3BM-SAN2025 License Renewal and Amendment Executive Summary

August 2026

The Government of Nunavut Department of Transportation and Infrastructure Nunavut, on behalf of the Municipality of Sanikiluaq, is applying to amend water licence 3BM-SAN2025. A Type B water licence will be applied for with the Nunavut Water Board for the increased water withdrawal limits of 299 cubic metres per day and 109,135 cubic metres per annum. The new water treatment facility is expected to be under construction from 2026 to 2027 and in commission from 2027 to 2047. The water treatment facility will be placed adjacent to the existing site and will continue to withdraw water from the existing water source Sanikiluaq Lake. Two intake lines with submersible pumps and DFO rated fish screens will be used to withdraw raw water for treatment in the water treatment plant. The water quality in Sanikiluaq is characterized as brackish water. Therefore, the new treatment plant will have an improved treatment process including basket strainers, flocculation, dissolved air flotation, ultrafiltration, reverse osmosis, UV disinfection, and chlorination. This treatment process is required to ensure that the treated water quality meets the Health Canada Guidelines for Canadian Drinking Water Quality. Treated water will be stored in a tank with a storage capacity of 350 cubic metres. As the water treatment plant will have a reverse osmosis system, management of reverse osmosis reject water (brine water) will be required. A brine water tank with a storage capacity of 260 cubic metres will be used to stored brine water before it is disposed by a buried pipe to the creek connecting Sanikiluaq Lake to the Hudson's Bay or by truck at the brine water trucked disposal site when the creek is frozen and unable to accept brine water flow without creating ice build up. The brine water quality will have a lower chloride, sodium, and total dissolved solids concentration that the receiving creek (ocean mixing zone) and marine environment, and a hydrological analysis demonstrated that the flows will not negatively impact the existing flow regime of the creek. Any deemed required changes to the infrastructure or operations will be made to ensure compliance with the Fisheries Act. Construction materials and any hazardous wastes will be transported in and out of the community by sealift. Wastewater produced at the water treatment facility during the operations phase will be brought to the municipal sewage lagoon, as per existing operations. Consumables required for the operations phase of water treatment facility such as empty containers of process chemicals and water testing reagents will be brought to the municipal solid waste disposal facility, as per existing operations. Existing operation of the existing water supply facilities will continue until the new water treatment facility is commissioned in 2027. In addition, under the renewed water licence, no infrastructure and operational changes to the solid waste disposal facilities or sewage disposal facilities are currently proposed. Please note that a new sewage disposal facility, which the application for was previously withdrawn (NIRB File No. 23XN071), will be designed to meet the sewage treatment requirements for

the lifecycle of the new water supply facility. Once the design of the sewage treatment facility is prepared a new application to NPC will be submitted.

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ᓄᓇᕗᑦ ᑲᕕᒪᖓᒐ ᐃᖏᕐᕿᓯᓚᕆᔨᑯᖏᑦ ᓇᐸᓂᖅᑎᑕᐅᓭᓚᕆᔨᑯᓪᓗ ᓄᓇᕗᑦᑎ, ᑭᓱᖅᑐᖅᓯᒋᑦ ᐄᔪᓚᑦᑭᐅᔭᑦ ᓴᓂᑭᓗᔪᖅᑎ, ᐱᓇᔭᖅᓴᑦ ᐊᓯᔨᓴᖅᓯᕕᒪᓪᓗᑎᑦ ᐃᒪᖏᑦ ᓚᐃᓴᑦᑭᐅᔭᕆᐅᖅ 3BM-SAN2025, ᖃᓄᐃᑦᑐᓂᖓ B ᐃᒪᖏᑦ ᐱᔭᕐᓇᐅᑎᒋᖅ ᑐᔨᓯᖏᓂᔪᖅᓴᑦ ᓄᓇᕗᑦ ᐃᒪᓕᕆᓚᑦ ᑲᑎᒪᔨᖓᑭᓕᑦ ᐅᓄᖓᓯᔪᖅᑎᓪᓗᑦ ᐃᑎᖅᑕᖏᑕᐅᓴᖅ ᐃᓯᖃᖏᓪᓗ 299 ᑭᑕᓂ ᐅᓪᓗᖏᑦ ᐊᑕᐅᓯᖏᑦ ᐊᓱᒪ 109,135 ᑭᑕᑦ ᐊᖏᓴᐃᒧᑦ.ᓄᑦᖅ ᐃᒥᖏᑦ ᓴᓗᒪᖏᓴᐃᒪᖅ ᓴᓇᕗᐅᕐᓂᐊᓂᐊᕐᕿᓂᕐᓴᖅ 2026–ᒥ 2027–ᒧᑦ ᐊᓱᒪ ᐊᑐᖅᑎᑕᐅᓄᓂ 2027–ᒥ 2047–ᒧᑦ. ᐃᒥᖏᑦ ᓴᓗᒪᖏᓴᐃᒪᖅ ᐃᓕᓴᐅᓂᐊᖅᑐᖅ ᐊᓯᐅᓚᓂ ᖃᓂᒋᔭᓄᑦ ᐊᓱᒪ ᐃᒥᖅᑭᓵᓂᖅᕿᓯᓕᕆᓂᖅᑐᓂ ᓴᓂᐅᓚᐊᖅ ᑕᓯᖓᓂ. ᒪᖏᑉᐳ ᐃᒥᖅᑕᖏᓀᐃᖅ ᐃᒪᖅᖃᖅᑕᑦ ᐊᓱᒪ ᐃᒪᖏᐅᑕᓕᕆᔨᓂᖅ ᐃᖅᓚᓐᓂᖅ ᑕᓂᐅᓚᐅᖅ ᐊᑐᖅᑕᐅᓴᖅᑐᓂᖅ ᐃᒪᓕᕆᔨᓂᖅ ᐃᒥᐅᖅᑕᐅᓴᖅᑐᓂᖅ ᐊᑐᖅᑕᐅᓴᖅᑎᓂᖅᓴᖅ ᐃᒪᓕᕆᔨᓂᖅ ᐃᒥᐅᖅᑕᐅᓴᖅᑐᓂᖅ ᐃᒥᐅᖅᑕᐅᓴᖅᑎᓂᖅᓴᖅ ᐃᒪᓕᕆᔨᓂᖅ ᐃᒥᐅᖅᑕᐅᓴᖅᑐᓂ

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(ᓄᓇᕗᒻᒥ ᐊᐢᕈᑎᓕᕆᔨᖏᑦ ᑲᑎᒪᔨᖅᑎᑦ ᑎᑎᖅᑲᖏᑎᖅᑎᑦ 23XN071), ᐊᖏᑭᑕᐅᓂᒪᓂᐊᖅᑐᖅ ᑭᓇᓗᖃᖅᓴᐅᐸᑦ ᐊᑐᐃᑦᑐᒍᓐᓇᓂᓕᒃ.ᐊᖏᑭᓂᒪᓂ