

CITY of NOVI CITY COUNCIL

Agenda Item 2 February 18, 2014

SUBJECT: Consideration of a request from Eberspaecher North America, Inc. for a variance from Section 22-100(d)(1) of the City Code prohibiting loading and unloading of any commercial vehicle between the hours of 8:00 p.m. and 7:00 a.m. within 400 feet of a residential structure. The applicant would like to conduct loading and unloading activities between the hours of 5:00 a.m. and 11:00 p.m. within 210 feet of the adjacent residential property.

SUBMITTING DEPARTMENT: Department of Community Development, Planning Division

CITY MANAGER APPROVAL

BACKGROUND INFORMATION:

Eberspaecher North America, Inc. has requested a variance from the City Code for their property located at 43700 Gen Mar to allow loading and unloading activities to take place outside of the normally permitted hours within 400 feet of a residential structure. The applicant has proposed an additional shift on the site in response to expanding business opportunities. Additionally, the applicant has submitted a letter from a professional engineer specializing in acoustics, noise and vibration to analyze sound levels generated from the loading activities.

Per Section 22-100(d)(1) of the City Code loading and unloading of any commercial vehicle is not permitted between the hours of 8:00 p.m. and 7:00 a.m. (the following day) within 400 feet of a residential structure. The <u>applicant has requested the variance to permit loading and unloading activities to take place between the hours of 5:00 a.m. and 11:00 p.m. on the site within 210 feet of the adjacent residential development (i.e. loading may take place two hours earlier and three hours later than allowed by the City Code).</u>

The applicant has begun construction on an expansion of their parking area to accommodate the additional workers for the added shift and the addition of an outdoor storage tank on the site. Construction is expected to be completed in the spring.

In the attached letter, the applicant contends the loading activities will be screened from the residential development by the existing eight foot berm along the west property line as well as the existing vegetation. Additionally, the applicant has submitted a Noise Study detailing the noise impacts from regular loading and unloading activities at a similar facility.

Impacts to Adjacent Properties

The most obvious impacts to the adjacent residential development would be from a visual perspective and as a noise generator. The existing landscaping and berm adjacent to the residential development would provide adequate screening from any after-hours lighting.

Staff has reviewed the variance request and the submitted Noise Study. The submitted Noise Study assesses noise impacts from an existing Eberspaecher facility in the City of Wixom and also includes an assessment of the noise levels in the area of the subject property. The nighttime residential noise limit per the Zoning Ordinance is 55 dB(A). Exhibits 4 through 10 in

the attached Noise Study evaluate various scenarios that could occur with regular loading and unloading operations. Based on the results of the Noise Study, the loading and unloading operations would exceed permitted noise levels in every scenario evaluated except for one (with expected noise levels ranging from 51 dB(A) to 77 dB(A)), even with the existing berm and vegetation. (For comparison purposes, 77 dB(A) would be roughly equivalent to traffic noise heard when standing 50 feet away from a freeway edge, and 51 dB(a) would be roughly equivalent to an at-home conversation.)

Given the fact that most scenarios surpass the permitted noise levels, the applicant is seeking relief through a variance considered by the City Council. The February 6, 2014 off-week packet memo noted that, given the lack of practical alternatives available, and the long-standing equivalent nature of the use of the property, the City Manager's Office is recommending approval of the variance with the limitations in the hours of delivery offered by the applicant.

The noise control section of the Noise Study indicates that a couple of measures could be attempted to reduce the sound of delivery trucks loading and unloading. The report indicates that applying silencing devices to trucks coming onto the site could reduce the noise generated, but is not always practical or a likely solution for vendors coming to the site. Constructing an expansive sound barrier wall across the extent of the site would reduce the noise levels, but the location and length of the wall that is shown in the Noise Study would block a necessary parking area on site.

