

## SVRA Technical Bulletin #TB2011-003

**Subject: Venting of Fuel Cells** 

From: Colin King, Technical Director

Date: December 30, 2010

This is not a new regulation, it is a re-affirmation of an old ruling that seems to have been lost somewhere along the way.

Rules Enforcement Issue 98-09, Fuel Systems and Leakage: Leaking fuel is an obvious source of concern. Aside from the fire hazard, leaking fuel can cause you or a competitor to lose traction and spin or crash. It is almost as bad as oil when it gets on your tires or the race track. Gasoline can be very problematic in other ways. Fumes can cause driver impairment which is never a good thing. If in contact with the skin, it can cause a minor irritation to major discomfort.

All fuel cells must have an atmospheric vent in order for fuel to be drawn from them. A properly designed vent line should allow air to come in but prevent gas from exiting under pressure, as in an impact situation. The vent must automatically close if the car is in a position where the fuel level is higher than the vent opening, such as a during hard cornering or a roll-over.

In line, spring activated check valves serve this function well, but sometimes make remote filling difficult. A gravity ball valve seems to work best, but still may allow fuel to exit a very full cell. If you are in a habit of filling your cell to the brim, there should be a catch can on the vent line. Any fuel spillage will get you a black flag quicker than any other violation.

To be absolutely clear and specific...THERE MUST BE NO FUEL SPILLS THROUGH THE VENTING SYSTEM. YOU WILL BE BLACK FLAGGED!