

**Travis County Emergency Services District No. 9
Westlake Fire Department**

Standard Operating Procedure

Subject: Handling Class A Foam and Class B Foams

Effective Date: February 8, 1999

Authorized By: Chief Paul Barker **Revised Date:** June 15, 2000

I. Purpose

To establish a procedure for TCESD#9 personnel when handling Class A and Class B foams. This procedure will be the guideline for storing, handling, and transporting Class A and Class B foams.

II. Policy

All TCESD#9 members will follow the guidelines set forth in order to safely handle Class A and Class B foams.

III. Procedure

CLASS A – Foam concentrates are harsh detergents that can irritate the skin, causing dryness, cracked skin, and bleeding. However, diluted foam solution should have little or no effect on a person's skin.

Storage and Transportation:

Class A foam concentrates should be stored and transported according to the manufacturer's guidelines. Concentrates should generally be stored and transported in their original containers, either 55-gallon drums or 5-gallon cans, or in a manufacturer-approved tank. Apparatus concentration tanks should be constructed of polyethylene, polypropylene, fiberglass, or other plastic composite material. The foam concentrate will cause degradation of steel, aluminum, and some stainless steel tanks, which could lead to damage or cause the foam proportioning equipment to malfunction.

Handling:

Proper precautions should be taken when handling foam concentrates to prevent injury. Personnel that handle concentrates should wear goggles and rubber gloves to prevent eye and skin irritation. Long sleeved shirts, long pants, and rubber boots are recommend. Rubber boots are recommended when handling concentrates because the concentrates can soak through leather boots quickly.

Class A foams are much more environmentally friendly than most Class B film-forming foams; however, care should be taken to prevent spills of concentration into waterways and watershed areas because aquatic life is sensitive to foaming agents. The use of foam in wildland fire fighting has proven that foam has little effect on forest soils and plant life due to its ability to rapidly degrade.

Federally approved Class A foams are tested for their ability to biodegrade into inert components within an established period of time. For approval by the United States Forest Service, 50 percent of the foam must biodegrade within 28 days. Most foams biodegrade within 14 to 30 days.

It is recommended that spills of concentrate be soaked up with absorbent rather than flushed with water (which will create a lot of foam).

CLASS B – Foam concentrates are made up of synthetic detergents, which will remove oil from the skin. This will cause moderate irritation or dermatitis.

Storage and Transportation:

Class B foam concentrates should be stored according to the manufacturer's guidelines. Concentrations should generally be stored and transported in their original containers (5 gallon buckets) or in a manufacturer-approved container constructed of polyethylene, polypropylene, fiberglass, or other plastic composite material. The foam concentrate will cause degradation of steel, aluminum, and some stainless steel tanks, which could lead to damage or cause the foam proportioning equipment to malfunction. Class B foam will only be used through the use of an in line eductor. Class B foam will never be placed in any on-board tank on any apparatus due to the potential for corrosion and / or coagulation in the presence of Class A foam residuals.

Handling:

Proper precautions should be taken when handling foam concentrates to prevent injury. Personnel that handle concentrates should wear goggles, long-sleeved shirts rubber boots, and rubber gloves to prevent eye and skin irritation. All foam concentrates will quickly soak through leather boots.

Class B foams will not biodegrade well and often must be cleaned up as toxic waste after use. Use appropriate protective equipment during clean up. Collect spilled concentrate with absorbent material. Clean up residual with water. Care should be taken to prevent spills of concentrate into waterways and watershed areas because aquatic life is sensitive to foaming agents. Do not discharge foam concentrates into wastewater treatment systems without prior approval (foam kills the bacteria used for wastewater treatment).