Public Notice

Staff has sent a total of 16 letters (example attached) to all property owners within 300 feet of the property as a courtesy. The public was invited to visit contact the Community Development Department with any comments or questions, and encouraged to provide written comments if desired. A public hearing is not required as part of the consideration of variances from the City Code.

Consideration of Variance Request

The City Council is asked to consider the variance request as outlined in Section 1-12 of the City Code. Specifically, a variance may be granted when all of the following are satisfied:

- (1) A literal application of the substantive requirement would result in exceptional, practical difficulty to the applicant;
- (2) The alternative proposed by the applicant will be adequate for the intended use and shall not substantially deviate from the performance that would be obtained by strict enforcement of the standards; and
- (3) The granting of the variance will not be detrimental to the public health, safety or welfare, nor injurious to adjoining or neighboring property, nor contrary to the overall purpose and goals of the chapter or article containing the regulation in question.

RECOMMENDED ACTION: Approval of the request from Eberspaecher North America, Inc. for a variance from Section 22-100(d)(1) of the City Code to allow loading and unloading of any commercial vehicle between the hours of 8:00 p.m. and 7:00 a.m. within 400 feet of a residential structure, with a finding that the standards of City Code Section 1-12, as provided above have been met, subject to the following conditions:

- 1. That the hours for loading and unloading activities shall not extend beyond the requested hours between 5:00 a.m. and 11:00 p.m.
- 2. Noise levels shall be found to be within the levels predicted in the submitted Noise Study, with the worst case being 77 dB(A) measured at the property line.

	2	Y	N
Mayor Gatt			
Mayor Pro Tem Staudt			
Council Member Casey			
Council Member Fischer			

	2	l Y	N
Council Member Markham			
Council Member Mutch			
Council Member Wrobel			



January 16, 2014

Ms. Kristen Kapelanski Planner City of Novi 45175 W. Ten Mile Road Novi, MI 48375

RECEIVED

JAN 2 I 2014

CITY OF NOVI COMMUNITY DEVELOPMENT

Re:

Eberspaecher North America, Inc. Loading/Unloading Variance Request City of Novi Reference No. JSP 13-60

Dear Ms. Kapelanski

The following letter serves to request a variance from the Novi City Council to allow loading and unloading activities for our business outside of the normally permitted hours.

Our business operations have recently increased to the point that expanded shipping hours are now critical to our operations. We are therefore seeking a variance to allow loading and unloading operations between the hours of 5:00 AM to 11:00 PM at our facility located at 43700 Gen Mar.

We understand the concern with the proposed increase in allowable shipping hours, due primarily to the residential areas located to the west of our facility. City ordinance specifies that loading and unloading shall not be permitted between the hours of 8:00 p.m. and 7:00 a.m. within four-hundred feet of residential structures. The loading areas at our site are located between approximately 210 and 330 feet from the nearest residential structure. We note that there currently is an approximately 8' tall landscaping berm between said loading area and the residential area along our west property line, as well as numerous trees that screen our site and help to reduce noise from the loading area.

We have had a noise study completed at this site, which is attached for your reference. Please consider our request, as we feel it represents a critical aspect to our continued business growth in the City.

