



APPLICATION SPOTLIGHT

Air Sparging System - Environmental Treatment



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APPLICATION:

Air Sparging is a remediation technique used for the treatment of saturated soils and groundwater contaminated by volatile organic compounds (VOCs) like petroleum hydrocarbons, which is a widespread problem for the groundwater and soil health. The technique involves the injection of pressurized air into contaminated groundwater, enabling the hydrocarbons to change state from dissolved to vapor. The air is then sent to the vacuum extraction systems to remove the contamination.

Customer was in search of rugged but low cost air flow meters that could be mounted in any direction to incorporate in a Remediation System. The flow meter would serve as a visual indication that there is constant air flow in the system, both in the inlet of the system as well as the outlet.

PRODUCT SUPPLIED:

- Pneumatic Variable Area Flow Meters

CHALLENGE:

Systems can have various flow rates and operating pressures. For this particular application, the system operated at a lower pressure than what our standard units are manufactured for. (100 PSI).

SOLUTION:

We provided our standard AW-Lake Pneumatic Variable Area Flow Meter with a special scale that was corrected for their 15 PSI operating pressure.

RESULTS:

The flow meters installed will ensure there is enough air flow entering into the ground in order to "Bubble" contaminants into the vapor pocket above the water. The contaminated air is then pulled out of the pocket and treated, hence improving the soil health and removing contaminants from the ground water. The sparge runs continuously until the ground water is free of contaminants.

