

ILLINOIS POLLUTION CONTROL BOARD  
January 4, 2007

MICHAEL A. PETROSIUS and DARLA G. )  
PETROSIUS, )  
 )  
Complainants, )  
 )  
v. ) PCB 04-36  
 ) (Enforcement – Noise)  
THE ILLINOIS STATE TOLL HIGHWAY )  
AUTHORITY, )  
 )  
Respondent. )

MR. SCOTT J. DWORSCHAK, LAW OFFICE OF SCOTT J. DWORSCHAK, APPEARED ON BEHALF OF THE COMPLAINANTS; and

VICTOR F. AZAR, ASSISTANT ATTORNEY GENERAL, ILLINOIS TOLL HIGHWAY AUTHORITY, APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by T.E. JOHNSON):

On September 25, 2003, Michael A. Petrosius and Darla G. Petrosius (complainants) filed a complaint against the Illinois State Toll Highway Authority (respondent). *See* 415 ILCS 5/31(d) (2004); 35 Ill. Adm. Code 103.204. The complainants allege that the noise from the traffic using a toll collection/entrance ramp on the northbound side of the I-294 tollway (Tri-State) in LaGrange has resulted in a violation of 35 Ill. Adm. Code 900.102, due to the unreasonable interference with the use and enjoyment of the complainants' property. The complainants further allege that the noise during the night interferes with their sleep, endangers the physical and emotional health and well being of their children and decreases their property value. The complainants reside at 7335 Maridon Road, LaGrange, Cook County.

A hearing was held on December 5, 2005 through December 6, 2005, at the James R. Thompson Center, Room 8-31, 100 West Randolph Street in Chicago before Board Hearing Officer Carol Webb. The complainants filed a post-hearing brief on April 6, 2006. On June 30, 2006, the respondent filed a post-hearing brief. The complainants filed a reply brief on July 31, 2006.

Based on the evidence presented in this proceeding, the Board finds that the noise emanating from the Tri-State as alleged in the complaint does not unreasonably interfere with the enjoyment of the complainants' property.

**STATUTORY BACKGROUND**

Section 24 of the Act provides:

No person shall emit beyond the boundaries of his property any noise that unreasonably interferes with the enjoyment of life or with any lawful business or activity, so as to violate any regulation or standard adopted by the Board under the Act. 415 ILCS 5/24 *amended by* P.A. 92-0574, eff. June 26, 2002.

Section 33(c) of the Act provides that:

In making its orders and determinations, the Board shall take into consideration all the facts and circumstances bearing upon the reasonableness of the emissions, discharges, or deposits involved including, but not limited to:

- i. The character and degree of injury to, or interference with, the protection of the health, general welfare and physical property of the people;
- ii. The social and economic value of the pollution source;
- iii. The suitability or unsuitability of the pollution source to the area in which it is located, including the question of priority of location in the area involved;
- iv. The technical practicability and economic reasonableness of reducing or eliminating the emissions, discharges or deposits resulting from such pollution source; and
- v. Any subsequent compliance. 415 ILCS 5/33(c) (2000) *amended by* P.A. 92-0574, eff. June 26, 2002.

#### Section 900.101 Definitions

Noise pollution: the emission of sound that unreasonably interferes with the enjoyment of life or with any lawful business or activity. 35 Ill. Adm. Code 900.101.

#### Section 900.102 Prohibition of Noise Pollution

No person shall cause or allow the emission of sound beyond the boundaries of his property, as property is defined in Section 25 of the Illinois Environmental Protection Act, so as to cause noise pollution in Illinois, or so as to violate any provision of this Chapter. 35 Ill. Adm. Code 900.102

Section 901.107(f) provides:

Sections 901.102 through 901.106 inclusive do not apply to the operation of any vehicle registered for highway use while such vehicle is being operated within

any land used as specified by Section 901.101 in the course of ingress to or egress from a highway. 35 Ill. Adm. Code 901.107(f).

### **BACKGROUND**

On September 25, 2003, the complainants filed a formal noise complaint against the respondent. The complaint concerns noise emanating from traffic using a toll collection/entrance ramp on the northbound side of the Tri-State in LaGrange. The Tri-State began operation in the late 1950s with a system of toll highways including the Tri-State which goes from near the Wisconsin border to the north, bypassing the City of Chicago to the west, and ends near the Indiana boarder to the south. Tr.1 at 17-21; Joint Exh. 1, 2, and 3. The Complainants' home is located at 7337 Maridon Road, LaGrange, Illinois, and is adjacent to the Tri-State and the 75th Street Interchange (Plaza 34) near Milepost 22 .1. *Id.*

Currently there are more than 1 .4 million vehicles that use the Tri-State daily. Tr.1 at 191. The average of daily traffic count in 2003, on the Tri-State by Milepost 22 .1 is 77,010 Southbound and 71,650 Northbound making a total of 148,550 vehicles per day; while the 75th Street interchange has an average traffic count of 3750 entering and 3550 exiting the Tri-State. Comp. Exh. 11. The 75th Street exchange was constructed at the same time as the Tri-State was widened pursuant to an Intergovernmental Agreement between the Tri-State, the Illinois Department of Transportation (IDOT) and the Village of Hodgkins. Comp. Exh. 15. The central portion of the Tri-State was widened. Tr.2 at 7-8. This construction included Plaza 34, and also included the construction of noise walls. *Id.*, Tr.2 at 1919. The project, widening the road and building Plaza 34 and the noise walls, was completed around November 15, 1993. Resp. Ex. 14.

The complainants' residence was built in 1964. Resp. Exh. 2 and 3. The complainants purchased the house on May 3, 1995 - over a year after the Tri-State was widened and 75th Street interchange was constructed. Tr.1 at 15, Resp. Ex. 1. The complainants approached the respondent because of the noise from the Tri-State, and asked that the existing noise wall be heightened and extended. Tr.1 at 39, 130. The respondent declined to alter the noise wall, informing complainants that its sound policy must be followed. Tr.1 at 131.

Representatives of the respondent conducted tests at complainants' house and determined that the existing noise walls did reduce the noise from the Tri-State. Tr.1 at 173. Mr. Greg Zak, the complainant's noise expert, recommended a wall a quarter-mile long and 18 feet high or higher in order to break the line of sight of the vehicles. Tr.2 at 113, Comp. Ex. 18. The respondent's expert, William Barbel, testified that he conducted a noise study in conformity with the FHWA traffic noise study guidelines that were adopted by the respondent to determine if the existing noise wall was effective. Tr.2 at 180, 189. Mr. Barbel opined that based upon his sound study, to effectively attenuate the noise complained of, would require a wall 20 to 30 feet above pavement grade. He noted that based upon the topography of the site (with the side of the road significantly lower than the pavement) the wall would have to be up to 45 feet tall. Tr.2 at 206.

The Board received seven public comments in this matter. Mr. and Mrs. Klima and Melinda R. Decker (PC 1), Suzanne M. Simpson (PC 2), Donna and Joseph A. Arrigo (PC 3), Robert and Marilyn Florek (PC 4), Ray and Jean Dolgner (PC 5), Lester Trilla (PC 6), and David

Dolgner (PC 7) all submitted comments in favor of the complainants.

