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Re: STB Finance Docket Number 35087.

**Phillis Johnson-Ball
Surface Transportation Board
395 E Street SW
Washington, DC 20423**

Dear Ms Johnson-Ball

Because the STB oversight /monitoring has been extended to JANUARY 23 , 2017 I wish to record my observations that are current and timely, and describe a situation worsening since the onset of the original oversight period.

This correspondence is a formal request to Canadian National Railway for immediate mitigation of the offense to my property, including noise, vibration and depreciation resulting from use by CN of track formerly belonging to the EJ&E Railroad; and that remedial measures be taken at the expense of Canadian National Railway. In the village of Hoffman Estates (adjoining Barrington Hills) CN proposed tall noise barrier walls to mitigate noise by 5-9 db since a computer model predicted noise to increase by at least 3 db and to a level greater than 65 db.

Following the CN acquisition of the EJE Railroad the trains passing adjacent to my property has increased from an occasional annoyance of 3 relatively quiet and short trains a day to the all pervasive exacerbating irritation of more than 20 loud and long trains a day.

Since October the deciduous vegetation level on my property has diminished significantly . The resulting natural vegetation is insufficient to noticeably reduce noise. As a result the noise level , already intolerable in the summer, has become unbearable with sound levels drowning out conversations in my yard at my recreation areas.

The frequency and intensity of train noise has adversely affected the occupancy, use, and enjoyment of the environment of my property. This intrusion classifies my property as a "noise sensitive receptor as defined below by the SEA.

Anticipating consequences of the acquisition of the Elgin, Joliet, and Eastern Railroad by the Canadian National Railway, The Surface Transportation Board (Board), Section of Environmental Analysis (SEA), prepared the Draft Environmental Impact Study (EIS) in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality (CEQ) regulations) . The following discussion references parts of the EIS.

As a result of CN using the EJE rail, peak sound levels at *noise-sensitive receptors* on my property may now exceed 80 db according to figure 3.10-2 of the EIS study

charting Wayside noise vs Distance from track . I believe that the Ldn of wayside noise on my property at “noise-sensitive receptors” is now in excess of that permitted by the the STB . (*For its analysis, SEA defined noise-sensitive receptors as areas of human habitation or substantial use where the intrusion of noise has the potential to adversely affect the occupancy, use, or enjoyment of the environment. Such areas include residences, schools, parks, and places of business requiring low levels of noise.*) ; the entertainment area of my residence is a noise-sensitive receptor.

The sources of this noise include that from train engines; squeal from rail track interfaced with train wheels; and from the rattling of couplings with train cars crashing against each other when a train stops and starts abruptly .

SEA recommended that for mitigation CN shall fund the improvements necessary to allow Barrington to maintain its Quiet zone designation . In the absence of mitigation the addition of CN train traffic would have caused CN to fall out of Compliance with FRA regulations. CN worked with affected communities including Barrington to mitigate train noise at sensitive receptors .

In addition to affected communities the SEA states that EIS should take into account desires of local residents when evaluating mitigation to noise impacts. Since the CN acquisition of EJE increased rail traffic by at least 100 percent as measured by annual gross ton miles or by eight or more trains per day, the Board’s regulations in 49 CFR 1105.7(e)(6) required a residential noise analysis . It was determined that the CN acquisition would cause an

incremental noise-level increase of at least 3 dB on an Ldn basis and the total noise level would rise to 65 dB (Ldn) or more. Thus the Board required that sensitive receptors (e.g.RESIDENTIAL PROPERTY) in the area be identified and the projected noise increase for these receptors determined.

Figure 3.10-2 details the relationship between wayside noise (locomotive and wheel/rail noise) and the distance from CN train track. People generally perceive a 10-dBA increase in a particular noise level as a doubling of loudness. For example, the average person will perceive a 70-dBA sound to be twice as loud as one of 60-dBA. The measured level for CN trains was 85.8 dB . Extrapolating, Figure 3.10-2 indicates train noise at 200 feet is more than 90 db. My entertainment area is 100 feet from the track. Table 3.10-1. (Weighted Noise Levels and Human Response) indicates a Sound Source of 80 db is annoying while that of 90 db over an extended period of time is loud enough to cause hearing loss..

SEA examined the potential for the CN acquisition to affect property values. During scoping, commenters suggested that proximity to the EJ&E rail line with increased freight rail traffic would have a negative impact on residential property values due to nuisance effects such as noise and vibration. The CN acquisition would result in adverse effects to individual property owners adjacent to or near the EJ&E Rail Line. SEA found that homes within 250 feet of a rail line with 20 additional trains would experience a decrease in property value. SEA concluded that without mitigation, noise impacts would be high and adverse.