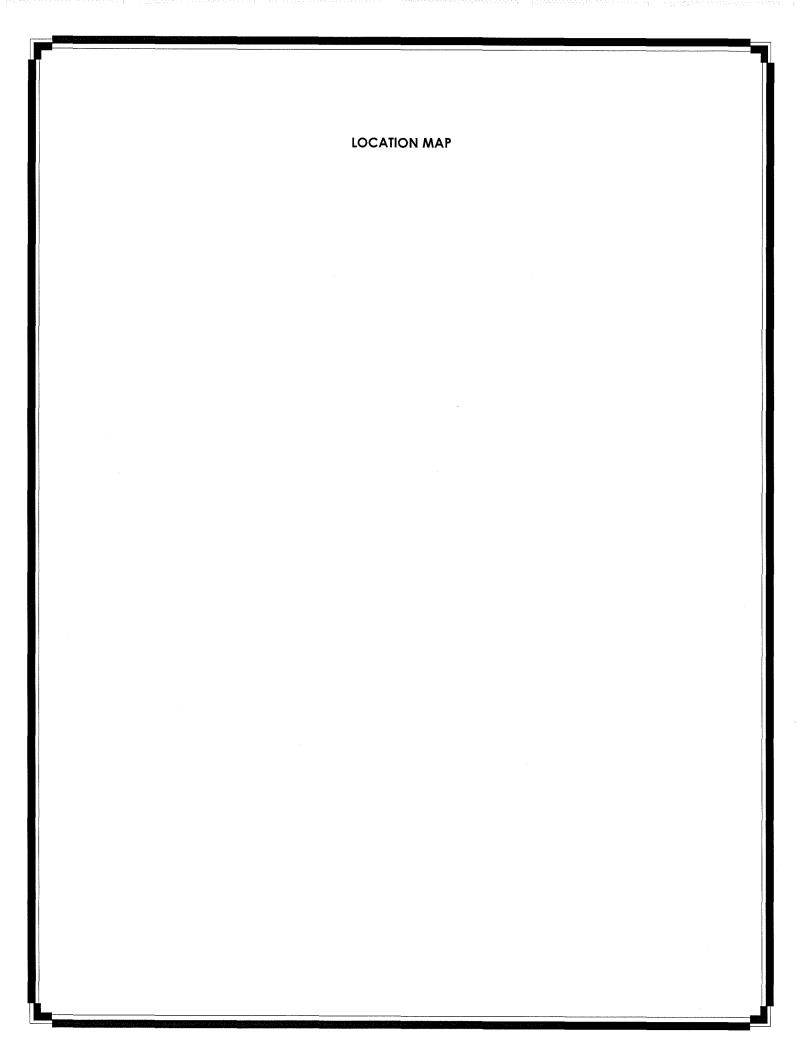
Sincerely,

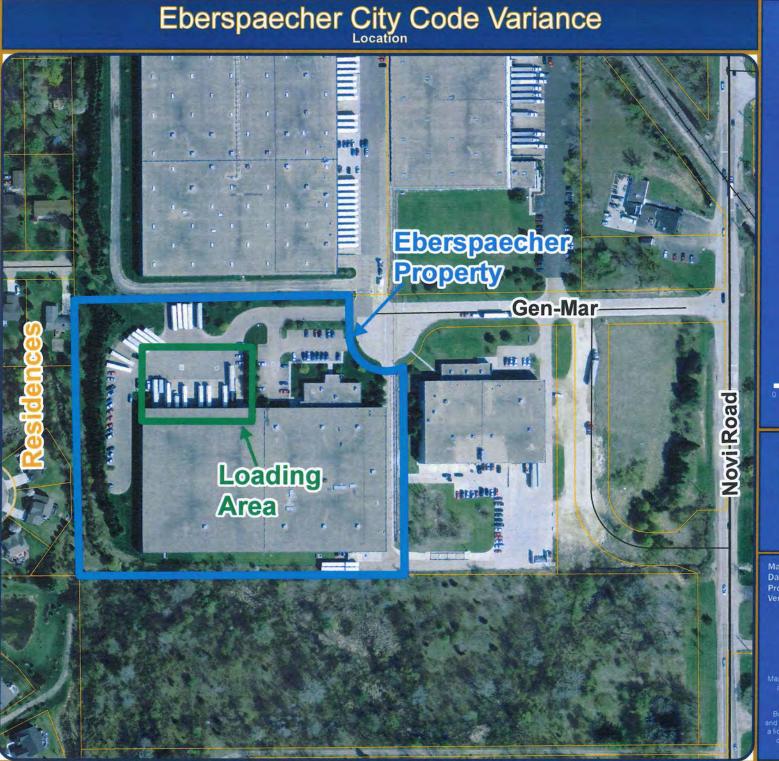
Larry Wojciechowski Plant Manager

Eberspaecher North America, Inc.