### **NOISE EMISSIONS TESTIMONY**

#### **Mr. Michael Petrosius**

Mr. Petrosius resides at 7335 Maridon Road, LaGrange. Tr.1 at 15. He and his wife purchased the property in 1995. *Id.* Mr. Petrosius testified that the noise from the Tri-State interferes with his sleep in that there are constant different noises emitting off the Tri-State all night long. Tr.1 at 32. He testified that the banging of the trucks, the jake brakes and the constant roar are all a problem, but that at night it's the noises that aren't constant that are most problematic. *Id.* Mr. Petrosius defines "jake brakes" as the brakes used by a semi truck. Tr.1 at 82.

He testified his sleep has been interrupted almost every night, causing him to see a doctor about his inability to sleep. Tr.1 at 33. Mr. Petrosius claims to be on his sixth type of prescribed sleeping pill. *Id.* He testified that the pills help him to sleep, but that nothing stops the constant wake-up. Tr.1 at 35. He testified that he uses a sound machine to help sleep, that he has insulated the roof, and planted trees in an effort to mitigate the effects of the noise. Tr.1 at 35-36.

Mr. Petrosius attempted to measure the noise with a noise meter and video recorder. Tr.1 at 37-38. He testified that his family seems to live a different way of life than other people due to the lack of sleep, lack of use of property, lack of normal living, and lack of inviting people over Tr.1 at 43.

#### **Mrs. Darla Petrosius**

Mrs. Petrosius testified that she was concerned about the Tri-State when she and her husband first looked at the house, but that she noticed a sound wall and assumed that it was doing its job. Tr.1 at 79. She testified that she overlooked the Tri-State and looked at the yard and the house, and went forward from there. *Id.*

She first started noticing the noises coming from the Tri-State in the first month at the new house. Tr.1 at 80. She noticed a constant noise like a roar, as well as significant noises such as metal banging, revving, what she called the jake brakes. *Id.* She testified that regardless of the time of year, there's always a noticeable noise or noises coming from the Tri-State. Tr.1 at 81.

Mrs. Petrosius testified that she does not enjoy being in their yard most of the time, and that, overall, the quality of life and their lifestyles is significantly affected by the noise. Tr.1 at 81. Mrs. Petrosius sleep is affected primarily by disruptions during the night. Tr.1 at 85. She testified that it is a very rare night that some sort of a significant noise does not awaken her, and that her sleep is disturbed most nights. *Id.*

Mrs. Petrosius does not feel that she and her husband were given a fair hearing or voice by the respondent. Tr.1 at 88.

Mrs. Petrosius testified that aside from the trees they put in, there is nothing different about the house today than when she looked at it prior to purchase. Tr.1 at 91. She testified that due to the noise, she does not play with her kids in the side yard, and only plays with them in the back yard sometimes – not as much as she would like. Tr.1 at 94.

**Ms. Zona “Bunny” Anderson**

Ms. Anderson is the liaison for engineering projects for the respondent. Tr.1 at 111. She holds degrees in political science and journalism from the University of Kentucky and a master's degree from Indiana University. *Id.* She is responsible for external and internal communications concerning design, planning, maintenance, and construction with the municipalities and townships that bound the Illinois tollway system. *Id.*

Ms. Anderson testified that the noise policy followed by the respondent is “basically the same policy set by the guidelines by the Federal Highway Administration, and are the same guidelines that the Illinois Department of Transportation follows.” Tr.1 at 113. She testified that the respondent uses the guidelines to determine our noise abatement throughout the entire roadway system. *Id.* Ms. Anderson testified that when the respondent builds either a noise wall or roadway, it uses funds derived exclusively from the collection of tolls. . Tr.1 at 114.

Ms. Anderson testified that in August of 2003, she was contacted by Mr. Petrosius about a tire that had come across the pavement onto his property, and that the conversation segued into one regarding noise emanating from the roadway, specifically noise from the mainline pavement. Tr.1 at 115. The respondent sent out the maintenance department to investigate, and found an asphalt joint that needed to be repaired on the roadway. *Id.* The repair was made within 24 hours. *Id.* Ms. Anderson testified that in August 2003, she took part in an inspection that determined that there was, in fact, a noise wall that protects complainants from the mainline. Tr.1 at 119.

She testified that the complainant’s house is built on an incline to where a person could see trucks and cars pass. Tr.1 at 119. She further testified that the tallest noise wall that respondent would install would be 20 feet, and that the shortest wall respondent will put up is eight feet tall. Tr.1 at 130. Ms. Anderson testified that when the central Tri-State was designed, noise studies were conducted, and they showed exactly where the noise walls should be and that the height in the design specifications were followed. *Id.* She testified that the noise walls were installed in the mid 1990s. *Id.*

Ms. Anderson testified that she explained to Mr. Petrosius that the criteria of the noise policy is adhered to quite faithfully, and that the central Tri-State had been widened previously and at that time noise studies were conducted, and the guidelines as to where those walls should be placed and their height of placement were strictly followed. Tr.1 at 131.

Ms. Anderson testified that the respondent only deviated from their traffic noise policy one time due to an intergovernmental agreement. Tr.1 at 131-32. She testified that the deviation occurred in Deerfield, and was an intergovernmental agreement between respondent and the Deerfield Park District wherein the respondent was reimbursed for half the cost and the State of Illinois, through a grant to Deerfield Park District, paid the other half. Tr.1 at 151.

Ms. Anderson testified that a resident with a concern about a noise wall needs to prove that the wall was done incorrectly, but that in this case, the respondent followed the design specifications. Tr.1 at 134. In the instant case, she testified that the results were that the design of the wall was followed to the specifications, and that because we have already done the widening of the central Tri-State would not be doing any further noise abatement in that area. Tr.1 at 146.

When faced with a request for a noise wall, the respondent first determines where the resident lives, finds out where the house is in relation to the roadway, and if it's in an area or section of the roadway system now that is going to be expanded, we can determine if a noise abatement study is going to be done. Tr.1 at 142. Ms. Anderson testified that based on the readings that were done both in front of and behind the noise wall, the wall did exactly what it was supposed to do in that it reduced the sound by over ten decibels. Tr.1 at 150.

### **Mr. Rocco Zuccherro**

Mr. Zuccherro is a 1991 graduate of Purdue University with a bachelor's degree in organizational leadership and supervision. Tr.1 at 154. He also holds a master's degree at the University of Illinois-Chicago in urban planning. *Id.* He is a senior environmental planner for the respondent, and is currently the acting chief of planning. Tr.1 at 156. He is responsible for the oversight of projects including development, implementation, and outreach. *Id.*

Mr. Zuccherro testified that the budget for the Tri-State in fiscal year 2005 is \$650 million. Tr.1 at 160. Mr. Zuccherro visited the complainants' home in August 2003, in order to see whether the existing noise walls are effective. Tr.1 at 173. At that time, he found that the existing noise walls did reduce the noise from the Tri-State. Tr.1 at 173.

