ILLINOIS POLLUTION CONTROL BOARD May 21, 1992

CARL MADOUX, ALICE MADOUX, GLENN MOODY, AND MARGARET MOODY,)))
Complainants,))) PCB 90-148 (Enforcement)
v.)
B & M STEEL SERVICE CENTER, INC.,)))
Respondent.)

JAMES S. SINCLAIR, STOBBS & SINCLAIR APPEARED ON BEHALF OF THE COMPLAINANTS.

PAUL H. LAUBER, FARRELL & LONG, P.C. APPEARED ON BEHALF OF THE RESPONDENT.

INTERIM OPINION AND ORDER OF THE BOARD (G.T. Girard):

This matter comes before the Board on the August 6, 1990 formal complaint filed by Carl Madoux, Alice Madoux, Glenn Moody, and Margaret Moody (collectively, "complainants") against B & M Steel Service Center, Inc. ("B & M Steel").¹ The Board accepted this matter for hearing on August 30, 1990. The Board held a public hearing on June 30, 1991 at Alton. Members of the public attended and participated at hearing. The complainants filed their post-hearing brief on August 12, 1991. B & M Steel filed its response brief on September 5, 1991. The Complainants filed a reply brief on September 18, 1991.

The complaint alleged that B & M Steel violated Section 24 of the Environmental Protection Act, Ill. Rev. Stat. 1989 ch. $111\frac{1}{2}$, par. 1024, in that noise from the operation of heavy equipment and the dropping of steel pipe unreasonably interferes with the use and enjoyment of the complainants' properties and with their enjoyment of life. The complainants request that the Board enter an order directing B & M Steel to cease and desist from all future violations and to alter its operations, equipment, or property in such a way as to reduce the noise emissions to a "nonintrusive level".

¹ This case is a companion to <u>Madoux v. Straders Logging</u> <u>and Lumber Mill</u>, PCB 90-149, filed by the complainants that same day for similar complaints against a neighboring lumber mill facility. Although the Board contemporaneously issues an interim opinion and order in that matter, each case is decided on its own individual record.

FACTS

All four complainants testified at the public hearing. Other local residents, Mr. John Fleming, Mr. Charles Zirges, and Ms. Karron M. Bowman, testified on behalf of the complainants. Mr. Gregory T. Zak, a noise technical advisor with the Illinois Environmental Protection Agency, testified under subpoena on behalf of the complainants. Mr. William Dittmar, President of B & M Steel and a Worden resident, testified on behalf of B & M Steel.

Summary Description of Setting

B & M Steel operates a pipe mill on property it owns in the south end of Worden, in Madison County, south and east of Edwardsville Road (County Highway 46, which runs out of town to the southwest), along Sawmill Road, a graveled side road. B & M Steel receives 20 ton truckloads of steel pipe from LaClede Steel at its facility. B & M Steel performs inspection and sorting of that pipe for LaClede Steel and ships it back to the LaClede Granite City mill under contract. B & M Steel resells the rejected pipe to various other customers, primarily other steel distributors. B & M Steel operates a pair of saws with which it trims and bevels the ends for some customers. B & M Steel owns three "Pettibone" front-end loaders² and fork-lifts for handling and transporting the pipe on the B & M Steel premises and one semi tractor and trailer for in- and out-bound transport of pipe. Tr. 10, 92-93, 101, 176-81, 184-89 & 208-18; Ex. 1-8, 14, 16, H & I.

There is a single building on the site in which B & M Steel performs the cutting and bundling operations. B & M Steel performs the sorting on a rack outside the building and stores bundled pipe outside in its yard. B & M Steel receives and ships several loads of pipe each day. At any given time, there are about 1200 tons of pipe in the B & M Steel yard. Tr. 176-81, 187 & 205-18; Ex. 1-8 & 14-16.

B & M Steel's normal hours of operation vary, with different operations occurring at different times and areas of the plant through the course of a day. Plant operations begin at about 7:00 a.m., and the first shift ends at about 3:30 p.m. Work continues with a second, part-time shift until about 10 p.m. three days a week, although the record also indicates that this late work may be more frequent and may go on until midnight. During the day B & M Steel tends to perform its loading, sorting,

² The record indicates that one of these three is not operable. Mr. Dittmar, president of B & M Steel, testified that he purchased one of these machines for spare parts, and it does not operate. Tr. 13 & 216; Ex. 14 & 16.

and other outdoors activities, while it performs cutting, banding, and other indoor activities in the evening. The record indicates that the outdoor activities may continue until as late as 6:00 or 6:30 p.m. Although B & M Steel will not accept night deliveries or make night shipments, hearing testimony indicates that this activity can continue as late as 8:00 or 9:00 p.m. B & M Steel does not operate on Sundays, and the occasional Saturday work schedule appears shorter than that of weekdays. Tr. 20, 29-30, 64-65, 72-74, 89, 94, 102-03, 106, 115-18, 183-84 & 209; Ex. 16.

