

**LIP Strippers** has been manufacturing custom-built air stripping towers for nearly a decade. We have served many major corporations throughout the United States. Our air strippers provide a cost effective method for the removal of volatile organic compounds as well as certain other substances from water such as ammonia, hydrogen sulfide and sulfur dioxide. They are used to renovate groundwater, industrial wastewater, separator discharge water, etc. Sometimes they are used as either economical replacements or supplements for granular activated carbon systems. Strippers have also been used with great success in removing gaseous radon from water.

**Air stripping towers** are basically simple devices in which contaminated water is pumped to the top of the tower and then through a spray nozzle or onto a distributor tray and downward into the packing media. Simultaneously, air is forced upwards, opposite to the flow of water. This countercurrent flow of air and water facilitates mass transfer of many substances from the water to the air, resulting in a high rate of contaminant removal. The decontaminated water flows, or is pumped, from the discharge port located at the bottom of the tower. The stripability of a particular pollutant is largely indicated by its Henry's Law constant. All other conditions being equal, the higher the value of the constant, the easier the substance is to strip. The approximate value of Henry's Law constants for some common substances is given in the table below.

*Approximate Henry's Law constant H (in atm @ 20°C)*

Compound or Element	H
Radon	2,000
Carbon Tetrachloride	1,180
Trichloroethylene	500
Ethylbenzene	390
Benzene	300
Methyl ethyl ketone	2

**At LIP Strippers**, our air stripping towers are custom-built to suit the removal requirements of our clients. We feel strongly about supplying units which are specifically designed for each job rather than providing towers built in advance which are "almost" appropriate. Most of our towers are constructed of FRP or carbon steel. Aluminum and stainless steel are also available. Our carbon steel strippers are epoxied inside and painted on the outside.

Each tower is equipped with the following standard features:

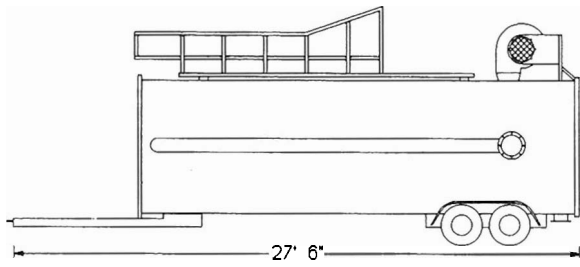
- **Packing** - We use the packing most suitable to the application.
- **Blower** - We choose a blower that is large enough to do the job but not so large as to incur unnecessary power expenditure.
- **Distributor** - An appropriate and properly sized distributor is supplied, whether it be a single nozzle, a nozzle array, an orifice riser tray or a V-notched trough system.
- **Internals** - a mist eliminator with support, packing support tray and any necessary re-distributors.
- **Instrumentation** - A static pressure gauge covering the range anticipated, and a high level water sensor and/or a sight gauge.
- **Fittings** - Since our units are made to order we can supply inlet and outlet fittings of any size or type. At least one hatch or manway is provided for removal/inspection of packing. Sampling ports are standard as are influent pipe tie-down lugs and guy wire lugs.

### Optional Features

- Pressure switches
- Ladders and cages - to OSHA standards
- Control panels - We can provide any type of monitoring, tele-monitoring, fail-safes and interlock devices that you require.
- External sumps
- Adapters for off-gas treatment

