

Arena Task Force Meeting Minutes

Meeting: August 20, 2015 11 a.m. – 1 p.m.

Location: Ramsey County Parks and Recreation

Attendance: Jon Oyanagi, Steve Reeves, Mike Searles, Don Mullin, Mike McGrath, Candy Petersen

Note Taker: Kara Coustry – Parks and Recreation

Guests: Stephen Borer – Zero Zone, Bob Lind and Bret Swanson – Gartner Refrigeration & Mfg., Ellen Richter – City of White Bear Lake, Jon Yang – Parks and Recreation Intern

Meeting began at: 11:06 a.m.

1. Welcome and Introductions
2. Arena Coolant Presentation

Midwest regional sales manager from Zero Zone, Stephen Borer, gave a presentation about refrigerants. Zero Zone provides custom manufacture of chillers. Bob and Bret with Gartner Refrigeration backed up the presentation and provided a refrigeration replacement/retrofit guide.

Steve referenced a graph of various refrigerants as they relate to pressure or capacity and global warming. CO² systems are very expensive and dangerous because they operate under high pressure and have no detectable odor. Anchorage installed these systems and they are not running as efficiently as expected. This system is good only when running in the winter. Basically another system has to be installed to run during summer. Next generation coolants are blends: R448A, R449A, R449B, although these are untested.

Today, 95% of newly constructed arenas are using ammonia coolant systems. Ammonia has been around the longest, is the greenest and provides the lowest risk and best bang for the buck. It is self-alarming and leak detection has improved to incorporate safety systems for handling leaks. The cost to replace the floor can run \$350K - \$500K and the cost to replace the compressor/refrigerant is the same. Having already replaced the floors, Ramsey County would have the latter cost. Better exhaust systems for ventilation would need to be installed. Buildings may also need to be reconfigured to provide external access or a breezeway. Staff training, especially pertaining to leaks, is recommended.

When asked what course of action is recommended for the County, both Zero Zone and Gartner Refrigeration agreed – Ramsey County is ahead of the game with our conversions and new floors. Our system is tight and requires less charge. Steve Reeves believed the statistic to be 85% less Freon used system wide. We could easily coast three – five years as long as we kept up on the leaks. They cautioned against waiting to convert our arenas so they wouldn't all need to be done at the same time.

When asked about the possibility of using energy savings to finance the conversion of R22 to ammonia, they believed our customer energy rebate would be minimal. With economies of scale realized in multiplex facilities, it would be roughly one-third the cost to add another sheet of ice. If you intended to close down one rink and leave another one running, you should incorporate that into your design such that a smaller compressor is used.

General Discussion: Changes in demographic and needs of the community should be considered when looking to repurpose arenas. We might be able to coast three to five years on current systems, but no longer and it was pointed out that a construction project could take just as long. It was thought that we should not reduce available ice, but rather use economies of scale to add sheets at some existing rinks, then repurpose, and reclaim refrigerant from, other rinks.

We need to figure out how to define our user groups and what percentage of ice time should be sold to groups outside of Ramsey County. How do we drive down costs during the off season? When we talk about 6% of ice time not sold, that means within the hours of 3:00 p.m. to 11:00 p.m.

Jon tasked the group to make a recommendation as to whether we should subsidize and at what percent, and if we drop below that, do we look at closing the rink?

3. Community Engagement Plan Update

The committee thought the staff had a good handle on the community engagement process and suggested we continue with the plan as drafted. Once a calendar of events is put together, Mike Searles asked that we send it out to the group and encouraged the groups' participation.

4. Agenda for the September 24th meeting should include cost estimates for 1, 2 versus 3 sheets of ice and an inventory of available land.

Don Mullin moved, seconded by Mike Searles that the minutes of the July 16th meeting be approved.

Mike Searles motioned and the meeting adjourned at 12:40 pm.