The B & M Steel facility is located in an industrial area that has been zoned and used for industrial purposes since some time in the 1950s. Prior occupants of the present B & M Steel site included a pallet mill and a trailer accessory manufacturer (for about 10 years). B & M Steel has occupied this property and engaged in this use since the fall of 1988. For a short time in 1988 prior to occupying the present location, B & M Steel engaged in pipe handling operations on an adjoining parcel about 100 yards to the east that is owned by a sawmill. Tr. 21-22, 37, 48-51, 57, 101, 114, 120, 133, 143, 176-77, 184, 188-89, 206; Ex. 1, D & I.

The Moodys' and Madouxes' homes are next door to one another, and they are located over 100 yards north and west of the B & M Steel property and mill building. Their addresses are on Edwardsville Road. The Madouxes have lived at this location since 1955. Mr. Charles Zirges, who testified at hearing, built the Moody home in 1970 and sold it to the Moodys later that year when he moved into a new home across Edwardsville Road. Originally zoned industrial when their houses were built, the Madoux and Moody properties have been zoned single family residential since the spring of 1990 or 1991. Other persons, some of whom testified at hearing, live in the immediate vicinity. The area does not, however, appear to have a high residential density. The record indicates that much of the surrounding area is used for agricultural purposes and the complainants' and immediately surrounding lots are relatively large. Tr. 8-10, 32, 43-44, 47-49, 62-63, 92-93, 95, 99, 101, 110, 133-34 & 140-42; Ex. 1-8, H & I.

Sawmill Road is a gravel road. It is presently the sole route of ingress and egress for trucks to and from the B & M Steel plant. At the time B & M Steel commenced operations, the Village of Worden restricted truck traffic at the other end of Sawmill Road, which leads directly into town. Trucks from B & M Steel must enter Sawmill Road from Edwardsville Road, passing through the intersection directly adjacent to the Madouxes' home.³ The drive from the intersection to the B & M Steel plant is about four blocks. Traffic on the gravel surface of Sawmill Road raises dust. B & M Steel once attempted to purchase an adjoining parcel to construct an alternative drive directly to the highway that would not use Sawmill Road, but the owner would not sell him the property. Tr. 26-33, 52-56, 80-88, 110, 121-23, 202, 216-18 & 220-21; Ex. 1, D & I.

Facts re Interference

Mr. Madoux testified that B & M Steel generates a lot of impulsive, "steel on steel" sounds. His house is fully insulated, yet he can hear the sounds from inside his fully closed house, and has "quite often" left his house to avoid the Tr. 13-14 & 18-19. If the door to the B & M Steel sounds. building is open, he can hear the indoor operations through the evening--sometimes as late as midnight. Tr. 20. Mr. Madoux also finds sounds of trucks on Sawmill Road annoying. Tr. 29. B & M Steel owns and operates a single truck. Tr. 30; Ex. 14. Mr. Madoux specifically testified that part of the annoyance is brake sounds from the trucks stopping at the intersection, and he specifically identified one such truck as bearing a B & M Steel logo on its side. Tr. 29-30 & 58. The local Property Tax Appeal Board lowered the assessment of the Madoux home as a result of the totality of the sounds in the area, including those generated by B & M Steel. Tr. 20-21; Ex. 9.

Mr. Madoux made a tape recording of the sounds as audible from the back porch of his home, on the side away from Sawmill Road. Tr. 24-25 & 59-60. The hearing officer admitted this exhibit over the general objection raised by B & M Steel. Tr. 26. Mr. Zak testified that he was familiar with the recorder used and that that type of recorder is useful for indicating the sounds in this type of case. The recorder, which has automatic level control, picks up the loudest audible sounds. He listened to the tape and visited the site. He testified that the sounds he heard on the tape were representative of those he heard at the site. Tr. 152-54.

