ILLINOIS POLLUTION CONTROL BOARD July 11, 2002

ROBERT GARDNER and YVONNE)	
GARDNER,)	
)	
Complainants,)	
-)	PCB 01-86
V.)	(Citizens Enforcement – Noise)
)	
TOWNSHIP HIGH SCHOOL DISTRICT)	
211, GERALD CHAPMAN,)	
SUPERINTENDENT,)	
)	
Respondent.)	

ROBERT AND YVONNE GARDNER APPEARED PRO SE; and

ARES G. DALIANIS OF FRANCZEK SULLIVAN P.C. APPEARED ON BEHALF OF RESPONDENT.

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

On November 27, 2000, Robert Gardner and Yvonne Gardner (Gardners) filed a complaint against Township High School District 211, Gerald Chapman, Superintendent (respondent). In that complaint, the complainants allege that the respondent violated Sections 23 and 24 of the Environmental Protection Act (Act) (415 ILCS 5/23 and 24 (2000)) and 35 Ill. Adm. Code 900.102 of the Board's noise regulations. The Gardners allege that noise generated by air conditioners located on the roof of Hoffman Estates High School, 1100 West Higgins Road, Hoffman Estates, has unreasonably interfered with them in their home.

A hearing was held on December 19, 2001, in Chicago, Illinois, before Board Hearing Officer Brad Halloran. The Gardners filed a post-hearing brief on February 4, 2002. On March 5, 2002, the respondent filed a motion for additional time to file its post-hearing brief. The respondent filed a post-hearing brief on March 8, 2002. The Gardners filed their response to respondent's post-hearing brief on March 15, 2002.

Based on the evidence presented in this proceeding, the Board finds that the noise emanating from Hoffman Estates High School does not unreasonably interfere with the enjoyment of the Gardners' 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.

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).

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.

BACKGROUND

This case involves noise emanating from air conditioning units located on the roof of Hoffman Estates High School (high school). The high school was opened in 1972-1973, with additions finished in 1977 and 1982. Tr. at 56, 62. The high school is comprised of identifiable sections. In pertinent part, the section closest to the residences in question is a three story square building where all the academic activities are held. Tr. at 56. A parking lot is located to the west and north of the academic building, and immediately east of the academic building is the auditorium. *Id*. High school athletic fields are located to the north of the parking lot. Ex. A.

The Gardners purchased their house at 1545 Fairfield Lane, Hoffman Estates, on December 24, 1989. Tr. at 12. Fairfield Lane runs north – south and is located to the northwest of the high school. The residences in question, complainants as well as those of the complainants' witnesses at hearing, are on the east side of Fairfield Lane directly adjacent to the athletic fields. Ex. A.

In early 1999, the respondent began operations to replace the existing air conditioning and heating systems at Hoffman Estates High School. Tr. at 62. As part of these operations, the respondent purchased five York International Company chillers (chillers). Tr. at 71. The chillers were installed in the summer of 1999, and began operating after a short testing period. Four chillers are located on the roof of the three story academic building, and one chiller is located on the roof of the auditorium. Ex. A. The high school typically operates the chillers when the outside temperature is above 50 degrees Fahrenheit - six days a week, twenty-four hours a day, 230 days a year. Tr. at 18-19.

The chillers were installed both to remedy continual equipment failures with the compressors and the air conditioning, and to bring the high school into compliance with changes in the School Life Safety Code that required additional air exchanges in every room. Tr. at 63-64. The cost to replace the old system, including the air conditioning units, the heating system, and other related equipment was \$4,420,000. Tr. at 71.

