

Exhibit H

City of Ketchikan Preliminary White Paper on the Tongass Narrows Being Classified as an Impaired Water Body and the Potential Impacts on the City of Ketchikan Charcoal Point Wastewater Treatment Plant

The City of Ketchikan's Charcoal Point Wastewater Treatment Plant was permitted by the Environmental Protection Agency (EPA), constructed in accordance with the requirements of that permit, and began improving water quality along the coast of the City of Ketchikan in 1989. As was common along the Pacific coast, the City qualified for a secondary treatment and disinfection waiver as provided for in the Federal Clean Water Act of 1972. This waiver allows for wastewater effluent discharge after primary treatment and without disinfection. The waiver to allow primary treatment is based on several criteria, one of which is that the receiving waterways, in the City's case the Tongass Narrows, cannot be classified according to EPA guidance as "impaired."

At various times over the past three years, the Alaska Department of Environmental Conservation (ADEC) has pursued water sampling along Ketchikan's coastline, as well as in various other southeast Alaska communities and Anchorage, with the purpose of being able to declare waterways that should be classified as impaired. ADEC did this knowing that classifying a receiving water body as impaired would result in a new discharge permit being issued from the EPA without the exemption to allow for primary treatment. While ADEC has announced that it is once again performing water sampling for the 2021 season, the agency has informed City staff that it believes that enough water quality sampling (three summers, and reduced testing over the winter of 2020/2021) has been accomplished to meet the EPA's criteria to conclude that there are waterways within 5 miles of the City of Ketchikan's Wastewater Treatment Plant (WWTP) that do not meet the minimum water quality standards for consumption of shellfish and are, therefore, impaired. This determination, progressing towards finalization, will spur a new permit issuance that will include more stringent discharge requirements. The City has been advised that EPA has assembled a permit writing team to issue new discharge permits in Southeast Alaska. In order to meet these new discharge requirements, the treatment plant would have to be reconstructed to provide secondary treatment and disinfection. This reconstruction would substantially expand its footprint, displacing the buildings currently used as the City Streets Warehouse and City Garage. Such reconstruction would be very expensive, to the tune of \$180 million. Operational costs would nearly double.

Obviously, Southeast Alaska, including the City of Ketchikan, does not have the population numbers to spread out the cost of such a capital improvement and subsequent increased operational cost. A preliminary estimate indicates that in the unlikely event that all other operational costs stayed the same, each of the 2300 ratepayers would have to pay nearly \$700 per month to finance such an improvement – clearly out of the realm of reality.

The second issue is that the City of Ketchikan's deep water (Elevation -100') discharge mixing zone water testing has indicated that the WWTP is not the cause of water quality degradation along Ketchikan's coast. Unfortunately, the Federal Clean Water Act does not require that an impairment designation and subsequent permit issuance establish a causal relationship between the WWTP discharge and the water quality impairment. Therefore, if the water quality is impaired by a factor or factors beyond the WWTP, the discharge waiver still goes away. Consequently, it is the City's belief

that constructing secondary treatment and disinfection is not going to result in improved water quality along the beaches of Ketchikan.