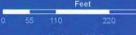
43700 Gen Mar Novi, MI 48375

Eberspaecher North America Inc. · 43700 Gen Mar ·Novi · Michigan 48375 Fax: 248-305-8830





Map Legend
Subject Property



1 inch = 199 feet



City of Novi

Planning Division Community Development Dept. 45175 W Ten Mile Rd Novi, MI 48375 cityofnovi.org

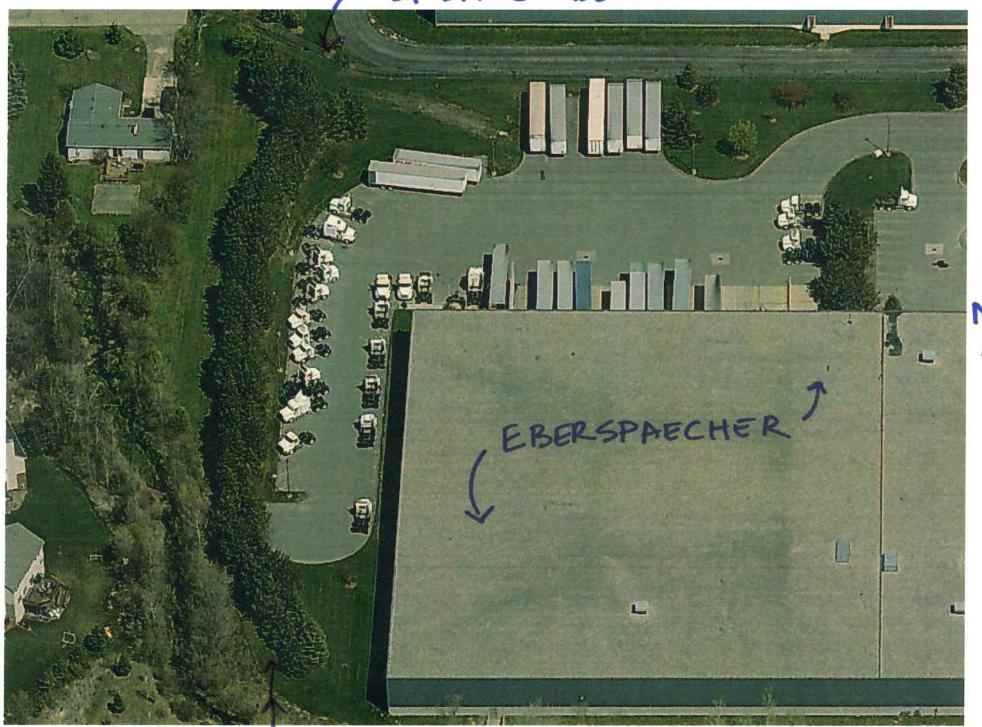
Map Author: Kristen Kapelanski Date: 02-03-14 Project: Eberspaecher Loading Variance Version #: 1.0

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

PHOTOS OF EXISTING BERM AND LANDSCAPING AT WEST PROPERTY LINE

EXISTING BERM



EXISTING BERM



From Eberspaecher parking lot looking west at existing berm and landscaping



From Eberspaecher parking lot looking west at existing berm and landscaping

CITY CODE SECTION 1-12 GENERAL APPEAL

Sec. 1-12. General appeal.

(a)

Where any chapter or article of this Code does not provide procedures for appeals from determinations made in the administration of such chapter or article, the appeal procedures provided herein shall apply.

(b)

An appeal may be taken to the city council by any person adversely affected by, and claiming error in, any order, requirement, permit, decision or refusal of an administrative official carrying out or enforcing the provisions of this Code. Such an appeal shall be filed with the city clerk within ten (10) days of the determination from which the appeal is made.