In September 1999, the Gardners contacted District 211 headquarters, the School Board and the Illinois Environmental Protection Agency (Agency) to complain of noise allegedly generated by the chillers. Tr. at 13. Ultimately, the Gardners filed a formal complaint before the Board. In response to the complaints, the respondent first contacted the manufacturer of the chillers to see if any deviation from the requested specifications of the ordered machinery existed. Tr. at 72. The respondent had ordered chillers with a soundproof package that contains a quieter fan motor and compressor. *Id*. The respondent confirmed that the correct chillers were in place. The respondent then limited the hours the chillers operated to start at 6:00 a.m. on weekdays and 9:00 a.m. on Sunday, with operations ending at 9:00 p.m. Tr. at 73-74. The respondent wrapped first the chillers' compressors and then the bottom of the units themselves with an insulated sound blanket. Tr. at 74-75. Finally, the respondent installed metal stud-framed structures or vertical barriers around the five chillers. Tr. at 78. The barriers are approximately 10 feet tall and 10 feet away from the until. Tr. at 79. The respondent estimates that \$40,000 was spent trying to resolve the noise issue. Tr. at 82.

Noise Emissions Testimony

Robert Gardner

Mr. Gardner testified that he first became aware of the noise one morning in August 1999, when he woke to hear what he thought was a "back-up generator running at the high school." Tr. at 12. Mr. Gardner testified that after the noise continued for two or three days, he went to the high school and discovered the noise was coming from the roof of the high school. *Id.* At that point, Mr. Gardner contacted the high school. Mr. Gardner describes the noise like that of a "hydraulic elevator, a hydraulic motor" or a "low horn blowing." Tr. at 13. He testified that he wants the respondent to return the noise levels to the negligible level that it was for the 26 years prior to August 1999. Tr. at 14.

Yvonne Gardner

Mrs. Gardner describes the noise as a "constant low hum." Tr. at 16. She testified that she notices the noise in the kitchen, the bedroom, along the back deck, while swimming and in the back yard. Tr. at 16-17. She testified that the noise bothers her "a little bit" in the kitchen, but definitely impacts her use of the back yard where she states it is more aggravating to use the back yard to eat dinner or entertain, and that they don't do that as much since the new chillers were installed. Tr. at 17-18. Mrs. Gardner testified that the noise does not affect her sleep, and that she is able to have a normal conversation in the house. Tr. at 18.

Mrs. Gardner testified they laid the house out for entertaining because they enjoy the company, but that this use has been impaired because the noise is always there, making that sound in the background. Tr. at 18. Mrs. Gardner would like the respondent to have the situation as it used to be before the chillers were installed because it is not pleasant as it was before the chillers were installed. Tr. at 17.

Leonard Krzeminski

Leonard Krzeminski (Krzeminski) testified on behalf of the Gardners in this proceeding. Krzeminski lives at 1535 Fairfield Lane. His house is located directly to the south of the Gardners. Tr. at 27. He has lived there for approximately 17 years. Tr. at 21. Krzeminski first noticed noise coming from the high school in August 1999. Tr. at 22. He describes the noise as a loud humming, and likens it to a mosquito buzzing in your ear. Tr. at 22. Krzeminski finds the noise "very irritating." *Id.* Krzeminski testified that the noise interrupts the use of his home and yard because when he and his wife are outside the humming or buzzing gets annoying. Tr. at 24. Krzeminski testified that the noise disturbs his sleep, and

feels there is "some solution to the noise," and that the respondent can "put something up there, add something to baffle the noise." *Id*.

Krzeminski has not filed any complaints against the respondent or contacted any governmental agencies about the alleged noise. Tr. at 31. He did, however, talk to a representative of the high school. Krzeminski testified that he engaged in normal outdoor activities during the summer of 2001. Specifically, he described the activities as "normal, but annoying, may I add." Tr at 33. He testified that he has not seen a doctor regarding his lack of sleep. Tr. at 34.

