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TRANSPORTING INSECTICIDES IN HALF-TON PICKUP TRUCKS

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American Cyanamid's "Abate" and Exxon's "Flit" have, in recent years, largely replaced the old stand-bys, diesel oil and New Jersey Larvicide, in the day-by-day spray operations of the Morris County Mosquito Commission. These newer materials are normally applied at 4-7 gal. per acre. The dosage rates of these newer materials, far lower than those of the older larvicides, allow treatment of typical nuisance areas with relatively small amounts of spray. Therefore, our district inspectors, whose primary task is the surveillance of potential breeding sites, seldom have occasion to spray more than 50 gal. each day with their portable compressed air sprayers and/or small gasoline engine pressure pumps. When necessary, additional tankloads of Abate can be prepared by using available water sources in the field. Backup crews are available to spray the larger nuisance areas with high-pressure truck-mounted sprayers, mist blowers, swamp buggies or helicopters.

Tanks, suitable for carrying 15-40 gal. of insecticides (well within the capacity of a half-ton pickup) can be obtained from agricultural, industrial, marine and surplus dealers. Some are sold as specialized units and others are available as spare parts for spray units or as non-returnable shipping containers. Custom-built units can be constructed in steel, aluminum, PVC, or fiberglass.

A careful review of all options was made, and 2 tanks were selected on the basis of adaptability, corrosion resistance, and economy. These were a 30-gal. galvanized "Tank for Water Pumps" and a 19½-gal. military surplus smokeless powder can. Together they occupy only a small portion of the area available in the beds of "wide-bodied" (Fleet-side, Styleside, etc.) pickups. (Fig. 1) The remaining portions can be used for the mounting of a fog generator and concentrate reservoir or other equipment. The combined savings in bulk and weight gained in the adoption of low volume larvicides and adulticides has enabled the Morris

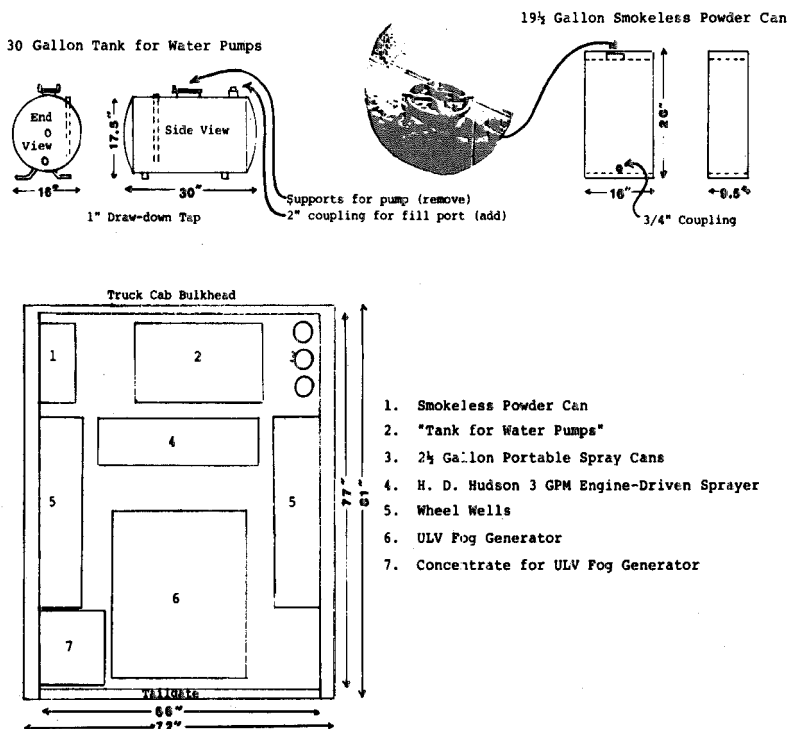


Fig. 1. Arrangement of equipment in 1/2-ton pickup trucks.

County Commission to phase out most of our 3/4 and 1-ton pickups in favor of handier and less costly 1/2-ton vehicles.

The arrangement of tanks within the truck body allows access to the portable compressed air sprayers from the curb side where the inspector is protected against traffic hazards. The 19-gal. tank is placed on the high side (when traveling on crowned rural roads) of the vehicle which removes some of the weight from the faster-wearing right-hand-side tires. Spigots for withdrawal of spray materials are located at either side of the tailgate as there is no protected location on the sides of wide-bodied pickups.

The 30-gal. tanks (W. W. Grainger Company's stock #3P557) are available at approximately \$40.00. They are 16 inches in diameter, stand approximately 17 1/2 in. high on their integral saddles and are 30 in. long. A draw-down tap, 1 inch in diameter, is included, and the supports for a home water pump were hack-sawed off. A 2 in. coupling and plug were brazed to the top as a fill port. The supplied pressure pipe was threaded and plugged. The total height of 17 1/2 in. allows

these tanks to be installed directly under the rear cab window of a pickup truck with no part obstructing the rearward vision of the driver.

The 19 1/2-gal. galvanized smokeless powder cans had been manufactured by the John Woodmegg Company of Chicago and purchased for \$10.00 from a local salvage yard. They were originally equipped with a very serviceable fill cap of the locking-lug type 6 inches in diameter. The only modification required was the addition of a 3/4 inch pipe coupling near the bottom for draw-down. The tank was attached to the side of the pickup with aluminum straps. Somewhat taller than the 30-gal. tanks, these units were mounted to the left of the rear cab window so as not to interfere with rearward vision.

Although these galvanized units have a probable useful life somewhat less than that to be expected of a fiberglass or stainless steel unit, their negligible initial costs can be quickly written off and the tanks discarded when technological changes make them obsolete. Several trucks so equipped have been in operation for 2 years without any failures.