BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

LOWE TRANSFER, INC. and MARSHALL LOWE, Co-Petitioners, vs. COUNTY BOARD OF McHENRY COUNTY, ILLINOIS Respondents.	)))))))	No. PCB 03-221 (Pollution Control Facility Siting Appeal)

NOTICE OF FILING

TO: See Proof of Service

PLEASE TAKE NOTICE that on September 2, 2003, we filed with the Illinois Pollution Control Board, the attached Lowe Transfer, Inc. and Marshall Lowe's **RESPONSE TO COUNTY BOARD OF McHENRY COUNTY'S BRIEF IN SUPPORT OF ITS DECISION TO DENY SITING APPROVAL TO LOWE TRANSFER, INC.** in the above entitled matter.

LOWE TRANSFER, INC. and
MARSHALL LOWE

By: _____
David W. McArdle

PROOF OF SERVICE

I, a non-attorney, on oath state that I served the foregoing Response on the following party, by hand delivery to on this 2nd day of September, 2003:

Hearing Officer
Bradley P. Halloran
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Ste11-500
Chicago, IL 60601

_____

SUBSCRIBED and SWORN to before me this 2nd day of September, 2003

_____
Notary Public

OFFICIAL SEAL
SHARON PIPPIN
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES: 02/21/06

David W. McArdle
Attorney Registration No. 06182127
ZUKOWSKI ROGERS FLOOD & MCARDLE
50 Virginia Street
Crystal Lake, Illinois 60014
(815) 459-2050
H:\LOWE\NOTFILERESPONSECHIC.TRANSFER.wpd

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

LOWE TRANSFER, INC. and MARSHALL LOWE, Co-Petitioners, vs. COUNTY BOARD OF McHENRY COUNTY, ILLINOIS Respondents.	))))))	No. PCB 03-221 (Pollution Control Facility Siting Appeal)

NOTICE OF FILING

TO: See Proof of Service

PLEASE TAKE NOTICE that on September 2, 2003, we filed with the Illinois Pollution Control Board, the attached Lowe Transfer, Inc. and Marshall Lowe's **RESPONSE TO COUNTY BOARD OF McHENRY COUNTY'S BRIEF IN SUPPORT OF ITS DECISION TO DENY SITING APPROVAL TO LOWE TRANSFER, INC.** in the above entitled matter.

LOWE TRANSFER, INC. and
MARSHALL LOWE

By: _____
David W. McArdle

PROOF OF SERVICE

I, a non-attorney, on oath state that I served the foregoing Response on the following party, by hand delivery on this 2nd day of September, 2003:

Attorney for County Board of McHenry County, Illinois
Charles F. Helsten
Hinshaw and Culbertson
100 Park Avenue
Rockford, IL 61105-1389

_____

SUBSCRIBED and SWORN to before me this 2nd day of September, 2003

_____
Notary Public

"OFFICIAL SEAL"
HELEN A. HARKINS
Notary Public, State of Illinois
My Commission Expires 04/23/05

David W. McArdle
Attorney Registration No. 06182127
ZUKOWSKI ROGERS FLOOD & MCARDLE
50 Virginia Street
Crystal Lake, Illinois 60014
(815) 459-2050
H:\LOWE\NOTFILERESPONSE.TRANSFER.wpd

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

LOWE TRANSFER, INC. and MARSHALL LOWE, Co-Petitioners,	)	No. PCB 03-221
vs.	)	(Pollution Control Facility Siting Appeal)
COUNTY BOARD OF McHENRY COUNTY, ILLINOIS Respondent	)	

RESPONSE TO COUNTY BOARD OF McHENRY COUNTY'S BRIEF IN SUPPORT OF ITS DECISION TO DENY SITING APPROVAL TO LOWE TRANSFER, INC.

Co-Petitioners, Lowe Transfer, Inc. and Marshall Lowe submit this Reply Brief to the brief filed by McHenry County on August 22, 2003.

A. Lowe is in Compliance with State Noise Regulations.

The County erroneously questioned the lack of planning for noise prevention or control by Lowe. The various measures planned and implemented in the design for the Lowe facility were enumerated in Lowe's Memorandum filed on August 22, 2003. Co-Petitioner's Memorandum at pages 13 and 19-20.