Norm R. Miller

Norm R. Miller (Miller) testified on behalf of the Gardners. He has lived at 1533 Fairfield Lane for 34 years. Tr. at 37. Miller's house is directly south of Krzeminski's. Miller compares the alleged noise from the chillers to a Chinese water torture that just hums and grates on you. Tr. at 39. He testified that the chillers operate at different times, not during specific set times as the respondent claims. Tr. at 39. Miller testified that the noise interferes with the use of his home and yard. Tr. at 39. He testified that when he is in the yard in the summertime, the chillers make more noise than the children in the neighborhood. *Id.* He testified that the noise disturbs his sleep, and that he would like the respondent to stop it. Tr. at 40.

Miller has not filed any complaints against the respondent or contacted any governmental agencies about the alleged noise. Tr. at 42. Miller did contact the high school over the phone to discuss the noise. Tr. at 43-44. When asked if he was able to have a normal conversation in his home when the chillers are running, Miller replied that a normal conversation occurs when there is no interference. Tr. at 44. Miller indicated that at times when the chillers are running he has to raise his voice during a conversation depending on wind direction. Tr. at 45. Miller testified that his normal bed and wake-up times have not changed due to the chillers. Tr. at 46. Miller testified that he has not seen a doctor regarding the disturbance of sleep he attributes to the chillers. *Id*.

James Dagley

James Dagley (Dagley) works for York International, the company that sold the chillers to the respondent. Tr. at 99. Dagley is the zone sales manager and is responsible for all new equipment sales in the greater Chicago area. *Id.* Dagley is a member of the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE). Tr. at 100. Dagley testified that chillers meet the applicable sound level standards in the HVAC industry as evidenced by measurements taken by York International in accordance with the Air Conditioning and Refrigeration Institute 370 standard. Tr. at 105.

Rudolph Trejo

Rudolph Trejo (Trejo) has been employed by the Cook County Department of Environmental Control for 17 years. Tr. at 114. He is currently the manager of industrial services that responds to asbestos and demolition permits and investigations. Id. Trejo has conducted sound level testing approximately 26 times over the course of his professional career. Tr. at 115. The Gardners contacted him on September 1, 1999. As a result, Trejo visited the high school on September 7, 1999, and June 13, 2000, to conduct sound measurements using a hand-held Bruell and Care sound measuring device on the A-weighted scale. Tr. at 117-19. On September 7, 1999, Trejo took five measurements with the highest sound reading recorded as 62 DB on the A-weighted scale. The measurements were taken approximately 200 feet to the northwest of the school, behind the garages or utility sheds that are affixed on the property. Tr. at 120. Trejo testified that he calibrated the machine according to the ANSI standard sound meter protocol SI4-1983. Tr. at 119. Trejo testified that on September 7, 1999, the chillers were in compliance with the appropriate provision of the Cook County ordinances. Tr. at 124. The allowable standard under the ordinance is 62 DB – the highest result obtained during the testing of September 7, 1999. Tr. at 124. The tests on September 7, 1999, were performed before any sound remediation work was done to the chillers. Id.

On June 13, 2000, Trejo retested the high school. These measurements were taken closer to the Gardners' house at the property line directly south of the subject properties, approximately behind the house at 1535 Fairfield Lane. Tr at 126, 128. Trejo monitored the sound equipment for one and one-half hours. Tr. at 131. The results on that day ranged from 47 DB to a high of 58 DB on the A-weighted scale. Tr. at 126.

During both tests, Trejo was informed by the management of the high school and the janitor that all the chiller units were running. Tr. at 131. Trejo did not enter the high school and verify at the operations panel that all the chillers were on before he took either of his measurements. Tr. at 132.

Clete Davis

Clete Davis (Davis) is employed by the firm of Kirkegaard Associates, and has been so employed for 13 years. Tr. at 134. Kirkegaard Associates are consultants in architectural acoustics and other branches of the acoustical trade. *Id.* Davis is a full member of the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE). He is a senior consultant in noise and vibration control for Kikegaard Associates, and is responsible for the design, implementation and oversight of the company's construction projects. Tr. at 137. During the course of his professional career, Davis estimates that he has conducted several hundred sound level testings. Tr. at 138. He estimates that he has measured outdoor sound levels in excess of 50 times. Tr. at 139.