For the same reasoning enunciated in the companion case, <u>Madoux v. Straders Logging and Lumber Mill</u>, PCB 90-149, at 2-3, the Board does not use this exhibit to indicate the levels of noise experienced on the Madoux property. Rather, we use this tape to indicate the types of sounds audible. Clearly audible on this exhibit are metallic clanging sounds and diesel engine-like sounds. A bit less audible are small engine, chain saw-like sounds and railroad-like sounds.

³ This is also true of truck traffic to and from the sawmill and a township garage located on this road.

Mrs. Madoux testified that B & M Steel generates "banging and clanging" sounds when pipe is picked up and when it is dropped on the B & M Steel property or when B & M Steel places it on the sorting table. She described these as an intermittent "bang, bang, bang" or "ping, ping, ping" sounds, depending on the diameter of the pipe being handled. The sounds are audible throughout the closed house, depending on the pipe diameter. She also hears the revving Pettibone engine noise as these vehicles Tr. 70-73. She said that these sounds have handle the pipe. caused her to move the beds in the bedrooms on the Sawmill Road side of her house because her quests cannot sleep. Her quests are awakened very early when the mill begins operating the Pettibones and dropping pipe. Tr. 72. She herself has been awakened by the mill operations. Tr. 72-73. The sounds begin between 7:00 and 7:25 a.m., and continue with variation throughout the day until as late as 9:30 p.m. Tr. 73-74. The sounds have interfered with her giving piano lessons to some younger students who are startled by the sounds. The sounds are audible over the music the students play. Tr. 74-75. Mrs. Madoux testified that she cannot use her yard and deck due to the B & M Steel sound emissions. Tr. 75. Sounds generated by trucks bearing pipe stopping beside her house to check their loads have annoyed her, but she could not specifically attribute these to the B & M Steel truck. Tr. 80-82, 84 & 88. Mrs. Madoux finds the B & M Steel sound emissions upsetting or very annoying, and would find them so even if the sawmill were absent. She stated, "There is no way you can survive with that kind of noise day after day." Tr. 91.

Mr. Moody testified that he has problems with the sounds of pipe hitting pipe and with truck sounds. Tr. 102-03. He is a shift worker who tries to sleep until mid- or late-morning, depending on the shift he has worked. He testified that the sounds from B & M Steel have awakened him many times at 7:20 to The first sounds he hears are the Pettibones running, 7:30 a.m. then he hears the sorting of pipe. He can hear when pipe is placed on the sorting table and when pipe banding is cut and the pipe is released to roll and drop on the racks. He finds the sounds annoying because they cause him to lose sleep and because he cannot enjoy his yard. He can hear the sounds with his house closed up. Tr. 105-08. He testified that although the sawmill and truck noises are annoying, they do not awaken him. Tr. 108-The B & M Steel sound emissions would annoy him even if the 10. sawmill were absent. Tr. 111-12.

Mrs. Moody testified that loud sounds result when B & M Steel sorts pipe on its rack, as metal hits metal. The problem sounds originate from trucks' brakes and air horns; the Pettibones; and from dropping, moving, and sorting pipe. The sounds have awakened her. She has found it necessary to move from room to room within her house to obtain relief; she cannot enjoy her yard; and she has had to yell to converse outdoors over

the sounds. Most of the problem sounds, however, originate from the pipe-on-pipe sounds. Tr. 115-16. Mrs. Moody can hear the B & M Steel indoor operations, but the sounds are muffled when the door to the B & M Steel building is closed. Every Monday morning, her day off, the pipe sounds awaken her. Further, although she must arise at 3:30 a.m. on days that she works, she cannot go to sleep until late the night before if B & M Steel is working late that evening. Tr. 117-18. The sounds have caused her to start from her chair while watching television and to leave the kitchen while doing dishes. Mrs. Moody finds it difficult to do housework due to the sounds, and once or twice a week she finds it necessary to leave the house to regain her composure because of the sounds. She no longer wants to be outdoors as a result. Tr. 118-19. When awakened by truck sounds, she has identified the offending truck as bearing the B & M Steel logo, but other non-B & M Steel trucks have annoyed her. Tr. 120-24.