Additionally, however, the Board's attention is directed to the supporting letter filed by Thomas D. Thunder from Acoustic Associates, Ltd. (C04025-C04027). Mr. Thunder is a licensed audiologist and a certified noise control engineer. He has over 25 years experience in assessing the compliance of existing and proposed commercial and industrial operations with local, state, and federal noise standards. *Id.*

Mr. Thunder attended the public hearing on the siting application when issues and concerns relating to noise were discussed. He also reviewed the Application's Executive Summary and examined the site engineering drawings. *Id.*

Mr. Thunder analyzed the sound level over distance for the equipment proposed for the Lowe facility. He obtained the specifications for the proposed wheel loader from the manufacturer's representative. He confirmed the sound level given by the manufacturer by comparing that sound level with the literature published by the U.S. Department of Transportation for heavy trucks. *Id.*

Using the standard formula for geometrical spreading of sound waves of 6 dB decrease per doubling of distance, Mr. Thunder calculated the noise attenuation over the distance to the nearest residents, a distance of about 1300 feet, would reduce the sound at the residents' property line to 50 dBA. Atmospheric and ground cover absorption would decrease the sound level another 3 to 4 dB. *Id.*

While the State of Illinois noise regulations apply to each of nine different frequencies, the effective overall limit for noise radiated from industrial to residential land during daytime hours (7:00 a.m. to 10:00 p.m.) is 61 dBA. Based on his calculations, Mr. Thunder concluded the noise generated by the proposed wheel loader at the Lowe facility would clearly meet the state regulations at the nearest residential property. *Id.*

Mr. Thunder further calculated sound levels for the equipment operating on the apron **without** the acoustical benefit of the transfer building. The sound level at the nearest residential property would be 51 dBA. If one factors in the acoustical barrier the transfer building will

provide, there would be an additional 5 to 20 dB of sound attenuation. This sound reduction is directly attributable to the ability of the concrete transfer building to contain sound. *Id.*

An analysis of the noise impacts of the back-up alarms was also conducted by Mr. Thunder. A typical back-up alarm has a sound level of 107 dBA at a distance of 4 ½ feet. Based solely on the geometrical spreading of sound waves, Mr. Thunder concluded the sound level at the nearest residential property would be 59 dBA. Because of the orientation and location of the transfer building, the actual sound level to the residents would be less than 59 dBA. For trucks operating inside the concrete transfer building, the sound would be reduced by an additional substantial amount. *Id.*

Mr. Thunder in his letter also discussed the effect of the ambient background noise levels. Because the nearest residential development is near U. S. Route 14, a busy 4-lane highway, the daytime ambient noise level will be fairly high, around 55 dBA. Any noise from the proposed Lowe operation would typically be inaudible because the background noise would "mask" the noise emanating from Lowe. *Id.*

Mr. Thunder concluded:

> based on the large distance to the nearest residential community, the strategic location of the transfer building, the type of building construction, and the probable ambient noise in the area, this facility as planned and designed should meet the Illinois noise limit and pose negligible impact to the nearby residents. *Id.*

The objector's witness only speculated on possible noise effects. Mr. Thunder was the only expert to provide any evidence in the record. Lowe will be in compliance with the noise regulations of the State of Illinois. The manifest weight of the evidence clearly and plainly demonstrates Lowe has met its burden of proof regarding noise as a factor for Criterion 2.

B. County Misstated the Record Regarding Auto Turn.

The County - in error - states that calculations performed by Mr. Gordon, Lowe's principal design engineer, were "flawed" and, thus, provided a basis for the County to deny Lowe on Criterion 2. County Brief at p. 10. In fact, the record reveals, any flaws in calculations using the Auto Turn modeling program were committed by Mr. Nickodem not Mr. Gordon.

Auto Turn is a computer program which simulates truck movements on different roadways. (C00214, pp. 45-47.). The program has standards for different trucks utilizing differences in size and other factors. *Id.*

Mr. Nickodem did not do the Auto Turn modeling himself as the County readily admits on page 10 of its brief. The modeling was performed by an associate in their Sheboygan office -- not by Mr. Nickodem. (C00214, p.46). He supervised inputting the data and instructing the associate what he wanted for the evaluation. *Id. However,* Mr. Nickodem testified he did not know the wheel base of the truck used in their modeling (C00215, p. 74); did not know the shortest wheel base for a truck that could hold 20 to 21 tons (C00215, p. 75); did not know whether the wheel base used in their modeling was the maximum contained in the Auto Turn program (C00215, p. 77); and did not know the speed assumed for the truck in their modeling. (C00218, p.7).

Mr. Nickodem testified in running models with the Auto Turn program it is important to know the speed assumed for the computer modeling. (C00218, p. 8). As the speed of a truck increases, the truck would need a larger turning radius. *Id.* Yet, he had no knowledge of the speed assumed in their modeling for the Lowe facility. (C00218, p.7).

Mr. Gordon testified that he used the standardized American Association of State Highway and Transportation Officials ("AASHTO") templates in the design contained in the Application. (C00223, p. 7). The AASHTO templates are recognized in the industry as an accepted design tool. (C00223, p. 29). Using the hand templates, a truck with a wheelbase 62 was able to maneuver through the ramps and tunnel with ease. (C00223, p. 13).