Davis was engaged by the respondent to conduct sound level tests at the high school. Tr. at 145. Davis made two visits to the site, and conducted tests in October 1999. Davis testified that the general level of sound activity at the high school was relatively high due to frequent airplane flyovers, parking lot traffic and a great deal of noise that funnels in from nearby Higgins Road. Tr. at 144-45. When conducting his tests, Davis used a Larson Davis 800 B machine that he calibrated before measurements were taken. Tr. at 146, 148. Davis performed sound level testing in a series of eight octave bands beginning at 31.5 Hz and ending at 4,000 Hz. Tr. at 151. Davis testified that the results indicate sound measurements were below Agency standards for the bottom five octave bands and slightly above for the top three bands. Tr. at 160.

Davis' test was performed before any sound remediation work was done to the chillers. Davis opined that the noise remediation efforts of the respondent would cause a substantial reduction in the amount of sound emitted by the equipment. Tr. at 163.

Public Comments

Under the Board's rules, public comments may be filed after a hearing subject to the hearing officer's scheduling order. 35 Ill. Adm. Code 101.628(c). Further, the Board's rules indicate that such public comments are given less weight than evidence subject to cross-examination. 35 Ill. Adm. Code 101.628(b). The Board received a total of four public comments in this proceeding. The comments were filed by past and present residents of Fairfield Lane and are supportive of the Gardners' assertions.

DISCUSSION

The Gardners have alleged that respondent violated Section 24 of the Act and 35 Ill. Adm. Code 900.102. These two provisions constitute a prohibition against "nuisance noise" pollution. <u>Charter Hall Homeowner's Association and Jeff Cohen v. Overland Transportation</u> <u>System, Inc., and D. P. Cartage, Inc.</u>, PCB 98-81 (Oct. 1, 1998) (<u>Charter Hall</u>), citing to <u>Zivoli v. Prospect Dive and Sport Shop, Ltd.</u>, PCB 89-205 (Mar. 14, 1991) (<u>Zivoli</u>) slip op. at 8. 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 an 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. <u>Charter Hall</u> slip op. at 19-21. The following discussion will address first whether complainants have established that the noise emanating from the high school 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. <u>Zivoli</u> slip op. at 9. Accordingly the Board must first determine whether the sounds have interfered with the enjoyment of life. <u>Furlan v. University of Illinois School of</u> <u>Medicine</u>, PCB 93-15 (Oct. 3, 1996), (<u>Furlan</u>) slip op. at 4. The Board has held that the following disturbances constitute interference: sleeplessness from nightclub noise (Manarchy

v. JJJ Associates, Inc., PCB 95-73, (Jul. 18, 1996) slip op. at 10); noise interfering with sleep and use of yard (<u>Hoffman v. Columbia</u>, PCB 94-146, (Oct. 17, 1996) (<u>Hoffman</u>) slip op. at 5-6, 17); and, trucking operation noise impacting sleep, watching television and conversing (Thomas v. Carry Companies of Illinois, PCB 91-195 (Aug. 5, 1993), slip op. at 13-15).

In their brief, the Gardners assert that both the Gardners and two of their neighbors testified that the noise from the chillers unreasonably interferes with the enjoyment of their lives and properties. Gar. Br. at 4. The Gardners assert that both of their neighbors testified that the noise bothers their sleep. Gar. Br. at 2. The Gardners contend that the noise prevents enjoyment of the back deck, and annoys them and the neighbor witnesses in the kitchen and the back yard. *Id*. The Gardners note that 34 neighbors signed a petition asking the respondent to correct the noise problem they created with the installation of the new chillers. *Id*.

The Gardners assert that the chillers run when the outside temperature is as low as 50 degrees, and that this results in an extra long cooling season from March through November. Gar. Br. at 3. The Gardners assert that during the cooling season, the chillers are turned on at 6:00 a.m. on weekdays and have occasionally stayed on past 10:00 p.m. if a special event is going on at the high school Gar. Br. at 7. The Gardners state that the noise penetrates their closed windows when their air conditioner is on. *Id*.