Corroborating the testimony of the complainants is the testimony of other area residents and one former resident. John Fleming, who lives due north of B & M Steel, north of Sawmill Road, testified that the sounds are a loud, metallic, frequent, and regular, but not constant. They have awakened him on He has heard them from a farm he owns a mile Saturday mornings. away. He finds them very annoying, and he has gone indoors when weary of hearing them, where he can still hear them. Tr. 63-65. The sounds get on his nerves. Tr. 67. Charles Zirges, who lives across Edwardsville Road from the Moodys, has found the sounds The sounds are intermittent, and their amount depends annoying. on the size of the pipe being handled. He has heard the sounds from B & M Steel in the evenings, and as emanating from the B & M Steel building as late as 9 or 10 p.m. Tr. 93-94. Mr. Zirges' solution to the sounds is to leave his home to avoid them. Tr. Karron Bowman, a former resident across the highway from 95-96. the Madouxes and Moodys, found the sounds annoying and decided to move as a result. Tr. 143-44. Her house sold for \$4000 less than its appraised value of \$62,000. Tr. 146-47. She has since returned to the area to visit former neighbors and found the sounds the same as when she resided there. Tr. 145.

ANALYSIS

This is a "nuisance noise" action under 35 Ill. Adm. Code 900.102 and Section 24 of the Act, Ill. Rev. Stat. 1989, ch. 111½, par. 1024. Therefore, the complainants do not rely on numerical quantification of the noise to prove a violation. Such quantification is immaterial in determining whether such a violation has occurred. <u>Ferndale Heights Utilities Co. v.</u> <u>Illinois Pollution Control Board</u>, 44 Ill. App. 3d 967, 358 N.E.2d 1224, 1228 (1st Dist 1976). The Act prohibits "nuisance noise", regardless of any quantification of the noise.⁴ Section 24 of the Act prohibits noise pollution as follows:

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 this Act.

Ill. Rev. Stat. 1989, ch. 111¹/₂, par. 1024.

Thus, under the Act, the respondents have caused a noise violation if the complainant has proven that B & M Steel's noise emissions have unreasonably interfered with the complainants' enjoyment of life or with their pursuit of any lawful business or activity.

The issue in any "nuisance noise" enforcement proceeding is whether the sounds have caused unreasonable interference with the complainants' enjoyment of life or lawful business or activity. Unreasonable interference is more than an ability to distinguish sounds attributable to a particular source. It is also more than "annoyance" due to the sounds, which is too subjective. Rather, the sounds must objectively effect the complainant's life or business activities. <u>See Kvatsak v. St. Michael's Lutheran</u> <u>Church</u>, PCB 89-182, 114 PCB 765, 773 (Aug. 30, 1990); <u>Kochanski</u> <u>v. Hinsdale Golf Club</u>, PCB 88-16, 101 PCB 11, 20-21 (July 13, 1989), <u>rev'd on other grounds</u>, 197 Ill. App. 3d 634, 555 N.E.2d 31 (2d Dist. 1990).

As a preliminary matter, the Board notes that some of the problems and annoyance experienced by the complainants results from trucks on Sawmill Road, from the nearby sawmill, and from airborne dust. Tr. 33, 59-60, 82 & 126-28; Ex. 11 (tape of local noise); see Tr. 51-52 (smoke from alleged open burning by

No person shall cause or allow the emission of sound beyond the boundaries of his property . . . so as to cause noise pollution in Illinois, or so as to violate any provision of this Chapter.

35 Ill. Adm. Code 900.102 (1991).

The rules define "noise pollution" as "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 (1991).

⁴ The complaint alleges only a violation of Section 24 of the Act. The Board's Noise Pollution Control rules similarly prohibit "nuisance noise". Board rule 900.102 provides as follows:

sawmill). The complainants made no air pollution claims. Therefore, airborne dust is not a matter for consideration in this proceeding.

Similarly, there are noises generated in the complainants' area that are not attributable to B & M Steel operations. These include the noises from saws and chippers or debarkers in use at the neighboring sawmill and trucks not clearly owned or operated by B & M Steel on Sawmill Road. Tr. 32, 58, 66, 71-72, 78-88, 97, 102, 109-10, 115, & 121-24. Sounds generated by trucks or other sources in the area that are not under the control of B & M Steel are irrelevant.

Unreasonable Interference

The Illinois Supreme Court has directed that the Board must consider the facts of the case in light of the factors outlined by 33(c) of the Act in determining whether unreasonable interference has occurred under the Act and Board rules. <u>Wells</u> <u>Manufacturing Co. v. PCB</u>, 73 Ill. 2d 226, 232-33, 383 N.E.2d 148, 150-51 (1978) ("nuisance" air pollution; first four factors only); <u>see Ferndale Heights Utilities</u>, 44 Ill. App. 3d at 967-68, 358 N.E.2d at 1228. Those factors are as follows:

- (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 . . resulting from such pollution source; and
- (v) any subsequent compliance.

