

5th Annual Water and Sanitation Workshop: *Arctic Wastewater Treatment and Disposal: current status and research needs*
Friday, January 30th, 2015

**A Workshop Co-sponsored by:
U.S. Arctic Research Commission & the Centers for Disease Control and Prevention**

Friday, January 30th, 8:30 AM - 5:00 PM – The Adventure Room, The Hotel Captain Cook, 939 W. 5th Avenue, Anchorage AK (907)276-6000

Preceding session of interest: ALPHA-sponsored Alaska Health Summit Meeting session of interest to be held January 28th from 10:15-11:45 A.M., **Session Number:** 204, **Track:** Social and Economic Determinants of Health. Session objective: to update the progress with provision of water and sanitation services in rural Alaska and to report on new data related to water/sanitation and health.

Workshop objectives:

- **Characterize the status of wastewater treatment and disposal in the rural Arctic**
- **Identify opportunities and research needs to improve the delivery, management and performance of wastewater treatment and disposal systems in the rural Arctic.**
- **Development of a list of health-related wastewater research needs**

8:30 A.M.	Meeting commences
8:30- 10:00 A.M.	SESSION 1: Wastewater treatment overview
8:30-8:45	Welcome, Announcements and Introductions
8:45-9:15	Current state of wastewater treatment and disposal infrastructure in arctic and subarctic areas of Alaska (overview) (D. Antrobus, ANTHC)
9:15-9:30	Characterize the performance of existing rural Arctic wastewater treatment and disposal technologies, including practices: comparison between 1970 and today (D. White, UAF)
9:30-10:00	Challenges to sewage lagoon operation (R. White, YKHC)
10:00-10:30 A.M.	30 minute break
10:30-12:00 P.M.	SESSION 2: Regulatory matters
10:30-11:00	Engineering performance standards- the regulatory perspective: DESIGN (G. McCabe/C. Adler, ADEC)
11:00-11:30	Engineering performance standards- the regulatory perspective: OPERATION (B. Doyle/M. Solter, ADEC)
11:30-12:00	Facilitated Discussion: Have design standards changed lagoon performance?
noon-1:00 P.M.	Lunch on site, short videos

1:00-1:45 P.M.	SESSION 3: Operational considerations
1:00-1:30	Sludge removal presentation (B. Doyle/L. Aldrich, ADEC)
1:30-1:45	Honeybucket technology presentation (honeybucket hoppers) (B. Lefferts/B. Berube, YKHC)
1:45-3:30 P.M.	SESSION 4: Health connections
1:45-2:15	Review of documented outbreaks/adverse health events related to sewage problems in Alaska/Arctic, highlighting health status changes after installation of in-home services in 4 villages (T. Hennessy, CDC)
2:15-2:30 P.M.	<i>15 minute break</i>
2:30-2:50	Microbial contamination studies around sewage lagoons (E. Mutter, Yukon River Inter-Tribal Watershed Council)
2:50-3:10	UAF research on microbial transport in rural Alaskan villages with honeybucket lagoons (D. White, UAF)
3:10-3:30	Local perspectives on wastewater disposal/impacts on subsistence? (S. Jones, ARUC Vice chair, M. Pete, USARC/UAF)
3:30-4:30 P.M.	Breakout session: three groups will be tasked with coming up with a list of gaps/research needs/recommendations related to wastewater treatment and disposal practices.
4:30-5:00 P.M.	Groups report out/Wrap up
5:00 P.M.	<i>Adjourn</i>

Packet Contents:

- (Agenda)
- Specs on National Park Service SCAT System
- Commuter information
- Li Erickson Climate Change and coastal impacts handout
- Research Needs Workgroup Report (available at: http://www.climatechange.alaska.gov/docs/rn_12jun09_dfrpt.pdf)
- Water and Sewer Services in Rural Alaska Communities, Including Wastewater Treatment and Disposal
- Historical Sewage Lagoon Construction Costs
- Hooper Bay's Declining Lagoon Treatment Capacity
- Lagoon Construction Guidelines (ADEC)
- Bibliography of circulated background reading (available at workshop)