Mr. Zuccherro testified that traffic is visible from only the south side of complainants' property. Tr.1 at 174. He testified that just because traffic is visible does not mean the wall is ineffective. Tr.1 at 176. He testified that at complainants' property, there is a concrete wall of about 13 1/2 feet high, another section of concrete wall about eight feet high, and a section of wood wall extending a couple hundred feet past that to the south. *Id.*

Mr. Zuccherro testified that the respondent uses its entire budget and at the end of the day, no money remains, even assuming everything is on budget. Tr.1 at 183. He said that the Tri-State and the interchange not only address the traffic needs of the area and make travel within and through the State easier, but also provide a large number of jobs and billions of dollars of economic activity for the communities along the Tri-State as well as billions of dollars of merchandise entering the stream of commerce through the 75th Street interchange. Tr.1 at 191-198.

According to Mr. Zuccherro, complainants' house is in a zoning transition area and gets a little bit of everything, including the canal, the Burlington Northern Santa Fe, I-55, the Tri-State, and the UPS facility. Tr.1 at 199. He testified that the area is a suitable place to put an interchange because it is where people would want to get to a system, and that is just going to create a lot of the growth through the area. Tr.1 at 200.

Mr. Zucchero testified that the engineering company considers factors in addition to a noise study such as local topography, geology, underlying soil conditions, and drainage in designing a noise wall for the respondent. Tr.1 at 205-06. He testified that in examining the photographs of the site in question, drainage considerations would require quite a bit of maintenance to ensure that there is no blockage of the drainage way that would probably lead to flooding upstream. Tr.1 at 208. He testified that abatement measures would pose a threat to safety, hinder maintenance or create an operational problem to drain the environment, destruct drainage, or alter watershed boundaries, and that those factors constitute a feasibility issue, *i.e.*, whether a wall should actually be installed and how it should be built. Tr.1 at 209. He testified that feasibility becomes a problem when a noise wall is over 20 feet. Tr.1 at 214.

Mr. Zucchero testified that in the 1995 policy of the respondent, the total cost of a noise barrier wall shall not exceed \$30,000 per abutting residence. Tr.1 at 211. He noted that IDOT's walls are not to exceed a cost of \$24,000 per resident's benefit. Tr.1 at 212. He further testified that respondent does not set a dollar amount, but that the wall has to be what is deemed cost effective when looking at all the different factors. *Id.*

Mr. Zucchero testified that the adjusted contract amount is \$11,318,357.60, and that Mr. Petrosius' sound wall was part of that project. Tr.1 at 216. He testified that he measured the noise close to the roadway near the 80-decibel range, and that when he walked around towards the complainants' driveway, it got down to between 63 and 68 decibels. Tr.1 at 218. He testified that the achieved 10-decibel reduction, basically cuts the noise in half. Tr.1 at 220. Mr. Zucchero testified that the existing noise walls were effective at achieving a 67-decibel level on the site based upon that reading of 63 to 68. Tr.1 at 222.

Mr. Zucchero testified that the industrial areas are at least a half-mile to three-quarters of a mile away from the property in question. Tr.1 at 230. He testified that when Versar did their sound study with the Tri-State widening project conducted in the mid 1990s, they did not consider the large number of trucks that were coming from that UPS facility. Tr.1 at 234.

He stated that if the noise wall is placed away from the drainage that it allows the respondent to identify and readily maintain problems from the roadside, as opposed to trying to get into a residential neighborhood, whereas if the drainage ditch were behind the wall, a maintenance crew would not be readily able to identify blockage until somebody complains. Tr.1 at 243. He acknowledged that a wall could be staggered so that you have an access point from Tri-State. Tr.1 at 244.

### **Mr. Greg Zak**

Mr. Zak has performed over 60 noise studies, and testified that the noise readings were the highest he had measured since becoming a private consultant. Tr.2 at 97, 103. He testified that the noise readings were taken at the site pursuant to Board regulations, and depicted that noise levels experienced at the residential property exceeded Board criteria from 2 to 19 decibels depending on frequency. Tr.2 at 10. Mr. Zak testified that noise impacts at this level would adversely affect the complainants' quality of life due to sleep disruption and reduction in the use of their yard. Tr.2 at 106. He testified that the installation of an additional noise wall at the site

would significantly reduce the noise impacts originating from the Tri-State . Tr.2 at 107-10. Specifically, he recommended that a noise barrier wall of approximately 18 feet in height, extending a quarter mile adjacent to the property, be installed. Tr.2 at 112-3. Zak also stated that the noise barrier would also reduce noise reaching other residents in the area. Tr.2 at 116-18. He testified that sections of the noise wall are of insufficient height to block line of sight of traffic operating on the Tri-State. Tr.2 at 111.

Mr. Zak testified that restricting the line of sight from noise generator to receptor is critical to achieving effective noise reduction. Tr.2 at 109, 124-5. He stated that tire noise generated by vehicles traveling on the Tri-State is a significant source of noise, and that the current barrier wall, directly adjacent to complainants' home, allows for a direct sight line to the Tri-State pavement. Tr.2 at 21, 96, 111. Mr. Zak stated that the unrestricted noise consists of tire noise, engine noise, jake brakes, and trucks hitting holes in the road surface. Tr.2 at 96. He testified that an additional quarter mile of noise barrier wall installed in this area would reduce noise levels reaching the residential area. Tr.2 at 114.

Mr. Zak testified that the complainants' home is located in a nice residential area, but is very noisy because of the proximity to the Tri-State. Tr.2 at 90. He observed that 85-90% of the noise impact was from truck tires, truck engines, jake-braking, and trucks banging and clanging, and he opined that despite the amount of truck traffic, the ambient noise or background noise, which he derived from the regulatory table, fell within category 3 – moderate residential area. Tr.2 at 96, 127. Mr. Zak conceded that at or before the time that the complaint was filed, the Tri-State would have been classified as "U" or Unclassified. Tr,2 at 140. Mr. Zak opined that based upon the sound measurement in his report the sound levels exceed the 901 .102(a) limits as well as the ambient sound levels he derived from the table under the assumption that the new classification rules are applicable. Tr.2 at 139.

Mr. . Zak testified that the sound levels coming from the Tri-State would be a nuisance based upon the sound levels and problems complained of by the complainants. Tr.2 at 106. He recommended a wall a quarter-mile long and 18 feet high or higher in order to break the line of sight of the vehicles. Tr.2 at 113. Mr. Zak observed that even putting in an 18-foot wall, the area is still going to exceed the Board's sound limits, and that the proposed 18 foot wall would not reduce the noise levels to the limits for Class C to A. Tr.2 at 126.

Mr. Zak testified that ambient/background noise is normally the sound that creates a background for the area where a measurement is being taken, but that in the instant case the ambient noise is such that we really can't measure any ambient because the Tri-State is so predominant as far as the noise source. Tr.2 at 119. Mr. . Zak testified that the Tri-State noise would be the background noise under different circumstances. Tr.2 a 128.

### **Mr. John Wagner**

Mr. Wagner holds a Bachelor of Science degree in structural engineering from the Milwaukee School of Engineering, and has worked for the respondent for 20 years. Tr.2 at 4. He has been employed as a project coordinator, senior project engineer and a project manager, and was the project manager for the Tri-State widening project that was conducted by the



respondent in the early 1990s. *Id.* During that project the respondent added a fourth lane in each direction, and rehabilitated some of the existing roadway surfaces. Tr.2 at 5. He testified that the 75th Street interchange was built as part of the Tri-State widening project. Tr.2 at 9.