The respondent asserts that the Gardners did not testify that the sound had any impact on their sleep, and that the only testimony regarding sleep came from Krzeminski and Miller. Resp. Br. at 12. The respondent notes that the Gardners have not alleged that any portion of their residence is unusable due to the noise. *Id.* The respondent also asserts that two separate and unrelated organizations conducted sound level testing at or near the Gardners' property line, and revealed no violation of applicable sound level standards. Resp. Br. at 9.

Discussion

As previously stated the Board has found that if there is no interference there can be no nuisance noise violation. <u>Zivoli</u> 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. <u>Furlan</u> 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.

Initially, the Board addresses the noise measurements taken by respondent in this matter. The Gardners have argued that the measurements were flawed and do not meet the procedures requires by the Board in conducting such tests. The respondent does not respond to this assertion. As the Gardners correctly argue, it is inappropriate to use numerical data to show compliance with the noise nuisance regulatory standard. Gar. Br. at 7, *citing* <u>Zarlenga</u> <u>v. Partnership concepts</u>, *et al*, PCB 89-169 (May 9, 1991). The Board has previously found that compliance with the numerical noise standards does not present an absolute bar to finding of violation of the general nuisance noise prohibitions. *See* Village of Matteson v. World

<u>Music Theatre, *et al*</u>, PCB 90-146 (Apr. 25, 1991). However, noise measurements have been used to substantiate or refute a nuisance noise claim, even if they do not meet all Board requirements that would apply in a case alleging a numeric violation. *See* <u>Charter Hall Home</u> <u>Owners Association v. Overland Transportation System</u>, PCB 98-81 (Oct. 1, 1998). The Board will consider the noise measurements accordingly.

The Board has determined that noise interfering with sleep and use of yard (<u>Hoffman</u>) and trucking operation noise impacting sleep, watching television and conversing (<u>Thomas v.</u> <u>Carry Companies of Illinois</u>) does constitute an interference. Here, the Gardners have testified that the noise interferes with their use of the their back yard and deck. Further, both Krzeminski and Miller have testified that their sleep is affected by the noise from the chillers.

The Board finds that the noise emissions from the school do interfere with the Gardners' enjoyment of life. Accordingly, the Board must consider if the emissions unreasonably interfere with the Gardners' enjoyment of life.

Unreasonable Interference, Section 33(c) Factors

The remaining issue is whether the noise from the high school 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 high school 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 of discomfort." <u>Charter Hall</u>, slip op. at 21, citing <u>Kvatsak v. St. Michael's Lutheran Church</u>, PCB 89-182 (Aug. 30, 1990), slip op. at 9.

As previously indicated, the Gardners assert that both the Gardners and two of their neighbors testified that the noise from the chillers unreasonably interferes with the enjoyment of their lives and properties. Gar. Br. at 4. The Gardners specifically point to impacts in the enjoyment of their back deck and kitchen, as well as impacts on their abilities to entertain. The Gardners assert that the extra long cooling season results in aggravation and sounds like "a band of Vikings on the roof of the school blowing those long wooden horns all the time." Gar. Br. at 2. The Gardners assert that both neighbor witnesses and Mr. Gardner testified that

the noise causes problems with their sleep, and argues that the Board has found deprivation of sleep constitutes one of the most serious injuries short of trauma. Gar. Br. at 8.

The Respondents argue that the instant case is similar to <u>Furlan v. University of Illinois</u> <u>School of Medicine</u>, PCB 93-15 (Oct. 3, 1996). Resp. Br. at 10. The respondents argue that in that case the Board looked to whether the property owners were able to fully use their residence. In <u>Furlan</u>, the complainants testified they were unable to use a portion of the residence, but that the chiller noise did not interfere with normal conversation in the home. Resp. Br. at 11. Here, asserts the respondent, the Gardners testified that they could have a normal conversation in the house. Resp. Br. at 12. Further, the respondent notes that neither of the Gardners testified about their sleep being affected by the noise.