SEA provided technical advice and developed recommended environmental mitigation measures to address the identified adverse environmental impacts. These measures include requiring CN to take actions to reduce levels of noise and vibration,,

SEA considered it appropriate that the CN determine where mitigation could provide noise reduction benefits and fulfill the feasibility and reasonability criteria as defined by the Illinois Department of Transportation . The EIS included a noise impact evaluation that determined where the Ldn of noise on residential property adjacent to CN track likely exceeded the Federal criteria for impact and thus warranted mitigation. Feasible noise mitigation is that which can be implemented and provide a noise level reduction of at least 8 dBA to an impacted receiver (VM 77).

Effective mitigation by CN could include such measures as (1) constructing noise control devices such as noise barrier walls (2) installing berming .

In 2012 a study was made at a distance of 150 feet from CN tracks adjacent to and onto my property (the reference distance CN uses is 75 feet from the tracks and a more common distance is 50 feet). The results of Day one are shown on the included charts. The results of Day 2 of the study are not included because the study was flawed by an inadvertent power cord disconnect and data was only extrapolated . Engine noise from 2:pm to 2:am on Day 1 averaged 84.3 db for 8 trains and from 2:am to 2:pm averaged 77.1 db for 6 trains. (SEE ATTACHMENTS).Day 2 monitored 17 trains over 24 hours

but measurement data is not trusted due to the power cord disconnect. In any event this data is obsolete in view of the increase in train traffic to over 20 trains per day and an increase in associated noise of each train resulting in an associated increase in Ldn beyond its already high level in excess of that permitted by the the STB ; also the study was at 140 feet rather than 75 feet.

A similar study made in a neighboring community (Hoffman Estates) measured train engine noise 140 feet from the track (the reference distance CN used is 75 feet from the tracks although a more common distance is 50 feet). The rolling stock created noise of a wide band of frequencies well within the critical speech range. The volume of engine noise peaked at 78 db and that of rolling stock noise peaked at 69 db which is twice as loud as conversation.

As mitigation CN proposed tall masonry walls which would cut the loudness by 50 % . Since the noise level at my recreation area, 100 feet from the track, would be substantially greater than that measured in this study (at140 feet), sound wall mitigation (with absorbent features as opposed to reflective features) would have a significantly greater positive affect on noise reduction. The walls that I found to be very effective at sound absorption and attenuation are either MODULAR WALL SYSTEMS or ALL SOUND WALLS.

As a result I am requesting that CN , at its own expense,

build

a sound barrier wall between my residence and the CN acquired tracks parallel to my property line at a point to be determined , and that this mitigation be paid for by CN since the noise level is (1) in violation of the agreement with STB , (2) has reduced my property value, and (3) has caused unending distress in the sanctity of my home, virtually non existent when EJE ran 2 or 3 quieter trains daily compared to CN's 20 or more louder trains each day

Additional mitigation I am requesting of CN is to move the staging area that results in train cars crashing against each other in my back yard to the region of Route 68 and Route 59 and Algonquin Road where the train track bed is below the grade of the a fore mentioned road intersections and residential occupation is minimal, or non existent.

Also, CN should be conforming to the following agreements with the STB that (to the best of my knowledge) have not as yet been implemented .

1. CN shall design all new curved track sections of 7 degrees or above in a manner that minimizes or eliminates the potential for wheel flange squeal, using guidance provided by AREMA standards.

2.CN shall also install and properly maintain rail lubrication systems at curves where doing so would reduce wheel flange squeal noise for residential or other noise-sensitive receptors.

3. CN shall regularly inspect rail car wheels for rough surfaces and, where appropriate, grinding these surfaces to provide a smooth surface during operations; to

maintain them in good working order and to minimize the development of out-of-round or flat wheels (that is, areas where a round wheel develops a worn flat section, leading to a clanking sound when a rail car passes).

4.CN shall regularly inspect the EJ&E rail line for rough surfaces and corrugations of the rail and shall grind these surfaces, including tangent track, to provide a smooth rail surface. ,

5.CN shall regularly maintain locomotives, and keeping mufflers in good working order,

6. To minimize noise and vibration, CN shall install and maintain rail and rail beds according to AREMA standards.

7.Cn shall comply with FRA regulations to minimize vibration resulting from increased train operations (my kitchen table shakes when an engine passes which corresponds to paragraph 3.10 vibration study.). CN shall install a wheel impact load detector (wild) on the ej&e rail line within five years of the effective date of the board's final decision.

Finally, SEA proposes the following conditions relating to monitoring and

enforcement of the mitigation imposed. If there is a material change in the facts or

circumstances upon which the Board relied in imposing specific environmental

mitigation conditions, and upon petition by any party who demonstrates such

material change, the Board may review the continuing applicability of its final

mitigation and compliance with the mitigation measures for a period covering the

first three years of operational changes, or for any period the Board imposes.

