



DRILLING ENVIRONMENTAL SERVICES

## Peak Wastewater Treatment Systems

### EXCEPTIONAL SERVICE

Peak's comprehensive service program ensures effective equipment operation. Our experience and size allow us to deploy equipment as required across western Canada and the United States from strategically located service points.

Peak Energy Services is committed to protecting the environment and maintaining public and employee health and safety throughout our operations.

We also handle government regulations for wastewater treatment on behalf of our clients (site permits and quality control reports). Peak is a member of the Alberta Onsite Wastewater Management Association (AOWMA), the Western Canada Water and Wastewater Association (WCWWA) and British Columbia Onsite Sewage Association (BCOSSA). Our sewage system installers are licensed, certified professionals. All field employees are certified to the IRP-16 standard.

Treatment plants are sampled after startup and monthly thereafter. Samples are transported to the laboratory (fully accredited through the Canadian Association of Environmental and Analytical Laboratories/Standards Council of Canada (CAEAL/SCC) and registered to ISO 17025 and 9001 standards) for analysis using various water quality parameters. This regular testing program provides feedback on unit operation and is required by regulatory authorities to monitor system performance.



**PEAK ONSITE WASTEWATER TREATMENT SYSTEMS** deliver a fully portable, low-maintenance solution for your wellsite needs. Systems use advanced biological processes to protect both the environment and your team. Our reliable, proven package plants have been used worldwide in the oilfield industry for more than 30 years.

Smaller treatment units are suitable for up to 10 people at the wellsite, while larger units service approximately 25 people in a camp situation. Any combination of sizes can be linked together. Peak also offers a wide range of biodegradable cleaning products especially formulated to work with our package plants.



## PROCESS

Peak onsite wastewater treatment systems use aerobic bio-digesters to break down and eliminate black and gray water waste. Bacteria rapidly consume organic waste material in sewage, releasing only carbon dioxide and water – unlike anaerobic systems (such as septic tanks), which release odors and explosive gases. This technology has been used in municipal applications for decades and was selected for our purposes due to its simplicity, effectiveness, low cost and zero odor emission.

Sewage is routed from wellsite trailers (via heat-traced and insulated collection piping) to heated, automatic lift stations and then transferred to the treatment plant by a solids pump. After retention in the plant for 18 - 24 hours (based on average daily flow), effluent is returned to the environment. Final treatment occurs in the soil, where adsorption, filtration and biological and chemical reactions remove remaining pollutants.

## HOLDING TANKS

In addition to onsite wastewater treatment systems, Peak offers sewage holding tanks that are fully insulated and heated for winter use. Select a capacity (500 - 5,000 gallons) based on your job location, duration and specific requirements. Our largest tanks hold three/four days' worth of sewage from a typical camp or two weeks' worth of sewage from a typical wellsite. Sewage is then hauled by vacuum truck to a local treatment facility (e.g. lagoon).



## PEAK ADVANTAGES

- Professional, 24/7 service from certified technicians
- Regulatory approval in Alberta and British Columbia
- High level of system mobility (i.e. can move with rig or camp)