Ill. Rev. Stat. 1989, ch. 111½, par. 1033(c), as amended by P.A. 86-1363, § 2002, 1990 Ill. Legis. Serv. 1979, 1989 (West), effective Sept. 7, 1990.

The Board now turns to consideration of each of these mandatory factors in determining whether the interference suffered is unreasonable.

Character and Degree of the Injury or Interference

In considering the injury or interference suffered by the complainants, the Board does not ignore the fact that there is noise from other sources in the area. This background noise is relevant in determining whether the B & M Steel sound emissions are unreasonable. Specifically, in consideration of the character or degree of injury or interference suffered by the complainants from the B & M Steel sound emissions, the issue is whether the testimony clearly indicates that it is those sounds, and not the background noise, that causes the interference.

Review of the witnesses' testimony indicates that though the witnesses indicated annoyance or interference due to the background noise in the area, each also clearly identified particular B & M Steel sound emissions with particular instances of interference. As outlined in the factual discussion, B & M Steel sound generation has deprived the complainants of sleep, curtailed the enjoyment of their yards, and, to some extent, upset the enjoyment of their homes at various times. Additionally, the sounds have impinged on Mrs. Moody's ability to teach piano, although she appears able to continue teaching and did not testify as to any loss of students.

Mr. Zak testified that he has worked on several nuisance noise situations. He testified that this case is different than other situations in that no witness ever testified to hearing the offending sounds from a mile away, as did Mr. Fleming. Tr. 155-58; see Tr. 64.

Social or Economic Value of the Source

The record indicates that B & M Steel is of significant social and economic value to the community. B & M Steel is a profitable business and provides jobs to 13 workers who live within a 15 mile radius of the plant. Its payroll of about \$350,000 and pension plan contributions of about \$50,000 per year are beneficial to the local economy. B & M Steel makes cash and non-cash charitable donations to the local community, such as the use of equipment, labor, and materials. It contributes about \$3300 as real estate taxes, \$3500 in road use and local business taxes, \$4800 as unemployment taxes, \$83,000 as federal income taxes, and \$11,000 to \$12,000 for state income taxes each year. Tr. 196-99 & 219-20.

Suitability or Unsuitability of the Source

On the one hand, the record indicates that the land upon which B & M Steel is located has been zoned for industrial purposes since before the complainants moved to the area. In fact, the complainants' homes were built on industrially-zoned land, and they are in an area that is surrounded by industrial and agricultural lands which are not heavily populated. The record indicates that their properties were part of this contiguous industrially-zoned area all the way until within the last year or two.⁵ Further, at least one other parcel in the immediate area, that owned and used by the sawmill, is used for an offensive sound-generating industrial purpose. As stated by Mrs. Moody:

I realized that we live in an industrial area It's always been an industrial area. There has been industry there forever

Tr. 133.

The sawmill and truck traffic on Sawmill Road generate dust and sounds that could somewhat inhibit the complainant's use of their yards or their opening their homes without regard to any mitigation efforts by B & M Steel. Virtually all the local resident witnesses testified negatively with regard to this background noise and dust. Tr. 26-33, 51-53, 58, 60-61, 66-67, 71-72, 78-88, 102, 109, 115, 123-28 & 138. Mrs. Madoux testified that the dust in the area inhibits her use of her yard. Tr. 82. Mr. Moody testified that the sawmill dust and noise contribute to his inability to enjoy his yard. Tr. 110. Mrs. Moody similarly stated that the sawmill and road dust contribute to the problem of using her yard, and she further testified that there would be a problem even in the absence of the B & M Steel sound emissions due to the industrial nature of the area. Tr. 123-25.

On the other hand, the present reality (without regard to the former zoning status of the complainants' parcels) is that B & M Steel is located on land abutting the complainants' (presently zoned) residential properties and those properties were in residential use long before B & M Steel commenced its operations. Further, the record indicates that B & M Steel sound emissions are distinctive and especially bothersome to the complainants and other local residents--over and above the dust and any background noise.