484 Franklin Circle  
Yardley, PA 19067

215-752-2709, F-1611



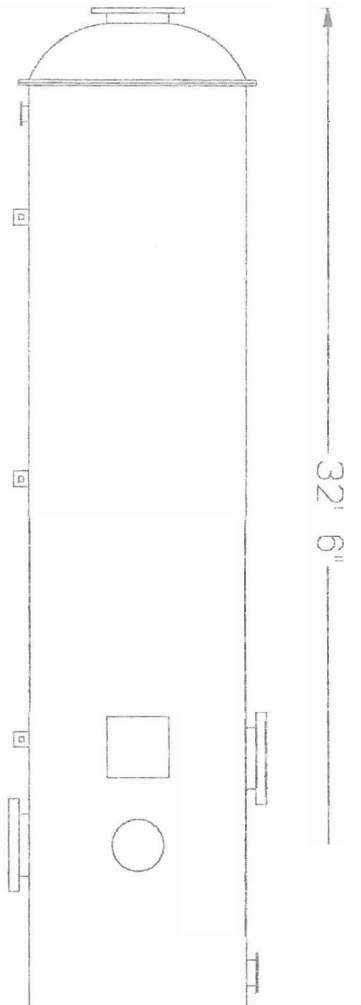
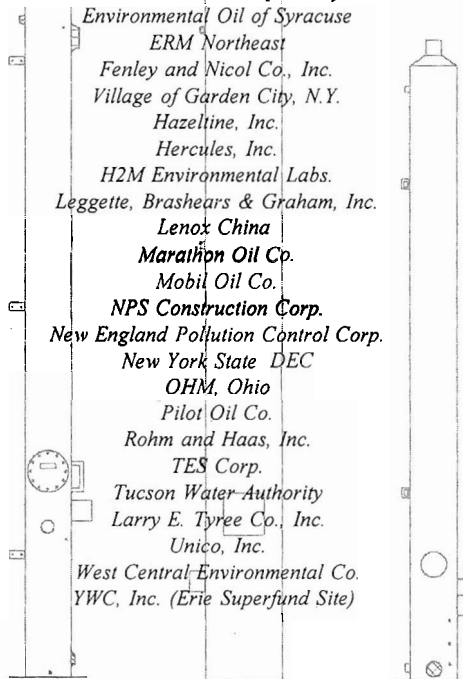
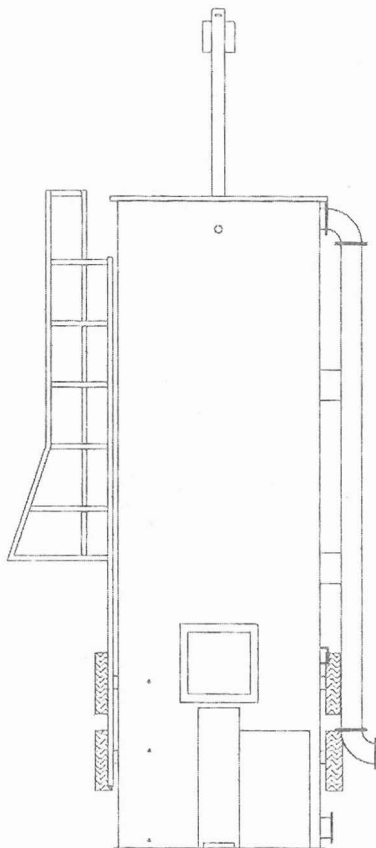
**Mobile Unit in Towing Position**

**We also manufacture** mobile strippers and low profile strippers. Our mobile units are mostly used for de-watering at contaminated sites where the water table is too high to pour concrete foundations. The units are towed from job to job and are capable of handling contaminated water flow up to 1500 gpm. We have supplied several large mobile air strippers to tank installers on the East Coast. Another major unit which was provided for the Tucson Water Authority is illustrated in the figure to the left. It is six and one half feet in diameter and rides on dual axles.

**Low profile** counter flow aeration strippers have been added to our product line. These strippers use no packing, are compact, are less prone to fouling and are capable of essentially the same high removal rates as conventional towers.

A PARTIAL LIST OF CLIENTS

- Amoco Oil Co.*
- Arkay Packaging Corp.*
- Asarco, Inc.*
- Barrier Oil Corp.*
- Environmental Services Div.*
- Clean Harbors, Inc.*
- Chevron Oil Co.*
- Delta Environmental Consultants, Inc.*
- Domermuth Environmental Services*
- Electrolux Corp.*
- Environmental Oil of Albany*
- Environmental Oil of Syracuse*
- ERM Northeast*
- Fenley and Nicol Co., Inc.*
- Village of Garden City, N.Y.*
- Hazeltine, Inc.*
- Hercules, Inc.*
- H2M Environmental Labs.*
- Leggette, Brashears & Graham, Inc.*
- Lenox China*
- Marathon Oil Co.*
- Mobil Oil Co.*
- NPS Construction Corp.*
- New England Pollution Control Corp.*
- New York State DEC*
- OHM, Ohio*
- Pilot Oil Co.*
- Rohm and Haas, Inc.*
- TES Corp.*
- Tucson Water Authority*
- Larry E. Tyree Co., Inc.*
- Unico, Inc.*
- West Central Environmental Co.*
- YWC, Inc. (Erie Superfund Site)*



Call or fax us and provide us with the details of your cleanup problem. Include: water flow rate, description of organic compounds to be stripped, contaminant concentration of influent, required removal, water temperature, air temperature and any special conditions. We will provide you with the dimensions and a price quote for the stripper you need.