

MINUTES OF MEETING

Prepared by: Dr. Haroon R. Mian

Date: June 7th, 2023 ; Time: 3:30 pm

Location: Zoom

Attendees

University of British Columbia

Dr. Rehan Sadiq – PI, UBC
Dr. Kasun Hewage – Co-PI, UBC
Dr. Michael DeCosta – PM, UBC
Dr. Haroon R. Mian – PDF-Water
Dr. Anber Rana – PDF-Energy
Dr. Andre MacNeill – Collaborator, UBCV
Colin Wilson – Business development unit

Community and Industry Partners

Darryl Condon – HCMA
John Ireland – Myrtha Pools Inc.
Mark Versfeld – Myrtha Pools Inc.
Rob Walter – AME Consulting Group
Nic Besseling – AME Consulting Group
Renata Turick – City of Richmond
Eric Bientjes – City of Burnaby
Carol Chard – City of Burnaby
Steve Fagan – City of Kelowna
Tyler Stringer – City of Kelowna
Rob Parlane – City of Kelowna

Regrets

Doug Perks – DB Perks & Associates

Remarkable conversations and points

Opening remarks

Dr. De Coste (PM, UBCO) initiated the meeting at 3:32 pm and welcomed all the partners. Dr. De Coste requested to record that meeting for those who had not attended. All participants agreed to record the session via Zoom. Dr. De Coste introduced Dr. Sadiq (Project PI) to all participants.

Dr. Sadiq (PI, UBCO) welcomed all partners, introduced the project, and briefly emphasized the importance of having community-based projects. He discussed the challenges of having limited data for informed decision-making. Dr. Sadiq provided some background about Life Cycle Management

Laboratory's (LCML) previous experiences with such types of projects. He emphasized having such collaborative projects involving diverse stakeholders, which can impact policies in the long run. He thanked all partners for supporting such a project. He centred the discussion on science-based evidence and research on facilitating the stakeholder to make the right operational decisions. Dr. Sadiq also highlighted that LCML has international recognition and has conducted many community projects. He wished to have such meetings regularly and one in-person meeting every year during the project course.

Dr. De Coste (PM, UBCO): Briefly updated the project scope, goals, plans, timelines, and deliverables using PowerPoint slides.

Eric Bientjes (City of Burnaby): Asked if the UBCO research team will look at local, regional, and international standards. Dr De Coste and Dr. Sadiq responded that we will review and assess all available state-of-the-art practices to ensure we are not missing any useful and applicable knowledge important for this project.

Dr. Sadiq (PI, UBCO): Hoped that this research and unique collaboration would facilitate the managers and facilities stakeholders to improve their day-to-day operations.

Partners' comments/questions on the project:

Rob Walter (AME Consulting Group): Rob highlighted some lessons from the previous project on aquatic centres' performance. He mentioned some inconsistencies in sampling and wanted to avoid them in future. Dr. De Coste ensured that the UBCO research team will draft a comprehensive sampling plan and will discuss it with the partners before initiating a formal sampling. Rob also asked about specific water and energy-related parameters that the UBCO research team will consider to be displayed on the ePool dashboard. He supported the project and was excited to be a part. Dr. Sadiq acknowledges Rob and the AME Consulting Group for their continuous support in research and development over the years.

Eric Bientjes (City of Burlington): Mentioned that variations of the difference in chemicals and conditions need to be captured for a more robust assessment.

Darryl Condon (HCMA): It will be interesting to see how all the variables inside the facility are connected. There are many water and energy variables which need to be linked. He also added that sample size will be interesting in evaluating indoor facilities' performance. According to him, the

facility's age, water quality, humidity etc., will be important to assess. In addition, the air quality perception and dependent variables will be crucial for healthy and comfortable pools.

Dr. Sadiq (PI, UBCO): Responded to Darryl that it's a complex process and more quality and quantity data is required to assess and develop relationships in these variables to come up with an optimal solution. He also mentioned that we intentionally kept this proposal broader in detail since it is research-based and to answer questions that will emerge as research progresses in this project. He ensured that we will work closely with all partners to understand the real-time situation and develop applicable methodologies to devise the solutions.

Partners' expectations and opinions on the project:

Robert Parlane, Tyler Stringer (City of Kelowna): Both are excited to see the results and how the project progresses. CoK has various facilities. Some are old, and it will be interesting to see the results of these facilities. Dr. Sadiq answered that we would not be picking a specific facility. We wanted to ensure that our methods, tools, and techniques are generalized and applicable to all situations.

Eric Bientjes (City of Burnaby): The City of Burnaby is happy to be a part of this interesting project and want to ensure good indoor air quality and environment for their staff and users. We need to ensure that our facilities are good and healthy for staff and the public in the long run. Eric also emphasized the aspect of energy efficiency and the net-zero concept.

Dr. Hewage (Co-Pi, UBCO) responded that he has been working on various energy-based assessments for different systems over the years. He stated that this is a very interesting project as it will apply life cycle thinking-based approaches to evaluate the facilities' performance. He said LCML has sufficient skills to control state-of-the-art work in the subject area. Particularly the Energy-Health-Carbon nexus of recreational facilities will be helpful for all stakeholders.

Renata Turick (City of Richmond): We look forward to seeing the results and are excited to participate in this project.

Darryl Condon (HCMA): This research can generate results which can be discussed to drive policies and plans.

Mark Versfeld, John Ireland (Myrtha Pools Inc.): We are excited to be a part of the project and interested in working with the UBCO team on various aspects.

Dr. Andrea McNeil (Collaborator, UBCV): supported the project as it covers several variables such as health, water quality, energy etc. She mentioned the importance of such collaborative and multidisciplinary work to see different perspectives. She assured that public health authorities will be fully participating in this.

Dr. De Coste (PM, UBCO) mentioned that the UBC research team wants some input on our sampling program. The UBCO team will contact our community partners individually to discuss the sampling program and get feedback before mobilizing the sampling campaign.

Dr. Sadiq (PI, UBCO) and Dr. Hewage (Co-PI, UBCO): In the end of the meeting, thanked all the partners for all their support and emphasized reaching out to Dr. De Coste, Dr. Mian, and himself for any feedback and suggestions.