Mr. Madoux testified that he had no problem with noise in the past. Tr. 21-22 & 49-51. Mrs. Madoux did not find the truck noise as offensive as the mill noise. Tr. 81-82. Mr. Zirges testified that the neighborhood was quiet in the 1970s (despite the existence of a sawmill and industry at that time). Tr. 95. Mr. Moody testified that the other area noises have not awakened him, just the B & M Steel pipe sounds. Tr. 109-10. Mrs. Moody

⁵ However, the record in the companion case indicates otherwise, that the complainants' parcels are presently zoned industrial. <u>See Madoux v. Straders Logging and Lumber Mill</u>, PCB 90-149, at 1 & n. 2.

stated that the other noises have not awakened her, that the greatest part of the problem in the area is sounds from the B & M Steel pipe handling, and that the noise problem has worsened as B & M Steel's business increases and it handles more pipe. Tr. 115-16 & 120. Corroborating this is the testimony of Ms. Bowman that she decided to move on a day when the pipe sounds were especially bad and that there were no noise problems before B & M Steel commenced operations. Tr. 144.

The record includes facts that could disfavor a finding of unreasonable interference. Foremost, mitigating the sounds generated by B & M Steel would not eliminate all interference in this area. Also, B & M Steel is located on industrial land, and it is at least partly surrounded by industrial and agricultural land.

Technical Practicability and Economic Reasonableness of Control

The focus of inquiry into the technical practicability and economic reasonableness of control is what <u>can be</u> done about the purportedly offensive sounds. This contrasts against the focus of inquiry into any subsequent compliance, which is what <u>has been</u> done about the purportedly offensive sounds.

Mr. Zak and Mr. Dittmar were the principal witnesses with regard to corrective measures. It is possible to separate the testimony into two categories relating to solutions to specific problem areas: mobile pipe handling equipment problems and pipe inspection and handling (pipe striking pipe, impulsive sounds) problems.

Pipe Handling Mobile Equipment Sounds

The record includes some indication of a way to diminish pipe handling equipment sound emissions. However, the record information is of a general nature.

Mr. Zak testified that engine exhaust mufflers are commercially available for equipment of the type operated by B & M Steel. He said that equipment manufacturers install original mufflers that comply with the OSHA standard of 90 dB, which is higher than the state standard of about 60 dB. Tr. 170; <u>see</u> 35 Ill. Adm. Code 901.102(a) (indicating actual limitations in dBA). In his experience, their use has proven effective in the past without a detrimental effect on the equipment retrofitted with them. He testified that he checked to approximate the cost of such mufflers. Their cost depended on the particular use specification, but it was about \$350 to \$400 each.⁶ He believed one of these after-market mufflers would reduce the sound emissions by 35 to 45 dBA. Tr. 157, 159-61 & 170-71. B & M Steel presented nothing for the record that would indicate that such a retrofit is not possible.

Pipe Handling Sounds

The record includes information on possible control of pipe handling (impulsive) sounds generated by B & M Steel operations. However, the record is not sufficiently complete to permit more than preliminary conclusions with regard to the technical practicability and economical reasonableness of any specific methods of controlling the pipe handling sounds.

Mr. Zak testified based on his experience about control measures used in similar situations for controlling impulsive, metal-on-metal sounds. Mr. Zak testified that enclosing the sound source or modifying operating procedures were two effective ways to diminish the emissions of such sounds. Tr. 155-56 & 158. He said that the normal approach is to use acoustical enclosures to the extent this is possible. Tr. 161-63. Based on this, Mr. Zak suggested that B & M Steel could construct for about \$18,428 a steel building 56 feet wide, 153 feet long, and 18 feet high with two 24 foot long doors to enclose its inspection and sorting He suggested it was desirable to cover the interior walls rack. of this building with half-inch drywall under three and a halfinches of fiberglass insulation that is protected from abrasion with poultry netting. His estimate for the total cost of such an enclosure was about \$23,766. He suggested similarly covering the interior walls of the existing building with fiberglass insulation and poultry netting, for an estimated cost of about \$6960. Tr. 161-64. He believed, based on his prior experience that these measures and keeping the building doors closed would satisfy the local residents by mitigating the impulsive sound emissions.⁷ Tr. 168.

⁶ Mr. Zak's testimony is based on the assumption that B & M Steel would need to retrofit five pieces of equipment: three Pettibones and two forklifts. <u>See</u> Tr. 159-60; Ex. 14 & 16. The complainants' testimony, however, focused on the sound emissions of the "Pettibones". Further, Mr. Dittmar testified that B & M Steel uses only two of these vehicles because one is used for spare parts. Tr. 216

⁷ Mr. Zak characterized these as least-cost measures. He testified that a noise consultant would likely recommend measures costing five to ten times more. Mr. Zak would be reluctant to recommend corrective measures that cost B & M Steel \$200,000 to \$400,000. Tr. 173-74.