Mr. Wagner testified that tire noise generated by vehicles traveling on the Tri-State are a significant source of noise. Tr.2 at 21, 96. He testified that the respondent hired Versar, Inc. (Versar) to assist them in determining the height and location of noise barriers along the Tri-State. Tr.2 at 29. He acknowledged the existing noise barrier wall was not installed pursuant to the recommendations provided by Versar, in that Versar recommended that an 18-foot high noise barrier wall be placed adjacent to the Complainants residence, but that a barrier wall varying between 8 and 14 feet was constructed. Tr.2 at 45, 52.

Mr. Wagner acknowledged that noise barrier wall heights up to 25 feet are feasible, and that that the respondent has previously installed noise barrier walls exceeding 18 feet. Tr.2 at 71-73.

### **Mr. William Barbel**

Mr. Barbel is employed with CTE Engineers in Chicago. He has worked for that company for six years doing work on environmental documents under the National Environmental Policy Act and environmental impact statements. Tr.2 at 178. Prior to that, Mr. Barbel worked for the Illinois Department of Transportation for 35 years with and as the head of the environmental studies unit for the six-county Chicago metropolitan area. Tr.2 at 179.

Mr. Barbel testified that he conducted a noise study in conformity with the Federal Highway Administration (FHWA) traffic noise study guidelines that were adopted by the respondent. Tr.2 at 180. He testified that the guidelines are mandatory for new or significant road building projects, and are meant to consider impact from traffic noise approaching 67 dBA, what the impact is and what is needed to abate it if feasible. Tr.2 at 182. The criterion establishes impact on residences as the noise level approaches 67 dBA. *Id.* Mr. Barbel testified that the feasibility of abatement merely responds to whether the noise can be abated, and what is the minimum elevation for the wall. Tr.2 at 185.

Mr. Barbel noted that design feasibility is not considered because the factors a designer would evaluate, such as soil, soil strength, drainage and wall materials are not considered in the planning stage. Tr.2 at 186. He testified that he went to the complainants' home and conducted a noise study to determine if the wall was effective. Tr.2 at 189. Mr. Barbel ran two receptors simultaneously (one at the wall to detect the unabated noise and one at various locations on the complainants' property. Tr.2 at 198-99; see also Resp. Ex. 17. He testified that based upon his study, the wall effectively reduced the noise levels between one and eleven dBA depending upon the location of the receptor, and that he took his test during peak traffic hours when the noise levels should be the highest. Tr.2 at 195. Mr. Barbel noted that there are eight lanes that equally contribute to the noise. Tr.2 at 197.

Mr. Barbel testified that the lower frequency noise (the ones the complainants primarily complained of such as the jake-braking and exhaust pulsations) needs a wall 20 to 30 feet above

pavement grade to be attenuated. Tr.2 at 205-06. He opined that based upon the topography of the site (with the side of the road significantly lower than the pavement) the wall would have to be up to 45 feet tall. Tr.2 at 206. He testified that an 18-foot wall would allow an evident amount of noise to come over the wall, and would, regardless, not be feasible based upon the cost alone. Tr.2 at 207-208. He testified that it would cost about \$1.3 million to construct the wall in question and \$800,000 for the proposed 18-foot wall. Tr.2 at 207.

Mr. Barbel testified that this amount far exceeds the economic feasibility threshold established by both the respondent and IDOT, which has a \$24,000 per resident threshold. Tr.2 at 207. Mr. Barbel testified that the Tri-State's sound wall complied with the Federal regulations. Tr.2 at 246. He noted that the 67 dBA threshold was developed by the FHWA as a compromise between FHWA, the United States Environmental Protection Agency and various state departments of transportations to eliminate subjective standards and establish a uniform policy nationwide. Tr.2 at 213. He testified that he does not believe that the Board's noise regulations, which are inconsistent with the FHWA's regulations, are applicable to roads and thus not applicable to the Tri-State. Tr.2 at 212. Mr. Barbel testified that the proposed wall height does not factor in the low frequency sounds, and the impact sounds that need higher walls about 20 to 30 feet above the pavement would require a wall up to 45 feet tall. Tr.2 at 206. Mr. Barbel did acknowledge that an additional noise barrier wall would effect other homes in the area. Tr.2 at 218.

## **ARGUMENT**

### **Complainants' Brief**

The complainants assert that the excessive and unreasonable noise generating from the Tri-State violates the numerical standards set forth at 35 III. Adm. Code 901 .102, and constitutes a nuisance which is prohibited by 35 III. Adm. Code 900 .102. Com. Br. at 4. The complainants contend that expert testimony at the hearing demonstrated that the noise level is 19 decibels above the Board regulations for C class land to A class land, and that testimony from respondent's noise expert also depicted noise levels above Board regulations. Comp. Br. at 5.

The complainants assert that substantial evidence was presented depicting how the noise from the Tri-State interferes, and adversely affects, their lives. Specifically the complainants note testimony as to the constant loud noises emanating from the Tri-State, and how noise from the Tri-State limited complainants' use of their yard, continuously disrupted their sleep, precluded them from keeping their windows open and increased their reliance upon their air conditioner. Com. Br. at 6. The complainants argue that the noise from the Tri-State clearly interferes with their lives, and further assert that the noise causes an unreasonable interference with their lives. Com. Br. at 9.

In considering the character and degree of the injury, the complainants note that testimony at hearing clearly establishes that noise from the Tri-State continuously disrupts complainants' lives. Com. Br. at 9. The complainants acknowledge that uncontroversial evidence, and testimony, was introduced at the hearing depicting the economic value of the entire Tri-State, the annual revenue derived from the Tri-State, and do not dispute that the Tri-

State provides economic value to the area. Com. Br. at 11. However, the complainants argue that this value should not run roughshod over the economic value of the adjacent residential communities. *Id.*

The complainants contend that respondent's ability to promote increased traffic volumes on the Tri-State have stretched the suitability of the adjacent residential area to co-exist with the Tri-State operations, and have negatively impacted the area residents. Com. Br. at 11. The complainants do not seek the elimination of Tri-State operations in these proceedings, but instead seek a reduction in the roadway noise reaching the residential area. *Id.* The complainants assert that this reduction can be accomplished through the installation of additional noise mitigation, in the form of higher and longer noise barrier walls. Com. Br. at 11-12.

The complainants request the respondent undertake substantive steps to address the excessive noise originating from the Tri-State that would allow for the continued unregulated operation of the tollway system, while easing the impact to nearby residents. Com. Br. at 12. Specifically, the complainants advocate that a noise barrier wall of approximately 18 feet in height extending a quarter mile adjacent to the property be installed. Com. Br. at 13. The complainants assert that providing additional height and length to the existing noise wall would substantially reduce the noise levels reaching residential areas adjacent to the Tri-State. Com. Br. at 15.