(c)

A variance may be granted by the city council from regulatory provisions of this Code when all of the following conditions are satisfied:

(1)

A literal application of the substantive requirement would result in exceptional, practical difficulty to the applicant;

(2)

The alternative proposed by the applicant will be adequate for the intended use and shall not substantially deviate from the performance that would be obtained by strict enforcement of the standards; and

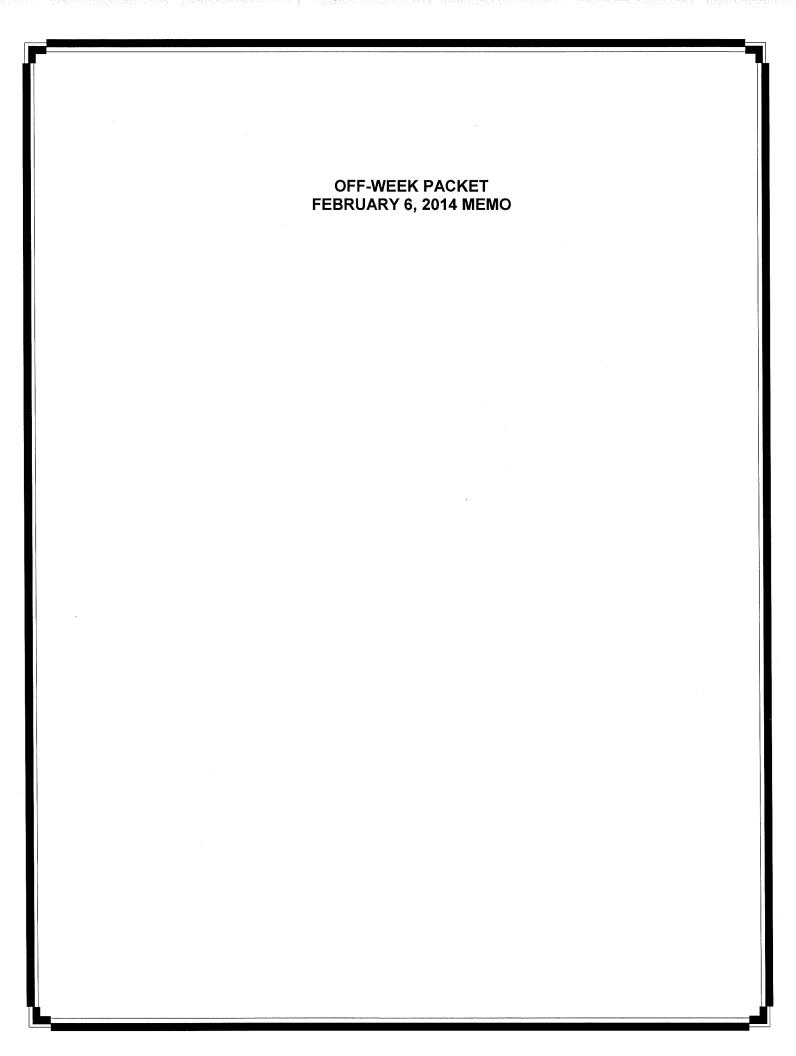
(3)

The granting of the variance will not be detrimental to the public health, safety or welfare, nor injurious to adjoining or neighboring property, nor contrary to the overall purpose and goals of the chapter or article containing the regulation in question.

(d)

This section is not intended to replace appeal procedures otherwise provided in this Code, and shall have no application to those Code chapters and articles which contain specific appeal procedures.

(Ord. No. 88-137, Pt. I, 7-11-88)



MEMORANDUM

practical Considerati



TO: CLAY PEARSON, CITY MANAGER

THRU: BARBARA MCBETH, AICP, DEPUTY DIRECTOR COMMUNITY

DEVELOPMENT

FROM: KRISTEN KAPELANSKI, AICP, PLANNER KJUSTY

SUBJECT: CITY COUNCIL VARIANCE REQUEST FROM EBERSPAECHER

DATE: FEBRUARY 6, 2014

Eberspaecher North America, Inc. has formally requested a variance from the City Code for their property located at 43700 Gen Mar to allow loading and unloading activities to take place outside of the normally permitted hours within 400 feet of a residential structure. The applicant has proposed an additional shift on the site in response to expanding business opportunities. Additionally, the applicant has submitted a letter from a professional engineer specializing in acoustics, noise and vibration to analyze sound levels generated from the loading activities.

