



# SWEET-AIRE<sup>®</sup>

## DEEP BED ODOR CONTROL SYSTEMS (DEEP BED OCS)

### SYSTEM DESCRIPTION

The SWEET-AIRE<sup>®</sup> DEEP BED OCS systems, incorporating granular activated carbon, and other media, deliver the lowest life-cycle cost and the highest hydrogen sulfide (H<sub>2</sub>S) removal efficiency, of any process on the market. Each system will provide consistently high H<sub>2</sub>S removal efficiency (>99%) regardless of the fluctuation in the inlet H<sub>2</sub>S concentration – without any operator adjustments to the system. The systems can be supplied with a wide variety of adsorbent media or blends of media to provide complete odor removal of any mixture of malodorous compounds.

The primary media used in the systems for H<sub>2</sub>S control has the highest H<sub>2</sub>S capacity, 60% by weight, of any activated carbon media available. The media is non-regenerable and non-hazardous when saturated. Complete systems are available to handle process airflows from 25 CFM to over 20,000 CFM.

The SWEET-AIRE<sup>®</sup> activated carbon odor control units are available in either pre-engineered models or custom-designed units to fit specific process requirements and/or site constraints. The standard systems are typically designed for installation on a customer-provided concrete slab; but, skid-mounted designs are also available. Materials of construction can be fiberglass, stainless steel, polypropylene, prestressed concrete or epoxy-coated mild steel. The SWEET-AIRE<sup>®</sup> activated carbon odor control systems include the vessel with internal media support system, media, fan and motor assembly, dampers, exhaust stack, instrumentation and control panels, and interconnecting ductwork.

The units can also be provided for installation below grade if desired. This option is especially suited for lift stations, collection systems, and headworks facilities that need a low profile odor control system with minimal visual impact. For noise-sensitive sites, sound attenuation is also available.

The SWEET-AIRE<sup>®</sup> activated carbon systems are furnished with either a single or dual-bed of media. With the single-bed units the malodorous air flows up through the media bed and is exhausted out the top of the unit. With the dual-bed units the inlet air enters the middle of the vessel and travels up and down and diffuses through both beds of media. The upward flow exits the top of the vessel. The downward flow exits into a plenum at the bottom of the vessel that is ducted out of the top of the vessel. Both of the exit stacks can be ducted into one common stack, if desired.

With the incorporation of high H<sub>2</sub>S capacity carbon (60% by weight) and the better than competitive pricing of the systems, the SWEET-AIRE activated carbon systems provide the lowest capital and operating costs for H<sub>2</sub>S and organic odor control.



Headworks Building



Sludge Press Room



Underground Odor Control Unit