The complainants argue that constructing a higher wall is feasible, and point to testimony presented by respondent's own engineer, Mr. Wagner, that noise barrier wall heights up to 25 feet are feasible. Com. Br. at 16. Further, the complainants note that Mr. Wagner testified that the respondent has previously installed noise barrier walls exceeding 18 feet. Com. Br. at 16. The complainants assert that at least two other areas along the Tri-State received additional noise walls after the initial wall construction. *Id.* The complainants believe that respondent's actions demonstrate that they are capable of adjusting existing noise barriers in order to reduce roadway noise, and that such actions are feasible. *Id.* It is complainants' belief that an additional noise barrier wall is necessary, technically feasible, and economically reasonable considering the number of residents that will be positively impacted by the reduction in roadway noise. *Id.*

### **Respondent's Brief**

The respondent moves to dismiss the complaint based upon the evidence presented at the hearing held on December 5 and 6, 2005, because the uncontested evidence showed that the respondent followed its noise policy, based upon FHWA's noise guidelines, when it designed and constructed the sound walls on the Tri-State. Resp. Br. at 1. Further, the respondent argues that there was not any evidence to suggest that the design was defective or that the wall was improperly constructed. *Id.* The respondent contends there was no evidence presented that contradicted the testimony of its employees and an independent expert that the noise wall near the complainants' home effectively mitigates the traffic noise in accordance with the respondent's noise policy. *Id.*

The respondent argues that the evidence and the applicable law clearly established that the respondent did not violate the Board's numerical noise limits, nor does the noise generated by

vehicles on the Tri-State constitute a nuisance pursuant to the criteria set forth by the Act. Resp. Br. at 11. The respondent asserts that before proceeding to analyze the numerical standards cited by the complainants, it is necessary to analyze the complainants' failure to address the issue of ambient sound. *Id.* The respondent feels that the complainants mistakenly try to separate the ambient noise from the traffic on the Tri-State, which is in fact the cause of the ambient noise. *Id.* The respondent argues that it is illogical to argue that the ambient noise is not the background if you are complaining about the cause of background noise. Resp. Br. at 12. The respondent urges the Board to consider the Tri-State as the background or ambient noise and not subject to numeric standards because the background noise, which is the Tri-State itself, overwhelms most other noises. *Id.*

The respondent argues that the evidence clearly shows that the ambient noise by the complainants home falls within the definition of Category 1 (Noisy Commercial and Industrial Areas) and not Category 3 (Quiet Commercial and Industrial Areas, and Moderate Residential Areas). Resp. Br. at 13. The respondent asserts that by failing to utilize the proper category, the complainants' expert failed to include the necessary correction for ambient noise, and that if he had used the proper category (Category 1) the ambient noise level would have been greater than most of the noise source frequencies. Resp. Br. at 14. The respondent believes that his failure to utilize the proper category is fatal to his conclusion because his raw numbers have not been corrected. *Id.*

The respondent contends that the complainants not only failed to comply with the measurement regulations, but that they incorrectly classified the Tri-State as Class C Land under the new Land Based Classification Standard (LBCS) instead of Class U Land under the Standard Land Use Coding Manual. Resp. Br. at 15. The respondent argues that the Board should not consider its subsequent adoption of the LBCS because that Standard should not be retroactively applied to this case. Resp. Br. at 16.

The respondent argues that the Board should deny the complainants' claim that the Tri-State violated the numeric noise limits because the complainants failed to strictly comply with the Board's measurement regulations, incorrectly applied the wrong LBCS to the Tri-State, erroneously applied the Class C land use category to the Tri-State (which was and is unclassified) and tried to apply retroactively rules it construed (incorrectly) to make the Tri-State a Class C property without any clear legislative intent of the retroactivity of the rule change. Resp. Br. at 20-21.

The respondent agrees that the complainants show that the noise interfered with their enjoyment of life, but argue that they failed to establish that the sound emissions generated by the Tri-State are unreasonable and thereby constitute a public nuisance. Resp. Br. at 21. The respondent contends the facts in their totality indicate that the interference does not rise to the level of substantial interference. Resp. Br. at 22.

The respondent notes that although the complainants argue that the Board should consider Mr. Zak's noise readings in considering the character and degree of the noise, the Tri-State did not exceed numeric limits because although the readings are high (P.E. 18), they are

within the range of background/ambient noise the Board adopted for areas like the 75th Street interchange that fall within a Category 1. Resp. Br. at 23.

The respondent argues that the impact of the noise emissions on the complainants should not be considered substantial because the complainants' priorities in home improvement show that the noise was more of a trifling inconvenience, petty annoyance or minor discomfort than substantial interference with the enjoyment of life and property. Resp. Br. at 23-24. The respondent specifically notes that complainants spent \$30,000 to convert the garage into a family room and added a four-season room that goes into the backyard, but did not spend any money on the area where they sleep. *Id.* The respondent argues that the value of complainants' property has increased substantially. Resp. Br. at 24. The respondent asserts that the complainants purchased the house for \$145,000 in 1995 and the 2003 appraised value was \$260,000. *Id.* The respondent asserts that the complainants initially purchased the house quickly because they knew they were getting a deal. *Id.*

The respondent argues that complainants acknowledged that their home's proximity to the Tri-State affected the price of the home at the time of purchase because comparable homes were selling for \$200,000, but that the evidence showed they were willing to buy the house despite the Tri-State and the noise, because they liked the house. Resp. Br. at 24. The respondent contends that the complainants knew what they were buying and ignored the noise because it was a great deal. *Id.*

The respondent argues that, as a whole, the community's general welfare and property interests are not adversely affected by the noise from the vehicles using the Tri-State. Resp. Br. at 25. The respondent contends that the Tri-State in general, and specifically at and by the 75th Street interchange, has enormous positive impact on the social and economic well-being of the community and the State. Resp. Br. at 26. The respondent argues that the Tri-State and the 75th Street interchange are ideally situated in their current location because they are adjacent to a major historically commercial-industrial area in the region and provides road access to and from the railroad and the UPS facility. *Id.*

The respondent argues that it performed its statutory duty to "construct, operate and maintain a safe, modern and limited-access highway designed for the accommodation and the needs of the traveling public within the State" when it approved the planning, design and construction of the Tri-State, the widening of the Tri-State and the 75th Street interchange. Resp. Br. at 27.

The respondent asserts that the Tri-State was built and became operational in the 1950s, and that the complainants' home was built in 1964, after the Tri-State was constructed and in operation. Resp. Br. at 27-28. The respondent asserts that it later spent \$500 million on the central portion of the Tri-State, including the 75th Street interchange. *Id.* The respondent contends this cost included \$11 million for construction of noise walls. *Id.* The respondent notes that even the complainants conceded that when they purchased the house it was on the edge of a residential area adjacent to the Tri-State and that the Tri-State, including the 75th Street interchange and the noise walls, were there before they bought the house. *Id.*

The respondent argues that the complainants failed to establish both the practical and economic reasonableness of the proposed noise wall for reducing the noise generated by the users of the Tri-State. Resp. Br. at 28. The respondent asserts that the facts brought out at the hearing clearly show that not only is it unlikely that the wall proposed would reduce the noise substantially but it is uncertain that such a wall is possible to build. Resp. Br. at 29. The respondent contends that the complainants' principal concern was noise from trucks (causing them to wake at night), specifically their acceleration and deceleration (fake-braking) and the impact noises from the banging of the trucks. *Id.* The respondent asserts that complainants' expert Mr. Zak conceded that the proposed 18 foot wall would not reduce the noise levels to the limits for Class C to A, and that the proposed wall would not even break the line of sight of the vehicles, which he found to be a problem with the wall. *Id.*

The respondent argues that in order to break the line of sight that Mr. Zak said was necessary the wall would have to be at least 13 feet above the pavement height, which is about ten feet above the height of the wall currently installed. Resp. Br. at 29. The respondent asserts that this would require a total height of at least 23 feet to meet Mr. Zak's criteria and exceeds the proposed wall height by five feet. *Id.* The respondent argues that Mr. Barbel testified that the proposed wall height does not factor in the low frequency sounds and the impact sounds that require a noise wall approximately 20 to 30 feet above the pavement, and would result in a wall up to 45 feet tall. *Id.* The respondent contends that since both Mr. Zak and Mr. Barbel observed that noise perception is subjective and since the wall would not be totally effective, it is fair to conclude that the proposed wall would not result in any help to the complainants at a substantial cost. Resp. Br. at 30.

