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Indian Health Service
Olympic District Office
4060 Wheaton Way, Suite E
Bremerton, WA 98310

Bob Hayden
Corporate Manager
Skagit Valley Casino Resort
5984 North Darrk Lane
Bow, WA 98232

October 15, 2012

Mr. Hayden,

This letter serves as the report for the sanitary survey conducted October 10th, 2012. The survey is intended as a tool to determine the efficacy of treatment, identify potential concerns to public health and the environment, and to provide guidance for improvements.

The wastewater treatment plant begins with the inflow to the screens which remove large debris which could cause harm to downstream processes. Next the screened influent is conveyed to the equalization (EQ) basin, a 350,000 gallon open tank providing surge storage capacity. Pumps in the EQ basin convey the sewage to the anoxic basin where low oxygen levels allow the process of nitrification and denitrification. The sewage then flows to the pre-air basin where bacteria continue nitrification and further break down organic matter. Next the sewage is further concentrated in the membrane tank where the small pores of the plates ensure that high quality effluent (mostly water) is discharged to the disposal system and the biosolids and the majority of contaminants are held in the tank for degradation and wasting. Wasted sludge is thickened in a thickening chamber and discharged to the sludge holding tank, where it waits for disposal. The disposal system that follows the membrane tank is a pump chamber, the water from this tank can be reused on-site for washing equipment or other non-potable uses or is discharged to one of the two injection wells.

This system gives every indication of near flawless operation, from the high quality of effluent produced to the clean and professional appearance of the facility grounds. No unfavorable observations were found as a result of this survey. Below are some of the noted observations/recommendations:

1. The laboratory and its equipment is a model for all other wastewater plants to emulate. The size, configuration, and capabilities are a great fit.
2. The redundancy of equipment from the two days storage capacity in the EQ basin to the extra blowers for all aeration/scour processes is a welcome design element, especially for ensuring public health and environmental protection as well as ensuring continued operations through potential breakdowns.
3. Keeping records of manhole inspections and any other inspection or maintenance activity is highly recommended.
4. Ensure the operator(s) familiarize themselves with preventative maintenance plans, operation & maintenance plans, emergency plans, etc. All of these documents were available in the laboratory and well organized to ensure accessibility.
5. This is one of the few facilities I have surveyed which has a Class IV wastewater operator. A Class III is recommended by the Orange Book form Washington Department of Ecology.

The planning and implementation of your facility has every indication of being done in top notch fashion. As long as this level of thought and care continue, the facility will also serve Skagit Valley Casino Resort and the Upper Skagit Indian Tribe by producing high quality effluent which will recharge the aquifer and hydraulically connected rivers with safe clean water.

If you have any questions or concerns on this report, please email me at Jason.schneider@ihs.gov or give me a phone call.

Sincerely,



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Tribal UIC Consultant
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cc: Stephanie Coffey, NW Indian Health Board