

**Feedback on the deployment of autonomous modules
with vacuum toilet systems**

(manufactured by TauRus Group, Russia, Moscow, Director – M.I. Timchenko)

From September to December 2013, TauRus Group manufactured, delivered and commissioned one hundred eighty six (186) toilet modules equipped with vacuum toilet systems (VTS) ordered by the Department of Capital Repairs of the Moscow Government. The modules were installed at city streets near metro stations, train and bus stations, on transfer hubs, etc.

The modules equipped with VTS helped noticeably improve environmental situation in the city thanks to:

- significant reduction in clean water consumption, since the VTS uses only 0.5-0.7 liters of water per use instead of 6-7 liters, which is a standard amount for a conventional urban bio-toilet;
- reduced load on the sewage disposal service, because the frequency of disposal has decreased by an order of magnitude, which lead to a significant fuel economy.

The modules were delivered and supervised installation and commissioning were conducted by TauRus Group pursuant to high quality standards and on time.

Also, it is worth mentioning that the modules and internal equipment are vandal-proof and include:

- prefabricated module building with an air conditioning system;
- toilet stalls with stainless steel vacuum bowls;
- electronic control system that controls water supply and disposal to dedicated tanks for further removal;
- hygiene equipment (a sink for washing hands, hot water tank, liquid soap dispenser, towel holder);
- clean water tank (1 cubic meter) and waste water tank (1.5 cubic meter);
- service room for maintenance operations that can be equipped with a cashier desk.

Modules are high quality, made of modern materials, have a nice look and are adapted to various temperatures.

Compared to conventional toilets, vacuum systems have the following advantages:

- modules with VTS are almost autonomous and require no connection to water supply and disposal lines;
- modules are easy to operate and maintain.

Pith quality of equipment and works completed on time, as well as smooth operation experience forms a solid foundation for further cooperation with TauRus Group under the Clean City program.

Deputy Head of Department



V.A. Epifantsev