The respondent argues that the complainants' proposed 18-foot wall is based upon the Versar study which "recommends" an 18-foot wall, but that the designer had to consider not only the Versar recommendations and the Tri-State policy, but also soil types, hydrology and drainage. Resp. Br. at 30. The respondent asserts that the Tri-State limits wall heights to 20 or maybe 22 feet because of structural stability and wind load, and that walls that are above 20 feet have cost-effectiveness and structural issues. *Id.* The respondent notes that the average height of a Tri-State noise wall is between 12 and 16 feet. *Id.* The respondent asserts that neither Mr. Wagner, the Tri-State's project engineer nor the sound experts were willing to testify that the wall proposed by the complainants was able to be reasonably and safely constructed. *Id.*

The respondent argues that Mr. Barbel testified that the cost of the wall proposed by the complainants would be at least \$800,000, while a wall that actually might mitigate to a level that addresses the complainants' concerns, assuming arguendo it could be built, would cost at least \$1.3 million. Resp. Br. at 31. The respondent argues that the expenditure of \$800,000 would be unreasonable under IDOT's guidelines (\$24,000 per residence impacted) as such expenditure would require 33 residences being mitigated, and that the expenditure would also be unreasonable under the Tri-State's guidelines of \$30,000 per residence impacted. *Id.* The respondent asserts that even including the handful of neighbors that submitted comments, a review of the aerial photograph shows that less than ten residences could even be generously included in the number of impacted residences. *Id.*

The respondent argues that the Board should give the Tri-State Board's decision to plan, design and construct the Tri-State and the 75th Street interchange with the sound wall it approved per its policy great weight since it was legislatively granted the authority to make the financial and planning decisions related to Tri-State. Resp. Br. at 32. The respondent contends that there are no available budgeted funds to install the proposed wall nor are their profits that could be used to pay for the wall, and it is thus economically unreasonable for the Tri-State to demolish parts of the existing wall, which is effectively mitigating the noise now, and erect a new higher and longer wall. *Id.*

The respondent asserts that the evidence shows that although the respondent previously built a noise wall at the cost of \$11 million when it widened the Tri-State, it nonetheless responds to all complaints about noise. Resp. Br. at 32. The respondent contends that it undertook extensive measures to address the complainants' concerns consistent with its policies. Resp. Br. at 33. The respondent contends that upon hearing Mr. .Petrosius' initial complaint, the respondent responded by finding out his concerns and ground down bumps on the Tri-State by his home. *Id.* Further, the respondent contends it responded to complainants' concerns by conducting a field test to ascertain whether the wall was constructed properly and to determine the effectiveness of the wall. *Id.*

### **Complainant's' Reply Brief**

The complainants assert that noise analysis performed by its sound expert, and presented as evidentiary testimony at the December 2005 hearing, confirms the existence of noise levels above standards promulgated by the Board and contained within the numerical standards set forth at 35 III . Adm. Code 901 .102. Reply at 1. The complainants assert that noise analysis performed by the respondent's sound expert also confirmed noise levels exceeding Board criteria, and that the uncontested evidence proves that the Tri-State is the source of the noise reaching the complainants and their property. *Id.* The complainants argue that the excessive noise levels also interfere with complainants' enjoyment of life creating a nuisance as prohibited by 35 III. Adm. Code 900 .102. Reply at 2.

The complainants contend that the noise measurements taken by the complainants comply with all procedural and substantive requirements, and that the Tri-State noise constitutes a substantial and unreasonable interference. Reply at 2, 5. The complainants argue that the Board held in Roti v. LTD Commodities, that impacts such as difficulty in falling asleep or awaking from sleep, loss of use of their outside deck, and effects on the complainants' children, all constituted an interference with enjoyment of life. Reply at 6.

The complainants disagree that the improvement of their house indicates a priority other than addressing the noise issue. Reply at 6. The complainants argue that while they need not defend their actions in improving their residence, their testimony clearly addresses these issues. *Id.* The complainants assert that they were starting a family and required additional space, that they contacted a window company regarding their bedroom windows; however, they were advised that new windows would help, but not solve, their noise problem. Reply at 6-7. The complainants further assert that they explored several options regarding improvements to their

home, and should not be subjected to the respondent's speculative and self-serving improvement list as it pertains to their home. *Id.*

The complainants argue that while the value of their home did increase, testimony was presented regarding the overall increase in homes in the Chicago market since 1995, and the Board should not consider any appreciation in the home's value against complainants. Reply at 7. The complainants contend that experts from both parties testified the installation of a noise wall is the preferred, and most effective means, of reducing roadway noise from reaching adjacent residential areas. *Id.* Reply at 7. The complainants assert that based upon the recommendation of their sound expert, they request the installation of a noise barrier wall approximately eighteen feet in height, extending a quarter mile adjacent to the property. Reply at 8.

The complainants assert that the proposed noise wall has been estimated between \$800,000 and \$1.3 million. Reply at 10. The complainants contend that the cost is reasonable in light of the fact that the cost of widening and renovating a portion of the Tri-State over ten years ago was approximately \$500 million, that the cost of the concrete noise walls (excluding design costs & noise wall fabricated from other materials) installed in conjunction with this toll road project was approximately \$11.3 million, and that the respondent's budget for 2005 was \$650 million. *Id.*

The complainants urge that the the existing noise barrier wall was not constructed in accordance with the respondent's own consultant's recommendation, and is deficient and ineffective. Reply at 10.

### **DISCUSSION**

The complainants have alleged that respondent violated Section 24 of the Act and Section 900.102 of the Board regulations. 35 Ill. Adm. Code 900.102; 415 ILCS 5/24 (2004). Together these provisions constitute a prohibition against nuisance noise pollution. Charter Hall Homeowner's Association and Jeff Cohen v. Overland Transportation System, Inc., and D. P. Cartage, Inc., PCB 98-81 (Oct. 1, 1998), citing to Zivoli v. Prospect Dive and Sport Shop, Ltd., PCB 89-205, slip op. at 8 (Mar. 14, 1991).

In determining whether noise emissions rise to the level of a nuisance noise pollution violation, the Board performs a two-step inquiry. First, the Board determines whether or not the noise constitutes interference in the enjoyment of complainants' lives, and second, considering the factors enunciated in Section 33(c) of the Act, the Board determines whether or not the interference is unreasonable. Charter Hall, PCB 98-81, slip op. at 19-21.

