

Water treatment plant opens its doors

James Smith Cree Nation hosted 50 people during an open house of its IBROM water treatment plant



At the JSCN water plant, back row, left to right: Ryan Arnold, Bullée Consulting; Lawrence Lukey, Bullée Consulting; Roger Chapman, Sapphire Water; Councillor Alvin Moostoos, JSCN; Frank St. Marseille; Bill Marion, JSCN Director of Public Works; Adam McMurtry, Sapphire Water; Derek Schultz, Sapphire Water. Front row, left to right: Jude Drouin; Dr. Hans Peterson; JSCN Chief Justin Burns; Robert Gray, President, Sapphire Water; PAGC Vice-Chief Brian Hardlotte
RON MERASTY PHOTO

On November 19, 2015, James Smith Cree Nation welcomed about 50 people for an open house at their integrated biological reverse osmosis membrane water treatment plant. The attendees were a mixture of First Nations, James Smith Indian Reserve residents, including James Smith Cree Nation (JSCN) Chief, Justin Burns, visitors from Stanley Mission, industry representatives, two representatives from the Water Security Agency, and main presenter, Dr. Hans Peterson.

Peterson developed the integrated biological reverse osmosis membrane (IBROM) technology through trial and error at Yellow Quill, Saskatchewan during 2002 to 2004. JSCN Director of Public Works, Bill Marion, called the system “impressive,” expressing his thanks to Indigenous Affairs for funding the technology.

“This technology is out there – it’s not just here in Saskatchewan,” Marion said. “It’s something that’s going to benefit, not just First Nations in the future, but when we talk about this type of treatment process, it makes undrinkable water drinkable.”



The Stanley Mission Project Management Team for all capital projects, back row, left to right: James Crawford; Gordon Hardlotte, Director of Operations; Elder Joe Roberts; Larry Charles, Public Works; Bob Hergott, Associated Engineering; Wayne Kabatoff, Project Manager. Front row, left to right: Councillor Linda Charles, Councillor Bernice Roberts, Councillor John Roberts; Glen Gillis. RON MERASTY PHOTO

According to Peterson, the IBROM process utilizes naturally occurring bacteria in a controlled environment to remove contaminants from the treated water. Following this process, the treated water goes through a reverse osmosis (RO) membrane. Slight amounts of chlorine are then added to prevent contamination in the distribution system.

“What’s interesting,” said Peterson, “is that the IBROM renders water so pure that the treated water must pass through a mineral bed of calcium and magnesium to increase the pH and add nutrients that are beneficial to human health.”

The IBROM system is currently operational in 15 First Nations with two First Nations – Mistawasis and Sturgeon Lake, Saskatchewan – scheduled for construction in 2016.

“I think it’s very worthy to advocate and promote this type of technology that’s available in this plant, not just within Saskatchewan, but nationally, because... this is the type of treatment technology that’s going to be there in the future,” said Marion.

Prince Albert Grand Council Vice-Chief Brian Hardlotte congratulated JSCN saying: “It’s a state-of-the-art facility. Everybody needs water to live. It’s good to drink. The people of James Smith have clean water to drink.”

JSCN’s old water treatment plant was always in need of fixing but with their IBROM, Chief Burns expects a working lifespan of 25 to 30 years.

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