

Public Building Commission
March 7, 2012 – 6:00 pm
Pool Dehumidification Project
Room 207, Town Hall

Members Present: Mr. Vin Robitaille, Subcommittee Chairman
Mr. Ron Palumbo, Subcommittee Co-Chairman
Mr. John Purtill, Chairman PBC

User Members Present: Mr. Bill Kunde, User Member
Mr. Dave Gavin, Energy Commission
Mr Mike O'Donnell, Park & Rec Committee (left at 6:10pm)
Mr. Walt Gayeski, Energy Commission

Others Present: Mr. Lew Cohen, Town Resident
Mr. Evan Cohen, Town Resident
Mr. Denis Rioux, BL Companies
Mr. George Noewatne, Public Works

The Chair called the meeting to order at 6:05p.m. Roll was called and a quorum determined.

BACKGROUND

The PBC was charged to replace the pool bubble
The bubble was a replacement in kind
The PBC retained a designer to provide guidance during bubble procurement/installation process, Denis Rioux, of BL Companies

Denis Rioux discovered that the pool had two code issues: (1) the amount of fresh air, and (2) the humidity level of the recirculated air.

I. Amount of Fresh Air

The building code requires the structure to have 15,500 cfm of outside air. The Arizon unit provides 9,500 cfm outside air for inflation of the bubble, and recirculates 21,000 cfm of treated air.

Options: (see attached document from BL Companies "Air Management Issues" dated 3/5/12)

- A. Request modification from state building official
- B. Add a 6,000 cfm blower/heater
- C. Replace existing unit with 15,500 cfm unit
- D. Modify current system per the schematic outlined in the document (option 2C)

Ideally, pool bubble should have "negative pressure" as compared to permanent building. In this case, the building may need to be pressured to just above the level of the bubble.

II. Humidity Level of Recirculated Air

1. Not required to dehumidify all air in the bubble to 60% relative humidity, only amount of recirculated air. Can dehumidify air with refrigeration (less desirable) or heat (more desirable) from a cost perspective.

Discussion of Option C ensued to gain an understanding of all the components:

600 pounds of water evaporate from the pool each hour.

Lew Cohen believes we can dehumidify without using compressorized dehumidification when outside air < 60% relative humidity. The subcommittee will explore this option since it presents a large cost savings compared to compressorized dehumidification.

Need a system in place by mid-September to meet code requirements

Handed out:

Pool humidity readings in building and in bubble Jan and Feb 2012
Air management issues – BL Companies – 3/5/12

Next meeting: March 13, 2012 at 6:30pm

Motion made to adjourn meeting. Motion seconded and approved unanimously. Meeting adjourned at 7:00pm.

Submitted by:

George Noewatne