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 evidence submitted by the Gardners on the interference caused by the noise is inconsistent. Mrs. Gardner testified that the noise bothers her "a little bit" in the kitchen, and that they don't entertain as much since the new chillers were installed. Tr. at 17-18. Mrs. Gardner also testified that the noise does not affect her sleep, and that she is able to have a normal conversation in the house. Tr. at 18. In the post-hearing brief, Mr. Gardner states that he, too, testified regarding problems with sleep because of the noise, but the transcript contains no such reference.

Although the Gardners argue that the noise causes problems with Miller's sleep, Miller testified that his normal bed and wake-up times have not changed due to the chillers. Krzeminski testified that the noise impacts his sleep, and that the noise interrupts the use of his home and yard because when he and his wife are outside, the humming or buzzing gets annoying.

The Gardners have asserted that the noise measurements taken by Trejo and Davis were flawed. As previously stated, the Board may consider noise measurements in a nuisance noise claim even if they do not meet all Board requirements that would apply in a case asserting a numeric violation. The Board finds that the noise measurements are inconclusive, and do not substantiate or refute whether the interference was substantial and frequent.

The Gardners have not proven that the noise emissions from the chillers substantially and frequently interfere with their enjoyment of life. The Gardners have not shown that the noise in question is anything more than a minor annoyance. The noise in question was characterized as annoying by Krzemkinski and unpleasant by Mrs. Gardner. Based on the evidence before it, the Board finds that noise emissions from the high school do not substantially and frequently interfere with the complainants' enjoyment of life, and weighs this factor in favor of the respondent.

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. <u>Wells Manufacturing</u>, 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. <u>Charter Hall</u> at slip. op. 23-24.

The Gardners did not present any testimony or argument concerning the social and economic value of the high school. The respondent argues only that the high school provides a social and economic value as its facilities are dedicated to education and have a rightful claim for proper climate control. Resp. Br. at 11.

Discussion

Hoffman Estates High School is a large public high school serving the city of Hoffman Estates. The respondent, Township High School District 211, serves 13,000 students during the day and 8,500 adults at night. Steve East, an employee of the respondent, testified that as facilities director he supervises 175 full-time custodial maintenance and grounds employees, and approximately 25-30 part-time and seasonal employees. This number does not take into account teachers and administrators both at Hoffman Estates High School and other schools in the district. The Board finds that the Hoffman Estates High School does have significant social and economic value to the community, and weighs this factor in favor of the respondent.

<u>The Suitability or Unsuitability of the Pollution Source to the Area in Which it is Located,</u> 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. <u>Roti</u> <u>v. LTD Commodities</u>, PCB 99-19 (Feb. 15, 2001) (<u>Roti</u>) slip. op. 26. 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. <u>Roti</u> slip op 27 citing <u>Wells Manufacturing</u> 73 III. 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 Gardners did not present any evidence that the high school was unsuitable to its location. The Gardners did assert that prior to August 1999, the high school did not cause any problems, including noise, and points to the installation of new air condition chillers as the cause of the current noise problem. Gar. Br. at 1-2.

The respondent asserts that the site of the high school is suitable to the area, and that the respondent has taken extraordinary measure to abate an alleged noise problem so as to remain a good neighbor to the area residents. Resp. Br. at 11.

Discussion

When weighing this factor, the Board must consider the suitability of the pollution source to its location, including priority of location. The installation of the chillers in the summer of 1999 is akin to an increase of operations that diminishes any priority of location claim the high school may have. The Gardners, therefore, can claim priority of location. However, although increased operations may impact whether or not a facility can claim priority of location, it does not mandate a finding that the facility is unsuitable to its location.

