzle end” inscribed at the end of the hose that is to be connected to the nozzle. This liquid removal system will remove gasoline that collects in the vapor hose; however, it will not overcome fuel leakage within the hose. Since LRD may malfunction and impair vapor recovery, District Rule 4622 requires operators to:

1. Drain and measure the amount of fuel from each vapor hose on a weekly basis.
2. Remove any hose from service when more than 100 milliliters (about ½ cup) of fuel is drained from it.

If you drain more than 100 milliliters of fuel from any vapor hose, you must:

1. Remove the affected nozzle from service until you have passed California Air Resource Board (CARB) Test Procedure TP 201.6C, Liquid Removal Rate of Balance Vapor Recovery Hoses.
2. Make repairs if there is a test failure and then retest to ensure the liquid removal system is working properly before placing nozzle back into service.
3. Closely monitor for the buildup of excess liquid in the hose because passing the test or making a repair may not always solve the problem. If liquid buildup continues, further repairs and monitoring are necessary until you find and repair the source of the problem.

If the District finds a vapor hose with more than 100 milliliters of gasoline in it, the hose and its nozzle will be tagged “out of order” and penalties may be assessed.