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## Landfill Gas Purification for High BTU Pipeline Gas, CNG or LNG Plant Pretreatment



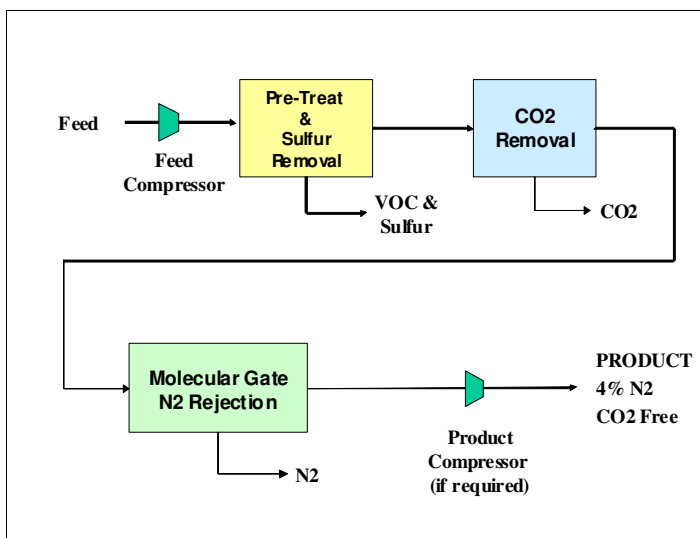
Guild Associates is a leading provider of adsorption systems for the purification of natural gas and other contaminated gas streams. These systems are based upon Molecular Gate® adsorbent technology using pressure swing adsorption (PSA).

Guild has underway seven landfill gas to high-BTU methane projects, including two projects that purify the landfill gas to produce LNG. Guild’s scope of supply for such projects ranges from the Molecular Gate® unit to remove carbon dioxide and nitrogen, to the entire gas purification train including compression, sulfur removal, pretreatment, and bulk carbon dioxide removal using membranes, or where desired, PSA technology. Where PSA is used the pretreatment is not required and water vapor, H<sub>2</sub>S, siloxanes, VOC’s and CO<sub>2</sub> are removed in the “CO<sub>2</sub> PSA” unit.

### A Guild Molecular Gate™ System

The ability of the Molecular Gate to remove nitrogen from landfill gas simplifies management of the landfill. Since the presence of nitrogen in the landfill gas is no longer an impediment to making high-Btu gas, the landfill can tolerate greater nitrogen infiltration, allowing the operator to exercise better odor control.

Guild’s modular, shop-fabricated equipment is easily installed. Capacities range from 0.5 MM SCFD to 10 MM SCFD. The systems are designed for simple operation and automatic product purity control. This is an important feature, given the fluctuation in nitrogen levels typically seen in raw landfill gas.



To learn more contact Michael Mitariten, by phone, at 908-752-6420 or, by email, at [mike@moleculargate.com](mailto:mike@moleculargate.com)

You can also visit us on the Internet at [www.moleculargate.com](http://www.moleculargate.com).

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