Although both parties spent a significant amount of time addressing studies on their impact on numeric noise violations, the complaint does not allege any such violations. The Board has, in the past, considered numeric noise readings in determining whether noise has caused an interference with the enjoyment of life. *See* D'Souza v. Marraccini, PCB96-22 (May 2, 1996). However, the readings are not determinative of that decision and constitute, at most, one factor in deciding if interference is present. In addition, the Board has also considered



numeric noise readings to substantiate or refute a nuisance noise claim once the threshold interference issue has been decided. See Charter Hall, PCB 98-81, slip op. at 21 (Oct. 1, 1998).

The following discussion will address first whether complainants have established that the noise emanating from the Tri-State constitutes an interference with the enjoyment of life and second, whether the noise emissions constitute an unreasonable interference in their lives.

### **Interference With Enjoyment of Life**

The Board has stated that if there is no interference, there can be no nuisance noise violation. Zivoli, PCB 89-205, slip op. at 9. Accordingly the Board must first determine whether the sounds have interfered with the enjoyment of life. Furlan v. University of Illinois School of Medicine, PCB 93-15, slip op. at 4 (Oct. 3, 1996). The Board has held that the following disturbances constitute interference: sleeplessness from nightclub noise (Manarchy v. JJJ Associates, Inc., PCB 95-73, slip op. at 10 (July 18, 1996)); noise interfering with sleep and use of yard (Hoffman v. Columbia, PCB 94-146), slip op. at 5-6, 17 (Oct. 17, 1996); and, trucking operation noise impacting sleep, watching television and conversing (Thomas v. Carry Companies of Illinois, PCB 91-195, slip op. at 13-15 (Aug. 5, 1993)).

The complainants testified that the noise from the Tri-State has been detrimental to their well-being, mental, emotional, and physical health. Mr. Petrosius testified that his sleep has been interrupted almost every night, causing him to see a doctor about his inability to sleep. Tr.1 at 33. Mrs. Petrosius testified that she doesn't enjoy being in their yard most of the time, and that, overall, the quality of life and their lifestyles is significantly affected by the noise. Tr.1 at 81. Mrs. Petrosius testified that it is a very rare night that some sort of a significant noise does not awaken her, and that her sleep is disturbed most nights. *Id.* She testified that due to the noise, she doesn't play with her kids in the side yard, and doesn't play with them in the back yard as much as she would like. Tr.1 at 94.

### **Discussion**

As previously stated the Board has found that if there is no interference, there can be no nuisance noise violation. Zivoli slip op. at 9. Therefore, the first step in the Board's inquiry about a nuisance noise violation is whether or not the sounds have interfered with the enjoyment of life. Furlan, PCB 93-15, slip op. at 4. Only if there has been an interference does the Board proceed to the second inquiry of whether the noise unreasonably interferes with the enjoyment of life.

The Board has determined that noise interfering with sleep and use of yard (Hoffman) and trucking operation noise impacting sleep, watching television and conversing (Thomas v. Carry Companies of Illinois) does constitute an interference. Here, the record is clear that the noise impacts the use of the complainants' lives, impacting their sleep on a regular basis. In addition, the noise causes them not to use at least some areas of their residence as they normally would. Further, the respondent has admitted that the complainants showed the noise interfered with their enjoyment of life. See Resp. Br. at 21.

The complainants' lives have been disrupted as a result of the noise. The Board finds that the noise emissions from the Tri-State interfere with the complainants' enjoyment of life. Accordingly, the Board must consider if the emissions unreasonably interfere with the complainants' enjoyment of life.

### **Unreasonable Interference, Section 33(c) Factors**

The remaining issue is whether the noise from the Tri-State has unreasonably interfered with the complainants' enjoyment of life. Whether an interference is unreasonable is determined by examining the factors set forth in Section 33(c) of the Act. The Board need not find against respondent on each factor to find a violation. *See Wells Manufacturing Company v. PCB*, 73 Ill. 2d 226, 233, 383 N.E.2d 148, 151 (1978) (Wells Manufacturing); *Processing and Books, Inc. v. PCB*, 64 Ill. 2d 68, 75-77, 351 N.E.2d 865, 869 (1976); *Incinerator, Inc. v. PCB*, 59 Ill. 2d 290, 296, 319 N.E.2d 794, 797 (1974). The Board will now consider each of the Section 33(c) factors.

### **The Character and Degree of Injury to, or Interference With the Protection of the Health, General Welfare and Physical Property of the People**

In assessing the character and degree of interference that the noise emissions from the fans have caused, the standard applied by the Board is whether the noise "substantially and frequently interferes" with the enjoyment of life, "beyond minor or trifling annoyance or discomfort." *Charter Hall*, PCB 98-81, slip op. at 21, citing *Kvatsak v. St. Michael's Lutheran Church*, PCB 89-182, slip op. at 9 (Aug. 30, 1990).

As previously indicated, the complainants assert that the noise from the Tri-State unreasonably interferes with the enjoyment of their lives and property. They specifically point to impacts on their sleep and use of their home.

### **Discussion**

In determining the character and degree of injury caused by the noise emissions from the plant, the Board must examine whether the interference was substantial and frequent.

The record is clear, and it is undisputed, that a nearly constant noise is emitted from the Tri-State. The complainants maintain that the noise is such an interference that it impacts their sleep on a nightly basis. Mr. Petrosius testified that he has sought medical assistance regarding his inability to sleep, and is on his sixth type of prescribed sleeping pill. Tr.1 at 33. He testified that the pills help him to sleep, but that nothing stops the constant wake-up. Tr.1 at 35.

Mrs. Petrosius testified that regardless of the time of year, there's always a noticeable noise coming from the Tri-State. Tr.1 at 81. She testified that her sleep is disturbed most nights. *Id.* In addition, the Board has received seven public comments from residents and past residents all in support of the complainants, and complaining of interference with their lives.

The respondent argues that the impact of the noise emissions on the complainants should not be considered substantial in part because the complainants' have opted to make improvements in their house not intended to reduce the noise levels. The respondent believes this shows the noise does not rise to the level of a substantial interference. In addition, the respondent stresses that the complainants bought the house in large part because they knew that the price was lower than other houses in the area. *See* Tr.1 at 72.

However, the Board is not convinced. There is considerable evidence that the noise from the Tri-State did generally interfere with enjoyment of life in the noise-impacted community as a whole. The record does not reveal any conflicting testimony on this issue. The fact that complainants received a good deal on the house or that they decided to add on to their house does not alter the fact that substantial interference did occur. *See Scarpino v. Henry Pratt Co.*, PCB 96-110 (Apr. 3, 1997) (finding no support in the record for substantial and frequent interference where the Board had conflicting evidence regarding the character and degree of interference). The noise readings are supportive of this conclusion. While the parties contest the classification on which the noise readings are based as well as the proper measurement of ambient noise, these arguments do not alter the fact that the readings are indicative of a substantial and frequent interference.

The Board finds that this factor supports a finding that the interference experienced by the complainants substantially and frequently interferes with the enjoyment of life, and weighs it in favor of the complainants.

