Nunavut Research Institute / ᓄᓇᕗᑦ ᖃᐅᔨᓴᖅᑐᑦᑕᓕᕆᔨᒃᑯᑦ
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SCIENTIFIC RESEARCH LICENSE

LICENSE NUMBER 01 023 24R-M

ISSUED TO: Julian Aherne
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TEAM MEMBERS: K.Wilkins,E.Papatheodorou

TITLE: Impacts of Air Pollution on Terrestrail and Aquatic Ecosystems on Southern Baffin Island

OBJECTIVES OF RESEARCH:

The impact of atmospheric emissions on air quality in the Arctic is expected to increase as new and expanded economic developments trigger growth in marine traffic and resource extraction. Emissions of sulphur dioxide and nitrogen oxides can contribute to ecosystem acidification and eutrophication in regions characterized by acid sensitive geology and nutrient poor soils, such as Baffin Island. This project will use a critical loads approach to quantify the assimilative capacity of arctic terrestrial and aquatic ecosystems to pollutant deposition. Lake water in the Iqaluit regions (20 study catchments) will be sampled for chemical analysis. In addition, moss and soil samples will be collected at the study sites, and vegetation surveys will be carried out to assess terrestrial ecosystem impacts.

TERMS & CONDITIONS:
The holder of the licence will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report (16YN048)and the Department of Culture & Heritage archaeological sites terms and conditions. These terms and conditions will form part of this licence.

DATA COLLECTION IN NU:
DATES: July 2,2024 to August 30,2024
LOCATION: Outskirts of Iqaluit and Kimmirut

Scientific Research License 01 023 24R-M expires on December 31,2024
Issued at Iqaluit, NU on June 19,2024

Jamal Shirley
Science Advisor