Per Section 22-100(d)(1) of the City Code loading and unloading of any commercial vehicle is not permitted between the hours of 8:00 p.m. and 7:00 a.m. (the following day) within 400 feet of a residential structure. The applicant has requested the variance to permit loading and unloading activities to take place between the hours of 5:00 a.m. and 11:00 p.m. on the site within 210 feet of the adjacent residential development (i.e. loading may take place two hours earlier and three hours later than allowed by the City Code).

The applicant has begun construction on an expansion of their parking area to accommodate the additional workers for the added shift and the addition of an outdoor storage tank on the site. Construction is expected to be completed in the spring.

In the attached letter, the applicant contends the loading activities will be screened from the residential development by the existing 8 foot berm along the west property line as well as the existing vegetation. Additionally, the applicant has submitted a Noise Study detailing the noise impacts from regular loading and unloading activities at a similar facility.

The most obvious impacts to the adjacent residential development would be from a visual perspective and as a noise generator. The existing landscaping and berm adjacent to the residential development would provide adequate screening from any after-hours lighting.

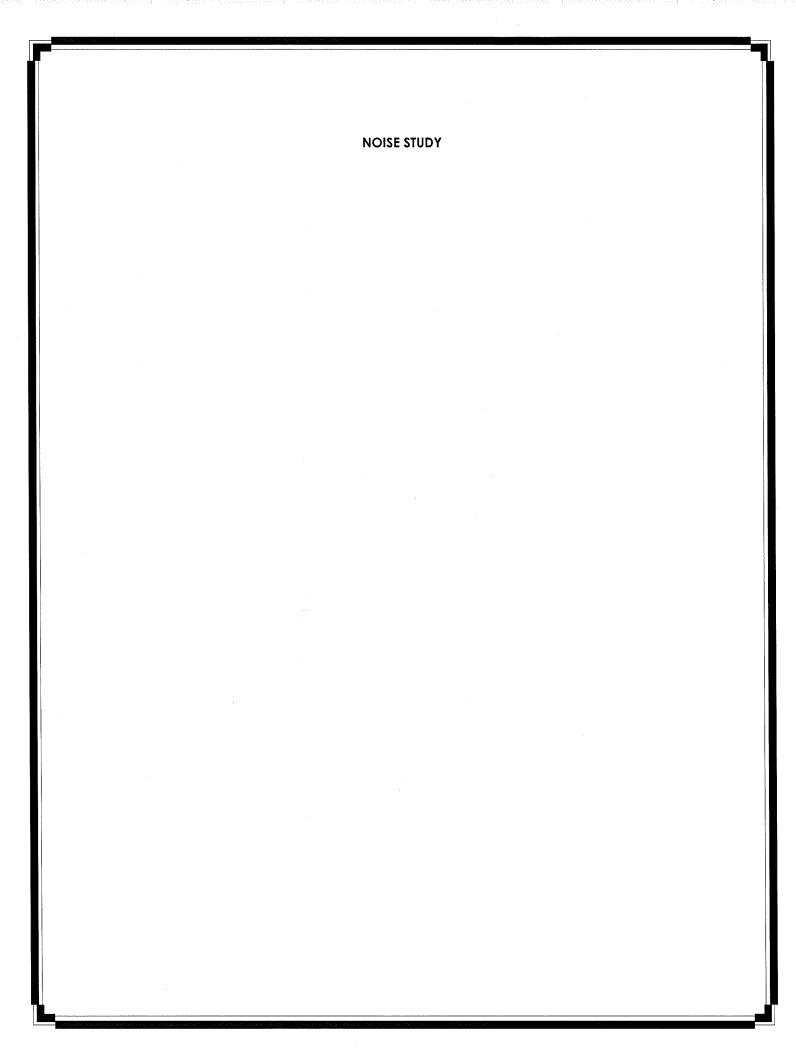
Staff has reviewed the variance request and the submitted Noise Study. The submitted Noise Study assesses noise impacts from an existing Eberspaecher facility in the City of Wixom and also includes an assessment of the noise levels in the area of the subject property. The nighttime residential noise limit per the Zoning Ordinance is 55 dB(A). Exhibits 4 through 10 in the attached Noise Study evaluate various scenarios that could occur with regular loading and unloading operations. Based on the results of the Noise