### **The Social and Economic Value of the Pollution Source**

In assessing this factor, the Illinois Supreme Court has looked to the number of persons that the respondent employed and whether respondent is an important supplier to a particular market. *Wells Manufacturing*, 73 Ill. 2d at 235-36. The Board has similarly looked to such factors as the number of employees at a facility and the total wages and taxes that a respondent paid. *Charter Hall*, PCB 98-81, slip. op. 23-24.

The parties agree that the Tri-State has social and economic value to the area, but the complainants argue that this value should not run roughshod over the economic value of the adjacent residential communities.

### **Discussion**

The record shows that more than 1.4 million vehicles use the Tri-State daily, while the 75th Street interchange has an average traffic count of 3750 entering and 3550 exiting. The Tri-State and the 75th Street exchange have an enormous positive impact on the social and economic well being of the community and the State. The Tri-State is undoubtedly a crucial and necessary part of the transportation system in the Chicago-land area and the State as a whole. The Tri-State and the interchange address the traffic needs of the area, but also allows access to an unquantifiably large number of jobs in addition to stimulating billions of dollars of economic activity for the communities along the Tri-State as well as billions of dollars of merchandise entering the stream of commerce through 75th Street interchange. The Board finds that the Tri-

State does have significant social and economic value to the community, and weighs this factor in favor of the respondent.

**The Suitability or Unsuitability of the Pollution Source to the Area in Which it is Located, Including the Question of Priority of Location in the Area Involved**

Suitability of location is not the only factor the Board examines under this factor. Roti v. LTD Commodities, PCB 99-19, slip op. at 26 (Feb. 15, 2001). The Board also looks to priority of location; however industry cannot rely on priority of location as a mitigating factor if emissions are substantially increased. Roti, PCB 99-19, slip op. at 27, citing Wells Manufacturing 73 Ill. 2d 237. Thus, the Board examines suitability of the location of the source, priority of location and whether emissions have increased when weighing this factor.

The Tri-State is part of a system of toll highways that go from near the Wisconsin border to the north, bypassing the City of Chicago to the west, and ends near the Indiana boarder to the south. Tr.1 at 17-21. The Tri-State was built and became operational in the 1950's. Resp. Ex. 2 and 3. The 75th Street exchange was constructed at the same time as the Tri-State was widened in 1993-1994. The complainants purchased their house in 1995. Tr.1 at 71-72.

**Discussion**

When weighing this factor, the Board must consider the suitability of the pollution source to its location, including priority of location. The Tri-State and the 75th Street Exchange were in place prior to the complainants' moving into their residence in 1995. A substantial increase in activity may undermine the priority of location argument, but here the record clearly shows that the Tri-State expansion was completed before the complainants purchased their house. The record contains testimony from the complainants that they were aware of the noise from the Tri-State before they purchased their house. Thus, the respondent clearly has priority of location in this instance.

In addition, the record contains no evidence that the Tri-State or the 75th Street Exchange is not suitably located. Instead, the evidence shows that the Tri-State and the 75th Street interchange are properly situated in their current location because they are adjacent to a long-standing commercial-industrial area. The record shows that the complainants' house is nearby numerous non-residential entities including the Tri-State, the canal, the Burlington Northern Santa Fe Railroad, Interstate 55, and a large United Parcel Service facility.

Accordingly, the Board finds the Tri-State and the 75th Street Exchange to have priority of location and be suitably location. This factor is weighed in favor of the respondent.

**The Technical Practicability and Economic Reasonableness of Reducing or Eliminating the Emissions, Discharges or Deposits Resulting from Such Pollution Source**

In considering this factor, the Board must determine whether technically practicable and economically reasonable means of reducing or eliminating noise emissions from the Tri-State are readily available to ADM. See Charter Hall, PCB 98-81, slip op. at 24.

## **Discussion**

The complainants propose that a noise barrier wall of approximately 18 feet in height extending a quarter mile adjacent to the property be installed. Com. Br. at 13. The respondent argues that the wall proposed by the complainants is neither technically feasible nor economically reasonable.

The first issue to be considered under this factor is technical practicability. While an 18-foot noise wall is generally technically practicable, a number of difficulties at the site in question exist. The Board is not convinced that an 18-foot wall would resolve the noise issue in any meaningful way. Experts for both sides testified that in order for a meaningful reduction to occur, the sight line between the vehicles on the Tri-State and the affected area must be blocked. The respondent has estimated that this would require a higher wall than that proposed by the complainant – a wall of approximately 23 feet in certain areas. In addition, while a wall of approximately 23 feet would be effective in blocking the sight line, the respondent introduced expert testimony that the low frequency and impact sounds responsible for a large portion of the complainants' night-time noise issues (*i.e.*, jake-braking and exhaust pulsations) require a noise wall approximately 20 to 30 feet above the pavement, and would result in a wall up to 45 feet tall in light of the topography of the site. *See* Tr.2 at 206.

The record indicates that the average height of a Tri-State noise wall is between 12 and 16 feet, and that the respondent limits wall heights to 20-22 feet because structural stability and wind load lead to cost-effectiveness and structural issues. Tr.1 at 210-13. In addition, the record contains testimony that drainage considerations further impact the technical practicability of the proposed noise wall at this site.

The respondent estimates the cost of the wall proposed by the complainants would be \$800,000, and that a wall to address all of complainants' concerns would cost \$1.3 million if it were possible to build.

The Board finds that the record does not indicate any technically practicable or economically reasonable remedies to further address the complained-of noise from the Tri-State. Accordingly, this factor is weighed in favor of the respondent.

## **Any Subsequent Compliance**

Under this factor, the Board analyzes the respondent's attempts to address the emissions that have led to the alleged violations of the Act or the Board's regulations. The record shows that the respondent was responsive to the complainants' concerns, and engaged in remedial efforts to alleviate the noise. After the complainants notified the respondent about the noise complaint, the respondent investigated their concerns and ground down bumps on the Tri-State by complainants' house in an effort to reduce the noise. The respondent also conducted a field test to ascertain whether the wall was constructed properly and to determine the effectiveness of the noise wall, and engaged in meetings with Mr. Petrosius.

The Board finds that the respondent made an effort to investigate and alleviate noise emissions at the site, and weighs this factor in favor of the respondent.

### **CONCLUSION**

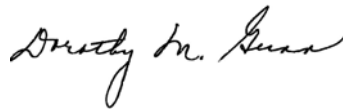
After evaluating the Section 33(c) factors, the Board finds that the sound emissions from the vehicles using the Tri-State is not unreasonable within the meaning of Section 24 of the Act. In this case, the evidence establishes that there is no unreasonable interference when the noise source is evaluated objectively. *See Sweda*, PCB 99-38, slip op. at 12. While the Board does not doubt the complainants' testimony that the noise interferes with their enjoyment of life and property, based on the record before it, the Board finds that the respondent does not violate Section 24 of the Act and 35 Ill. Adm. Code 900.102. The Board finds that sound emanating from the Tri-State and the 75th Street Exchange did not unreasonably interfere with the complainants' enjoyment of their lives and property.

This opinion constitutes the Board's finding of fact and conclusions of law. The Board dismisses the case and closes the docket.

IT IS SO ORDERED.

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2004); *see also* 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; *see also* 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on January 4, 2007, by a vote of 4-0.



Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board