NEW JERSEY NOISE CONTROL COUNCIL MEETING SEPTEMBER 11, 2012 MINUTES

NCC ATTENDEES: J. Lepis (Chairman, Civil Engineer), A. Schmidt (Vice Chairman, Public Member-Registered Environmental Health Specialist), J. Feder (Secretary, Public Member-pending confirmation), R. Hauser (DOL, Member), N. Dotti (Public Member), I. Udasin (Public Member – Medical Doctor), J. Kapferer (Public Member), C. Accettola (Public Member-pending confirmation), Drake Rizzo (Member-NJDCA), Eric Zwerling (RNTAC), D. Triggs (NJDEP).

I. SEPTEMBER 11, 2001 REMEMBRANCE

The events of September 11, 2001 occurred during an NCC meeting eleven years prior at which Chairman Lepis, as well as Mr. Kapferer and Dr. Udasin and some other current members had been present. Chairman Lepis called for a moment of silence to honor and remember those who had died, and especially the "first responders." Dr. Udasin, who has been significantly involved and knowledgeable regarding the treatment of September 11 victims, discussed briefly the recent changes to include eligibility for compensation and treatment for cancer related illness. She also discussed briefly some of the hardships faced by victims as well as some recent studies attempting to relate the conditions following the attack on September 11 to cancers experienced by victims.

II. COMMUNITY NOISE WORKSHOP IN NEW YORK/SOUND LEVEL METERS

Chairman Lepis, Mr. Zwerling and Mr. Dotti reported on their attendance at the August 22 Community Noise Workshop in New York City. Mr. Zwerling had also coauthored one of the talks at this workshop. He briefly described some of the problems in regulating noise in a place like New York City, which often had very high background noise levels. Mr. Zwerling related a court case in which peak momentary background noise levels of 85 decibels were cited to attempt to make a case that the some New York City noise was not intrusive. Fortunately, the judge in the case ruled that extraneous noise of short duration could not be used as a reason to not regulate some city noise.

A number of vendors showed measuring equipment for use in noise regulation. Mr. Zwerling discussed some recent trends in the development of such equipment. There has been trend to making meters more digital and settable with screens on the meter "faceplate." Unfortunately, there was, among some vendors, lack of sensitivity to the practical environment in which meters are used. As an example, Mr. Zwerling stated that it is critical that meters be conveniently switchable between "C" and "A" frequency weighting and between longer term averaged and more instantaneous measurements. One vendor could not do this with his meter without consulting the manual! Mr. Zwerling stated that the Quest 2100-10 Meter Kit (includes, meter, windscreen, and calibrator. Note:Quest was subsequently taken over by 3M) included a good basic meter. It is available for about \$1100 and is suitable for use in day-to day noise regulation. Mr. Zwerling also said that there was a tendency for municipalities to buy several very expensive meters with more capabilities than needed, and that a better policy was to buy one expensive elaborate meter and additional numbers of less expensive meters.

When asked about the relatively inexpensive Radio Shack sound level meter, available for less than \$100, which many residents who are concerned about noise have purchased, Mr. Zwerling stated that, for an inexpensive (and not usable in court) meter, it was quite good, although he faulted its relatively high residual noise level threshold of about 50 decibels and its default of being set to "C"

weighting upon being turned on, which causes inexperienced people measuring their noise to find larger numbers than would be obtained with the "A" weighting, used principally in the New Jersey noise code.

There was some brief discussion of the EXTECH meters, which carry impressive specifications. Mr. Zwerling reported that he found the inexpensive EXTECH meters to have poor consistency and accuracy. However, he cited a valuable feature of one of the expensive meters, which allowed triggering of an external alarm when a particular sound level is exceeded. Mr. Zwerling stated that he had used these in work to control noise in discoteks by triggering a visually prominent alarm in the discotek control booth when the alarm sound level was exceeded.

III. "BEACH BAR" NOISE REGULATION

Mr. Triggs reported on the absence of response or complaints with respect to the recently enacted legislation exempting "beach bars" from the NJ noise regulations. It was speculated that many bars might not be yet aware of the exemption and may be still be using previous policies for controlling noise. It will be interesting to see what happens in 2013 as the law becomes better known.

IV. NCC LETTER OFFERING HELP TO NJDEP IN REVIEWING EIS

A letter had been drafted earlier in the year offering help to the NJDEP in reviewing Environmental Impact Statements (EIS), but this letter has not yet been finalized and sent. There was some discussion as to whether this is something that the NCC should be involved with. Secretary Feder felt that due to lack of expertise within the NJDEP, having a knowledgeable organization available that could review EIS and make recommendations regarding comments is a valuable addition to the state noise program. Chairman Lepis questioned whether this activity fell appropriately within the NCC scope of activities. Since the language of the letter had not been finalized, Secretary Feder proposed that the letter be taken up at the next meeting, at which point the language could be hopefully "fine tuned" to something that everyone was comfortable with. The group voted near unanimously (10:1) to again consider and hopefully finalize the EIS help offer.

V. HELP TO SADC ON REGULATING NOISE FROM WIND TURBINE ELECTRIC GENERATORS

Mr. Zwerling and Mr. Szulecki have been working with the State Agriculture Development Committee (SADC) on standards for regulating wind turbine sound emissions. An extensive literature search has been performed. SADC is currently looking for advice on setback criteria for wind turbine generators. They are also seeking criteria for multiple turbines and groups of turbines potentially constructed at different time

Mr. Zwerling stated that coming up with simple setback criteria has proved to be far more difficult than originally anticipated for a number of reasons:

1. Some wind turbine electric generator vendors do not provide the necessary technical data on sound emissions of their products to allow sound levels to be calculated. Furthermore, when data is available, the measurement standards and conditions used are sometimes inconsistent across vendors.

- 2. Sound transmission between source and receptor varies with the terrain on which the wind turbines are installed.
- 3. Wind turbine sound emissions vary with frequency, with no standardized emission profile.
- 4. There is only limited data in peer-reviewed journals on the human impact and annoyance caused by the types of sounds emitted. Wind turbines, in general, emit sound at low frequencies. Most information on human annoyance uses the "A" frequency weighting scale, which deemphasizes the low frequencies that wind turbines emit, making it less effective for wind turbine emissions.
- 5. Sound emissions vary with wind speed.
- 6. Sound emission varies with the geographic configuration of the turbines.
- 7. The background sound environment affects the acceptability of the sound emissions to humans.

Mr. Zwerling stated that it would be difficult to come up with thresholds that would make everyone happy. If too strict, they could unduly interfere with the deployment of wind turbine generators. If too lenient, they could result in annoyance levels that would prove unacceptable to large numbers of people. After studying what has been done in various locations around the world, Mr. Zwerling indicated that he felt that a 37 DBA sound level at the receiver would likely strike a reasonable balance. As a separate point, it was mentioned that review of wind speed information showed that there were few areas, other than along the ocean, at which wind turbines are economically attractive without artificial financial incentives.

VI. APPRECIATION FOR PROVIDING NCC MEETING FACILITY

Members present expressed their appreciation to Mr. Zwerling for his ongoing efforts to make available and provide coordination of NCC meeting facilities.

VII. NEXT MEETING

The next meeting scheduled for October 9, 2012.
Respectfully submitted:
Jerome Feder