

Joint Lagoon Committee Report
Chair - Michael Harney December 20, 2018

Meeting with Morrison Hershfield Nov 21 2018

I met with Chad Newton and Abdul Khan. I updated them on the recent developments of the Darwell Transmission line project and how it will impact the future considerations of our lagoon restoration.

I was informed that the ground test holes were underway and weather permitting should be completed by end of Dec.

We had a discussion about the area that will receive the discharge once approved.

Mr. Khan has suggested that due to the high saline content of the fluid, that we should consider adding gypsum to the last cell before the spring to neutralize the sodium content. When the lab results from the test holes are obtained he will be able to calculate the amount of gypsum required. This will eliminate any future problems that we could encounter if the discharge (untreated) were to cause any problems with the vegetation. He was quite confident that if the high sodium content were to create a kill off of vegetation in the discharge area that environment would require us to rehabilitate the area affected and would potentially be at a much higher cost. Using gypsum to neutralize the sodium is relatively inexpensive (under \$5,000 guesstimate) and can be applied by hand on the ice of the required ponds.

As per information that we have received from the Darwell Transmission people about required conditions of Lagoons in service, we will probably need to de-sludge pond 1. Again, based on previous experience Mr. Khan estimates that this will probably be in the \$90,000.00 range .

We should note that this was a requirement of our original lagoon maintenance, and to my knowledge has never been done. Fortunately, once we have discharged, we should be able to move fluids from pond 1 to facilitate the de-sludging process. If all goes well we will be starting actual repairs in 2019. It is the hope of the engineers that we will be able to resume use of our lagoon before the transmission line comes into service.

Michael Harney