

Minutes Meeting of January 19, 2005 – Murphy

Members Present: Cindy Maxwell, Jay Prager, Mark Mulligan, Bob Cadle, Chase Duffy

The Acting Chairman convened the hearing by reading the Legal Notice.

The user was present, Rob Pellizier, an engineer who develops the devices. He said that they are external combustion devices, approximately 5 kilowatts, for propane, gas, etc. He said that there is an existing propane tank that has likely not been serviced in a long time. He said that the engines are quieter and much more efficient in terms of emissions, similar to a gas fired stovetop. He said that they can operate in a dwelling safely. He said that the devices are mechanical, driving a small energy cycle.

Mr. Prager asked what materials would be used for operations.

Mr. Pellizier said that noble gases, that are stable and inert would be used.

Mr. Prager asked about safety issues, ie, explosion possibilities.

Mr. Pellizier said that there is an inherent danger but all work will be watched and there is a small percentage of risk. He said that they are diffusion flames, and are not premixed. He said that the research is primarily about other good home cooking mixes.

Of note: the parcel is zoned B-1.

Mr. Pellizier submitted a handout describing the operation, noting that he used to work at Arthur D. Little before the company went bankrupt. He said that the company is operating under the name of Tyrex and three engineers left to join Environ and want to continue to work in thermal sciences

Mrs. Duffy noted concern because this is so close to a residential area.

Mr. Pellizier said that there would be no more than 3 and probably at most 2 people working in the lab at a time. He said that their lab at ADL was interspersed with offices and was not dangerous. He said that he is familiar with how to run a safe lab.

Mr. Cadle asked whether the apartment complex located to the rear was attached.

Mr. Pellizier said that it was somewhat attached and noted that he thinks there is an apartment on the second floor. He said that he is unfamiliar with what is on the ground floor because all the windows are blocked off.

Mr. Prager asked about the size of the devices.

Mr. Pellizier said that they are similar in scale to oil-fired furnaces for heating and noted that their systems are typically much smaller than a residential heating system.

Mrs. Duffy asked about safety materials used in renovation.

Mr. Pellizier said that there will be fire safety dry wall, and metal counters, and noted that most of the work is done under hoods with fire extinguishers near by. He said that the heating, etc is done outside of the building.

Discussion ensued regarding how the fabrication works.

Mrs. Duffy asked what the devices drive.

Mr. Prager asked who buys them and what they are used for.

Mr. Pellizier said that they are home generator/heaters. He said that they have done a lot of work for the military because the soldiers have to have self-generating batteries for the field. He said that the devices could be used to keep vaccines cold, etc. He said that they are typically less than one kilowatt devices and noted that a typical home has a 3 kilowatt device. He said that in the developing world there are potentially large markets.

Mrs. Duffy asked where the nearest houses are in relation to the site.

Discussion ensued regarding the location of the dwellings.

Richard Curtis, abutter, suggested the Board and abutters visit similar laboratories. He said that there should be strict limits on what is stored on site, emissions, odors, light pollution, etc. He said that the proposal sounds interesting and is not innately incompatible with the area but stressed it is good to have strict conditions. He asked about additional truck traffic, etc.

Mr. Pellizier said that fuels used include natural gas, argon, gasoline, diesel, alcohol, etc. He said that fuels are kept only as used and not stored generally. He said that most work is done with propane.

The Board went over special permit criteria.

1. The operation is a local business with employment on a small scale.
2. The big parking lot is already there.

Mr. Curtis said that site plan review was at least begun last year, but not for this particular use. He

said that he thinks it covers this building but may need revisiting for a change of use.

3. The utilities, etc. are not an issue.
4. Neighborhood character: the site is zoned B-1 and thus a lab is allowed under 218-13.
5. Mr. Pellizier said that things in this size class aren't monitored but they do have certain EPA regulations that need to be followed. He said that it is much like a home furnace and noted that they will use the same stack of the existing furnace. He said that it is no worse than mowing a lawn.

Mr. Curtis suggested that the Board could use some additional input regarding the hood and venting.

Mr. Prager said that he wants some process to ensure that they are operating under some guidelines.

Mr. Curtis said that the current process may be clean but said that if a new process is developed down the road, he wants a guarantee that the limit is not exceeded.

Of note: talk to George Barringer and the Fire Chief.

The hearing was continued to 2/9/05 7:30 pm.

The meeting adjourned at 9:15 pm.