

Suspended Solids	mg/L	16,300	16,771
Effluent Results			
Soluble COD	mg/L	1850	1800
MRE	%	65%	61%

As shown in Table 1, the MRE (molasses relative efficiency), which is an indication of regeneration, are the same for the two conditions.

Further, long term SBR (sequencing batch reactor) testing was performed, which also showed that treatment performance with carbon regenerated at the two conditions was equivalent. The SBR simulates a full scale PACT treatment system in which carbon and wastewater are contacted. In addition, the SBR also contains biological material to assist in the treatment of the wastewater. During the long term SBR test, wastewater was mixed with biological material and activated carbon for a specific time to allow for treatment of the wastewater. After the specified time, a portion of the treated material was removed, the carbon along with the biological material was concentrated and regenerated using WAR. The regenerated carbon was then returned to the system with fresh wastewater to be treated. This testing confirmed regeneration of the carbon with multiple regeneration cycles through the side by side comparison of the SBR effluent performance under the two conditions. See FIG. 3 for illustration of the results. The left column at 200°, 240°, and CFR (left to right) shows COD (chemical oxygen demand) removed while the right column in each category shows TOC (total organic carbon) removed.

While various embodiments of the present invention have been shown and described herein, it will be obvious that such embodiments are provided by way of example only. Numerous variations, changes and substitutions may be made without departing from the invention herein. Accordingly, it is intended that the invention be limited only by the spirit and scope of the appended claims.

14. The process of claim 1, wherein the spent carbon comprises spent powdered activated carbon.
15. The process of claim 1, further comprising separating the offgas (24) from the regenerated carbon material.
16. The process of claim 1, wherein the feed stream (14) comprises an amount of biological solids.
17. The process of claim 1, wherein the oxidant (22) added to the feed stream (14) comprises an oxygen concentration of at least about 20% by volume.