Live Line Sewer Cleaning System

The NOVA Award was presented to the Live Line System for innovation in cleaning large diameter sewers.

The cleaning of large diameter sewer lines (18" diameter and up) has been labor and equipment intensive, has required large amounts of water, and is usually disruptive to traffic traveling above the in-street utility lines. The Live Line Sewer Cleaning System, also known as "Hydro-Hog", combines ultra-high pressure water-jet cleaning with water recycling, in a self-contained mobile unit with a minimal street "footprint".

The system includes two units: a truck mounted high pressure water pump, hose reels, and the Hydro-Hog cleaning head; and a trailer mounted suction pump with solids screening, filters, and a conveyor belt to offload extracted solid waste to a waiting truck. The entire rig is operated by just three men. In use, the Hydro-Hog is lowered on its high-pressure hose into the sewer line where it floats just below the surface. The Hydro-Hog is run to the far end of the pipe length that will be cleaned. The suction pump is then lowered into the sewer. To clean, water is blasted from the Hydro-Hog at 25,000 psi and 250 gpm, forming a high-energy cone of water that both cuts away accumulated debris and funnels it to the suction pump as the hog is drawn backward to the pump.

As the hog strips and moves solids to the pump, the pump moves water and solids to the surface where they receive multiple filtering treatments. Solids are offloaded to waiting trucks. The filtered water is then returned to the high-pressure pump where it is recycled for injection in the Hydro-Hog. After successful application in tens of thousands of feet of sewer line, much of it in the desert Southwest, the Live Line System has proved it saves cleaning time, costs less, is less disruptive to traffic, prevents pipe damage, and saves millions of gallons of water.

Primary Responsible:	Don Derlein
Contact:	Don Derlein
Organization:	Live Line
	911 Bethel School Road
	Coppell, TX 75019
Phone No:	214-393-1990