Pollution Prevention: Reduction of VOC Emissions From Tank Degassing and Loading Operations

In many regions, air quality regulations have been enacted to control emissions of volatile organic compounds (VOC) from facilities that load organic liquids.

Conditions include actual loading into tank trucks, trailers, railroad tank cars, above and below ground storage tank, marine barge and ship fuel tanks.

ICE technology Features:
- Flare Reduction
- Industrial Degassing
- Centrifuge Vapor Abatement
- Vacuum Truck Vapor Control
- Approved For Hot Work Zones
- Technology PROVEN Worldwide

This includes storage tank degassing regulations designed to reduce VOC emissions from above-ground and underground storage tanks.

Storage tank cleaning and repair operations are distinct steps in a “degassing” process and a source of VOC emissions. Maximum VOC emission allowances are typically quite stringent. In California, for example, VOC loading and storage facilities must be equipped with an approved vapor recovery and/or disposal system.

The emissions generated during the cleaning and repair operation come from the vacuum pump that extracts the sludge and rinsing liquid from the storage tank. Industries subject to these provisions include tank owners and operators, as well as companies involved in tank excavation, tank repair,

To control these emissions, two options are contemplated by the regulatory boards:

(1) A vapor recovery system capable of collecting and returning discharged hydrocarbon vapors and gases during loading of organic liquids into transport vessels back to a stationary storage container, or into an enclosed process system.

(2) A vapor disposal system designed and operated to destroy VOC emissions prior to discharge into the atmosphere.
The RSI S.A.V.E.™ Solution

RSI’s specially designed pre-engineered remediation systems for tank degassing operations are already in full compliance with the regulatory boards requirements as a vapor disposal system. An engineered system can be specially designed to meet your particular VOC flow rates, concentrations and discharge emissions.

ProGreen® Chiller Installation

Specially engineered engine with air fuel controller.

RSI’s S.A.V.E.™ systems are truly innovative environmental solutions ready to help you meet today’s requirements, and those of tomorrow.

Note:

Total air throughput remains constant at set RPM and manifold vacuum. Engine manifold vacuum is a function of rpm, load, timing, and air-fuel ratio. Typically, systems are operated at high RPM, minimal load, advanced timing, and at or near stoichiometric air-fuel ratio, which results in high engine manifold vacuum. “Patents Pending”