The record shows that the high school has been located in its current location since 1972. The Gardners assert in their brief that for the 26 years prior to August 1999, the residents lived in "peaceful harmony" with the high school. No evidence indicating that the high school is not suitable to its location was introduced. Accordingly, the Board finds the high school is suitably located, and weighs this factor in favor of the respondent.

<u>The Technical Practicability and Economic Reasonableness of Reducing or Eliminating</u> 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 elimination noise emissions from Gilster-Mary Lee's facility are readily available to respondent. *See* Charter Hall slip op. at 24.

The Gardners request that the Board order the respondent to either move the chillers to the front of the school building, enclose them in a sound-proof cabinet equipped with intake and exhaust mufflers, or replace the chillers with units which do not emit noise which interferes with the use and enjoyment of their lives and properties. Gar. Br. at 8.

The respondent cites the Board's language in <u>Furlan</u> and argues that the Board should not substitute its judgment for that of the respondent in seeking a remedy for the Gardners.

Discussion.

The Board finds that the Gardners have not shown their proposed remedies to be technically practicable or economically reasonable. The only evidence in the record suggests that the proposed remedies would not be feasible.

East, the respondent's facilities director, testified that the chillers reside on the edge of the building because it was the only place structurally that they could be practically installed. Tr. at 90. He testified that the chillers cannot be moved to the center of the building because additional building structure costing hundreds of thousands of dollars would be necessary to hold up the units. Tr.at 91. East testified that moving the units to the ground would necessitate moving them closer to the homes and would require changes to the schools parking lot, wood shop, auto shop and bus loading zones. *Id.* East testified that moving the need to up-size the equipment to accommodate the additional piping needs. Tr. at 92. He testified that enclosing

the chillers as suggested by the Gardners would necessitate extremely large structures to ensure adequate airspace. East testified that the weight of the structures combined with wind or blowing snow would either push the chillers off the roof or result in having to install columns down through the building and horizontal beams to support the weight of the structures. Tr. at 93.

Paul Conner, vice-president for Amsco Engineering and a mechanical engineer, testified that moving the chillers to the front of the school would be difficult due to space constraints and the need for additional piping. Tr. at 182. Conner also stated that electrical feeds and additional piping needs would also complicate the issue, and that the pumping systems would have to be redesigned to accommodate the change.

The Board finds that the remedies suggested by the Gardners are not technically practicable and economically reasonable solutions to the address the noise from the chillers. 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 initially ordered chillers with a sound proof package that contains a quieter fan motor and compressor. In response to the Gardners' complaints, the respondent first ascertained positively that the correct chillers had been installed. The respondent then limited the hours of chiller operation. Next, the respondent wrapped first the chillers' compressors and then the bottom of the units themselves with an insulated sound blanket. Finally, the respondent installed metal stud-framed structures or vertical barriers around the five chillers. The record indicates the respondent spent approximately \$40,000 trying to resolve the noise issue.

The Board finds that the respondent made a considerable effort to alleviate noise emissions from the high school, and weighs this factor in favor of the respondent.

Summary of Findings on Unreasonable Interference

The Board finds that the noise from the high school has not unreasonably interfered with the Gardners' lives. The Gardners have not proven that the noise substantially interferes with their lives. In addition, the high school is suitably located and has social and economic value. No practical solutions that are economically reasonable to alleviate the interference were evidenced, and the respondent has vigorously attempted to address the Gardners' complainants about noise from the chillers. Accordingly, the Board finds that respondent did not violate Section 24 of the Act and 35 Ill. Adm. Code 900.102.

CONCLUSION

Based on the record before the Board, the Board finds that the respondent did not violate Section 24 of the Act and 35 Ill. Adm. Code 900.102. The Board finds that sound emanating from the high school did not unreasonably interfere with the Gardners' 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) (2000); *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, certify that the above opinion and order was adopted on July 11, 2002, by a vote of 5-0.

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Dorothy M. Gunn, Clerk Illinois Pollution Control Board