

ATTACHMENT E

Vapor Suppression Foam Description

The vapor suppression foam consists of a starch modified hydrolyzed protein surfactant, applied through a skid-mounted unit that is connected to a portable air compressor, at a dispensing rate of 160 gallons per minute of foam. The foam would be applied on soils (generated during excavation and/or drilling) that are acting as the source of the vapor emissions. The foam would act as a physical barrier to vapor movement by reducing volatilization of PCE impacted soils. This material is biodegradable and upon its use can be disposed at a sanitary landfill or shipped with soils designated for disposal at either of the disposal facilities discussed in Section 8.0. Other vapor control methods that may be used are subject to the NYSDEC Project Engineer's review and approval. The skid-mounted unit will be located on site during the construction phase of the project. The vapor suppression foam will not be utilized during active remediation, as there will not be any soils generated at that time. During the foam application process, Clayton will continue to monitor the fence line area to ensure that VOCs have not migrated beyond the property boundary above the established site standard of 5 ppm above background concentrations.

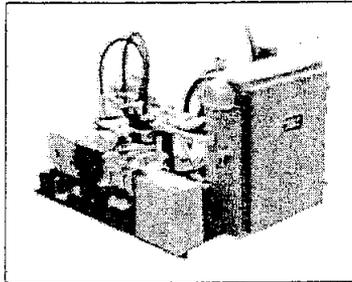
Since construction activities are being conducted in warm weather months, there are no concerns about freezing of either the foam or the foam application system.

A shop drawing of the vapor suppression foam application system is presented on the following page.

Equipment (PFU's)

Rusmar Pneumatic Foam Units are used to apply Rusmar Long Duration Foam. We manufacture and service our own equipment which can be found throughout the world at hazardous waste sites, sanitary landfills, hazardous waste landfills and remediation sites. All equipment can be rented or purchased.

NTC/8



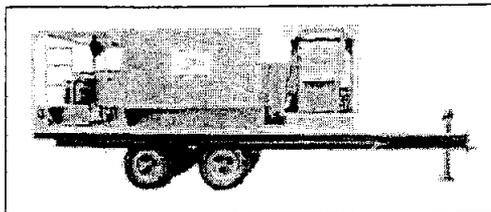
The NTC/8 is a skid mounted Pneumatic Foam Unit designed to mount on the tongue of a towable air compressor (minimum 125 cfm @ 100 psi). The NTC/8 draws approximately 8 gpm of chemical by way of a dip leg inserted in a drum of solution. It will dispense approximately 160 gpm of foam. The unit comes with 100 feet of 1" hose and has a throw range of about 25'. It features a remote control unit that allows for one man operation. The unit does not have freeze protection and must be stored indoors during freezing weather. Ideal for customers having a limited area to cover.

PFU 400/25

The PFU400/25 is a self-contained unit with liquid tank, diesel engine, compressor and chemical pump on a road trailer. Its on-board tank holds 400 gallons of foamable solution. It draws 25 gpm from the tank, which results in approximately 500 gpm of foam. The PFU400/25 has 200' of 1.5" hose with a throw range of about 35'. Unit includes freeze protection for outdoor storage year round. Excellent for medium size projects.



PFU 1600/40



The PFU1600/40 is a self-contained trailer mounted unit with a 1600 gallon storage tank. It draws 40 gpm, which results in about 800 gpm of foam. The unit comes with 200' of 2" hose with a throw range of approximately 60'. This unit has freeze protection and may be left outdoors in all conditions. A source of 110V, 50 amp power is needed to operate the freeze protection system. Recommended for larger size projects and for smaller landfills

PFU 2500/60

The PFU2500/60 is a self-propelled foam generating system designed and configured specifically for sanitary landfill applications and very large remediation projects. Foam can be applied by hand-line or via manifold distribution. Completely self-contained, the unit includes diesel driven hydraulics, air compressor, Caterpillar® tracks and drive assemblies, pump, hoses, solution storage tank, freeze protection and proprietary foam generating technology.



Rusmar Foam Technology

216 Garfield Avenue, West Chester, PA 19380

1-800-SEE-FOAM (1-800-733-3626)

Fax: 610-436-8436

[Company Profile](#) | [Emissions Control](#) | [Alternate Daily Cover](#) | [Case Histories](#)
[Superfund References](#) | [Equipment \(PFU's\)](#) | [Specialty Equipment](#) | [MSDS & Reports](#)