After the issue of the Auto Turn program was raised by Mr. Nickodem in his testimony, Mr. Gordon ran the Auto Turn program using a wheelbase 54. (C00223, p. 13). This is the most common wheelbase for transfer trailer and trucks coming into a transfer station. (C0023, p. 26). This would be a 45-foot 100 cubic yard transfer trailer with a conventional 19-foot tractor. (C00223, p. 8).

Before running the Auto Turn modeling, date was entered into the computer program reflecting the specifications of the most common transfer trailer and truck combination. This was done because the Auto Turn program does not include a transfer trailer truck among the standard trucks contained within its computer model. (C00223, p. 18). Upon running the Auto Turn program with the specifications for the typical transfer trailer and truck combination, Mr. Gordon found there was no trouble traversing the site. (C00223, p. 9). The modeling with the Auto Turn also demonstrated the transfer trailer and truck combination would have no trouble maneuvering through the loading tunnel. *Id.*

The modeling done on behalf of the objectors was done using the maximum standard over-the-road truck configuration found in the Auto Turn program - the largest, tallest and heaviest truck contained in the program. No attempt was made by Mr. Nickodem to use the

elements of the Auto Turn program to create truck specifications that would accurately reflect the design of a typical transfer trailer and truck combination.

Unlike the objector's, Mr. Gordon used the flexibility of the Auto Turn program to input the specifications of the most common transfer trailer and truck combination instead of using the maximum standard truck contained in the program. (C00223, p. 18). This approach provides for a modeling more accurately reflecting the trucks that will actually be used on a transfer station site.

Lowe's witness, Mr. Gordon, modeled the traffic flow through the facility using both the AASHTO standardized templates and the Auto Turn program providing inputs specific to the actual track and trailer combinations most common for transfer stations. Under the analysis of both of these methods, the trucks proposed to be used for the Lowe facility had no difficulty maneuvering through the site and the loading tunnels. Lowe's design meets industry standards. The manifest weight of the evidence clearly and plainly demonstrates Lowe has met its burden of proof regarding the designed traffic flow as it relates to Criterion 2.

C. <u>County Staff Report Found that Criterion 3 was Met</u>.

The County in its brief erroneously takes the position the Lowe facility was not designed to minimize the incompatibility with the surrounding area and minimize the effect of the transfer station on the value of the surrounding properties. This position clearly has no support in the evidence contained in the record as discussed in the Lowe's Memorandum filed on August 22, 2003..

Additionally, it should be noted the County hired Patrick Engineering as a consultant for the siting application review process. A member of the firm attended all the public hearings.

(C00178- C00227). Patrick Engineering along with the staff from the McHenry County Department of Planning and Development, the McHenry County State's Attorney Office and the McHenry County Department of Environmental Health prepared a detailed report. (C03852-C03992). The report was prepared following a review of the Application, the transcripts, the exhibits, the public comment and the record as a whole. *Id.*

This report contains the following discussion of "minimize" as it relates to Criterion 3:

> The wording of the criterion implies that there will be externalities associated with the development of a transfer station. The key to this criterion is the word **minimize**. Externalities do not need to be completely mitigated but must be managed to an extent to where they are minimal. (C03870).

In its review of the size of the Lowe facility, County staff stated as follows:

> Mr. Harrison's [Lowe's witness on property values] testimony indicated that the Northbrook transfer station was 2.42 acres and handled 350 tons per day and the ARC facility is 3.28 acres and handles 922 tons per day, which would indicate the 2.64-acre site [Lowe] is not unusually small when compared to the size versus tonnage of other transfer facilities in Illinois. (C03869).

The application and testimony contained information regarding the impact of the proposed transfer station on the character of the area and surrounding property values. In analyzing the Lowe Application, County staff found "the impact of noise will be reduced by the use of a concrete building, the sunken ramps, by the use of the scale house building, and with berms". (C03870). County staff additionally found "steps have been proposed to minimize odors, such as keeping all waste indoors, tarping in the tarping tunnel, daily floor cleaning and not storing waste overnight". *Id.*

The County staff concurred with the testimony presented by Lowe's witnesses that effort was put into the design of the Lowe facility to minimize incompatibility with the character of the

surrounding area. County staff found the testimony of Lowe's witnesses, Larry Peterman and Frank Harrison, indicated this criterion had been met. *Id.*

The manifest weight of the evidence clearly and plainly demonstrates Lowe has met its burden of proof regarding Criterion 3.

Respectfully submitted,
LOWE TRANSFER, INC. and
MARSHALL LOWE
By: Zukowski, Rogers, Flood & McArdle

By: _____
David W. McArdle

David W. McArdle
Attorney No: 06182127
ZUKOWSKI, ROGERS, FLOOD & MCARDLE
Attorney for Lowe Transfer, Inc, and Marshall Lowe
50 Virginia Street
Crystal Lake, Illinois 60014
815/459-2050; 815/459-9057 (fax)