CN is required to file a detailed Monthly Operational Report to allow the Board to closely monitor CN operations; and a Quarterly Environmental Report so that the Board will be kept apprised of the implementation and effectiveness of the mitigation. In a subsequent decision (Decision 26, served on December 21, 2010), the board after reviewing the findings of an independent audit of reports filed by CN in connection with its acquisition of EJ&E extended the 5-year monitoring and oversight period for this acquisition 1 additional year to January 2015 (NOW EXTENDED TO 2017). CN will continue to submit Monthly Operational Reports and Quarterly Environmental Report until the end of the oversight and monitoring period.

Please advise me of any additional requirements needed to have CN initiate the mitigation described above. CN representatives are welcome to visit the site at a mutually agreed upon time, but naturally, if CN wishes any sound studies to be made it would be at their expense

Thank you for your help !

Stephen M Harrison, M.D

Chart 1 - Sound Levels on Day 1 from 2:00 PM to 2:00 AM

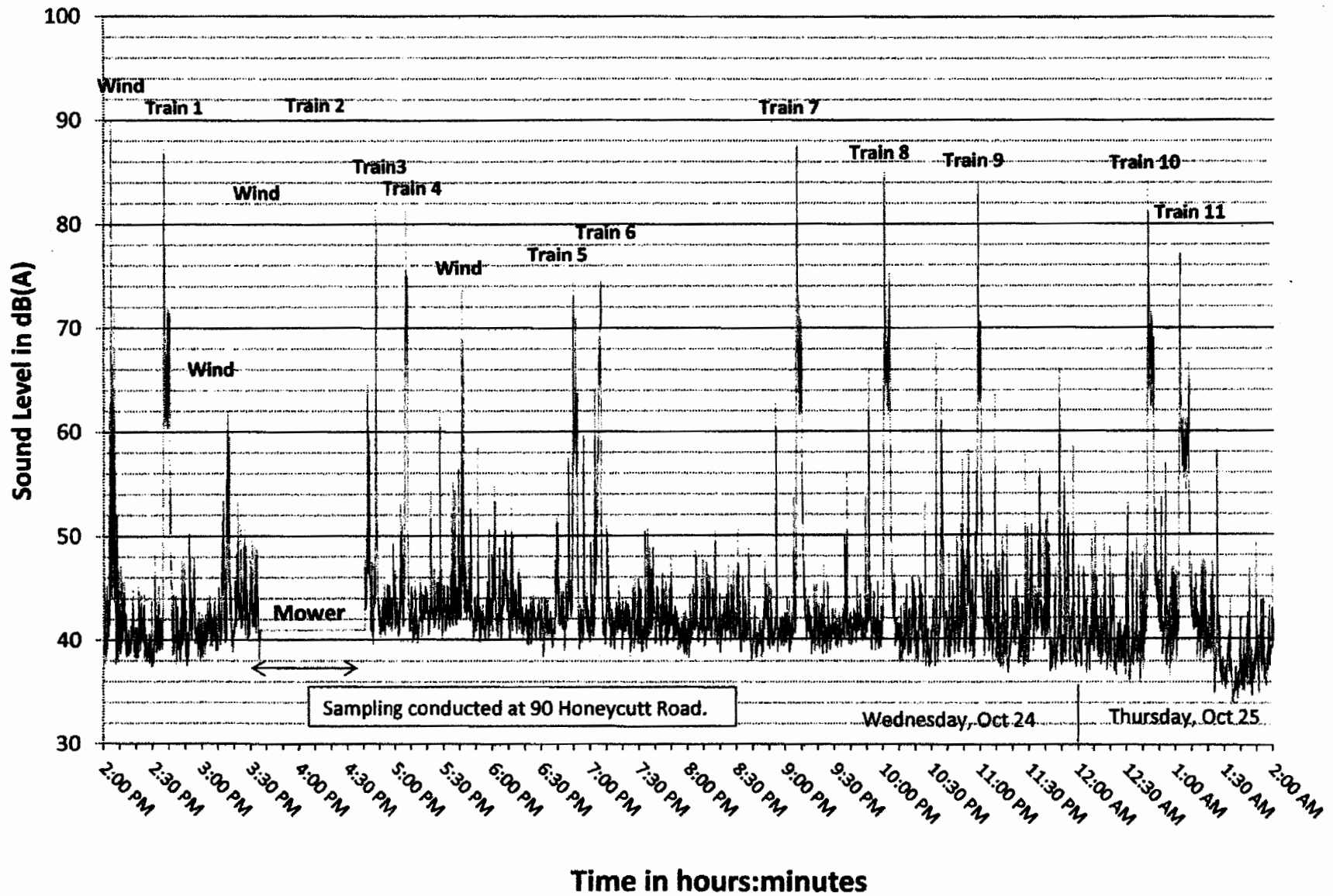


Chart 2 - Sound Levels on Day 1 from 2:00 AM to 2:00 PM