B & M Steel presented no detailed evidence to the contrary at hearing. Rather, Mr. Dittmar testified in generalizations. He asserted without elaboration that his plant premises do not have sufficient room for a new building and that use of such a building would prove too restrictive of B & M Steel plant operations. Tr. 205-06. He also testified, however, that performing the pipe sorting inside is possible. Tr. 219. Further, B & M Steel argues in its post-hearing brief without providing evidence that Mr. Zak's estimates ignore the cost of installation and are, therefore, low by half.

The impulsive sounds from pipe handling are the most interfering sounds emitted by B & M Steel. The estimated cost to correct sounds is about \$30,726. However, this estimated cost of compliance is, concededly, a "least cost" alternative presented by Mr. Zak. Further, Mr. Dittmar briefly testified that he could not construct another building at his plant and continue the present mode of operations. He did not elaborate, so there is nothing in the record that would indicate the nature of the operational disruption or whether some operational accommodation is possible. The record does not indicate any alternative methods or enclosures that B & M Steel could employ.

Any Subsequent Compliance

There is not much to consider with regard to what has been done to control sound emissions. Mr. Dittmar testified that he tried to buy land for an alternative driveway, but the owner would not sell. Tr. 202. He also testified that he had once planned everyreen plantings to mitigate the sound emissions. Tr. 202 & 222. He stated that he located his building on the portion of his property farthest from the complainants' homes. Tr. 185. The record indicates that Mr. Dittmar did not respond to local residents' complaints over the sound emissions from the B & M Steel plant. Tr. 22-23, 108, 119, 147 & 192; Ex. 10 & C. The record does not indicate any further compliance efforts to this day. The record does not indicate subsequent compliance as of this day.

CONCLUSION

After consideration of the facts and circumstances of record, and in light of the Section 33(c) factors, the Board finds that B & M Steel caused the emission of noise onto the complainants' residential lands that unreasonably interfered with the complainants' enjoyment of life and property and their pursuit of lawful business or activity. B & M Steel thereby violated Section 24 of the Envirohmental Protection Act, Ill. Rev. Stat. 1991 ch. $111\frac{1}{2}$, par. 1024.

REMEDY

The record indicates certain activities that B & M Steel could possibly undertake to mitigate its noise emissions to reasonable levels. These would include retrofit exhaust gas mufflers for all pipe handling mobile equipment used in the plant. They would include constructing a building enclosure for the pipe inspection and sorting rack that is insulated to reduce internal reverberations and the similar insulation of the existing building. These measures would finally include minimizing the time the building doors are open during noiseproducing operations.

On the other hand, the record is not complete and contains fragmentary and conflicting information with regard to other possible methods for controlling the noise emissions. For example, B & M Steel disputes the cost and practicability of enclosing the pipe sorting rack and insulating the buildings. However, B & M Steel has provided no information to substantiate its claims.

For the foregoing reasons, the Board will order B & M Steel to study alternatives for controlling specific noises generated by its operations. The Board will require B & M Steel to submit a plan indicating the steps it will take on a specific timetable to bring its operations into compliance with the Act. After the Board has reviewed the plan submitted by B & M Steel, we will issue a final order in this matter.

The foregoing constitutes the Board's interim findings of fact and conclusions of law in this matter.

ORDER

1. The Board hereby finds that B & M Steel has violated Section 24 of the Environmental Protection Act.

2. B & M Steel shall prepare a report of all measures, including reasonable alternative measures, that it believes would be effective to reduce the noise emissions from its "Pettibone" front end loaders and from its pipe handling operations. B & M Steel shall include in this outline the costs associated with implementing each measure or alternative measure, the time it would take to commence and complete implementation of each measure or alternative measure, and the estimated reduction in noise emissions that each measure or alternative measure would achieve.

3. B & M Steel shall file its report with the Board and serve a copy on the complainants no later than September 1, 1992. The complainants may file a response on or before October 1, 1992. I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that the above interim order was adopted on the $\frac{27.21}{7-0}$, 1992, by a vote of $\frac{7-0}{7-0}$.

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Dorothy M. Gunn, Člerk Illinois Pollution Control Board