Study, the loading and unloading operations would exceed permitted noise levels in every scenario evaluated except for one (with expected noise levels ranging from 51 dB(A) to 77 dB(A)), even with the existing berm and vegetation. (For comparison purposes, 77 dB(A) would be roughly equivalent to traffic noise heard when standing 50 feet away from a freeway edge, and 51 dB(a) would be roughly equivalent to an at-home conversation.) Given the fact that most scenarios surpass the permitted noise levels, planning staff cannot support the requested variance.

The noise control section of the Noise Analysis indicates that a couple of measures could be attempted to reduce the sound of delivery trucks loading and unloading. The report indicates that applying silencing devices to trucks coming onto the site could reduce the noise generated, but is not always practical or a likely solution for vendors coming to the site. Constructing an expansive sound barrier wall across the extent of the site would reduce the noise levels, but the location and length of the wall that is shown in the Noise Analysis would block a necessary parking area on site.

This request is expected to proceed to the City Council for consideration at an upcoming meeting.

C Victor Cardenas, Assistant City Manager Charles Boulard, Community Development Director Lauren Royston, Director of Economic Development Tom Schultz, City Attorney







2013-129 July 1, 2013

Mr. Chris. Coleman Eberspaecher Exhaust Technology of the Americas 2035 Charles Orndorf Drive Brighton, Michigan 48116

Subject: Prediction of Property Line Sound Levels

re: Manufacturing Facility Loading Dock,

Novi, Michigan

Dear Mr. Coleman:

At your request and authorization, Kolano and Saha Engineers, Inc. (K&SE) conducted an investigation of property line sound levels expected from the newly developed manufacturing plant in Novi, MI. The reason for our study was to evaluate the Loading Dock and associated activities to determine the plausibility of acquiring a variance to the Novi Ordinance which limits loading activities during nighttime in the vicinity of residential properties. To evaluate the loading dock noise condition, we measured the sound levels of loading dock activities at another Eberspaecher facility in Wixom, MI. We then used these measured levels to construct a model of the Novi facility and predict the sound levels at this location and its boundary to the west. The details of this study follow below.

Eberspaecher Novi Site

The location of the Eberspaecher Novi facility is on Gen Mar Drive, west off Novi Road and south of Grand River Avenue. The Eberspaecher site is zoned light industrial. Properties to the north and east are also zoned light industrial. The property to the south is zoned Office Service and property to the west is zoned Residential.

In order to properly evaluate the noise impact of the proposed expansion of the existing Wal-Mart store, predictive modeling was conducted using advanced computer software¹ and information regarding the proposed site, buildings, loading dock activities and deliveries by truck.

Ambient Sound Level Measurements

To help assess the current noise condition in proximity of the Eberspaecher Novi facility and the neighboring residents to the west, ambient sound levels were measured over a period of 2 days near the northwest corner of the Eberspaecher site. **Exhibit 1** provides a site picture with the

¹ Cadna A as developed by DataKustik GmbH, Munich Germany

location where these measurements were conducted. From these measurements, we recorded the average hourly sound level and the hourly L_{90} sound level. L_{90} is a statistical minimum that represents the sound level that was exceeded 90% of the time. The L_{90} is an industry standard to help determine the background sound level. The background sound level is considered to be the ambient sound level in the absence of other intermittent, temporal, and specific sources of noise under study.

