

## **ASPHALT EQUIPMENT CLEAN-OUT SYSTEM**

Boulder County, Colorado

Contact:

Ted Plank, Road Supervisor

Boulder County Transportation Department

1288 Alaska Ave.

Longmont, CO 80501

(303) 441-3962

[tplank@co.boulder.co.us](mailto:tplank@co.boulder.co.us)

### **Problem Statement:**

Our challenge was to find a way to clean out oil distributor trucks and tack oil tanks after use, without creating a mess or causing environmental impact. We needed some way to empty our spray bars of the diesel fuel/tack oil without just spraying out on the ground, parking lot or roadway.

### **Discussion of Solution:**

The current system is the third generation of the idea we had about 12 years ago. A 20-foot section of culvert is cut in half lengthwise. The section of culvert sits in a metal frame with steel plates hinged to create covers that can be closed when the system is not in use. The frame and culvert are elevated at one end to create flow. The ends of the culvert were sealed using a lid from a 55-gal drum, cut in half. A nipple is threaded to the bung of the 55-gal drum lid, and attached to the nipple is a 2 ½" suction hose that leads to a 300 gallon tank. To use the system, a distributor truck backs up to the culvert and empties the spray bars into it. The used diesel/tack flows from the culvert into the tank. When the tank is full, we contact a waste-oil company for pick up. Labor, Equipment, &

### **Materials Used:**

Two employees (including one with welding experience) can construct the system. Equipment included hand tools, a welder and a front loader.

### **Materials included:**

20 feet of 24" diameter culvert

Steel for frame and covers

2 ½" suction hose

300 gal plastic tank

Miscellaneous parts (screws, caulk, etc.)

### **Cost:**

The current system is much enhanced over our first attempts at creating a cleanout method; a similar system can be constructed for much less.

Materials: \$845

Labor: \$720

Equipment: \$200

Total: \$1,765

In addition, we paved our approach ramp, and added containment for the holding tank at an additional cost of approximately \$1,500.00. We have a contractor empty the tank about twice annually at a cost of approximately \$500 each time.

**Savings & Benefits:**

Like many counties, cities or paving contractors, we had nowhere to spray the diesel fuel/tack oil residue from cleaning out spray bars and tanks after paving or chip seal operations. This system allows us to quickly and efficiently clean paving equipment and dispose of the residue without impacting the environment or creating a mess.