The results of the ambient sound level measurements are provided in **Exhibits 2 and 3**. From these measurements we can see that overnight low average sound level is around 45 dB(A) and the overnight low L_{90} is around 39 to 40 dB(A). Given these levels being much lower than that of the Novi Ordinance (cited below), the ordinance is likely the criterion to which this should be evaluated. However, in awarding a variance, Novi could select a more stringent criterion that reflects the ambient noise condition.

City of Novi Ordinance Noise Limits & Loading

Excerpts from the ordinance directly pertaining to the loading dock activities for this study are as follows:

Sec. 22-100. Idling, standing, and loading/unloading of motor vehicles.

- (a) Findings and purpose. The city council having determined that exhaust and noise from standing, idling, and loading/unloading of motor vehicles and equipment presents an unreasonable risk to the general health safety and welfare of the community and otherwise presents a nuisance to residents living in close proximity to vehicles being loaded/unloaded or left standing or idling, this section is hereby adopted for the purpose of regulating standing, idling, and loading/unloading of motor vehicles and equipment in the City of Novi as follows...
- (c) Idling, standing prohibited.
 - (1) Between the hours of 8:00 p.m. and 7:00 a.m. (the following day), it shall be unlawful to permit, cause, or occupy any standing or idling motor vehicle or commercial vehicle within four hundred (400) feet of any residential structure, for more than fifteen (15) consecutive minutes or for a period or periods of time aggregating more than fifteen (15) minutes in any one (1) hour, for any reason other than compliance with a traffic control signal or device or traffic congestion, on any street, parking lot, or loading or delivery zone, dock, bay, or area...
- (d) Loading, unloading restricted.
 - (1) Between the hours of 8:00 p.m. and 7:00 a.m. (the following day), it shall be unlawful for any person to load/unload or permit the loading or unloading of any commercial vehicle within four hundred (400) feet of a residential structure, in any street, parking lot, or loading or unloading zone, dock, bay or area...

Furthermore, the City of Novi Code, Part II – Code of Ordinances, Appendix A – Zoning, Section 2519, Subsection 10 - Noise, restricts receiving residential property noise levels to 60dB(A) daytime and 55dB(A) nighttime.

All bays of the loading dock are within 400 feet of the closest residential structure. Therefore, the above provisions of the Novi code would apply. In order to obtain a variance for these provisions, it would need to be demonstrated that the impact of exhaust gas and noise created by the loading/unloading activities, that were the reason for the above ordinance provisions, would not be applicable in this case.

In our opinion, to be considered for a variance of the 400 foot distance limitation it would need to be demonstrated that noise from the loading dock would not exceed the nighttime noise limit. In order to evaluate the noise from the Eberspaecher loading dock, we conducted sound level measurements of an existing similar loading dock in Wixom and used this sound level data to predict the noise produced at the Novi facility.

Loading Dock Sound Measurements and Modeling

Sound is a physical phenomenon that can be readily predicted with reasonable accuracy. In order to evaluate the sounds created by activities and operations of the not yet operational Eberspaecher facility in Novi, we developed an advanced three dimensional computer model to accurately predict the resulting sound levels created due to the loading dock operations. Based on similar operations at the Eberspaecher Wixom facility, we measured the various loading dock activities that are expected to generate noise at the Novi facility. The computer program we use relies on international standards (such as ISO 9613) to properly calculate and predict sound levels. The computer program relies on user inputs of terrain, structures, foliage, obstacles, sound reflective and absorptive surfaces, receiver positions, as well as the type of sound sources with characteristic sound levels and frequency spectrum.

By using this predictive tool we have constructed a virtual acoustic model of the Eberspaecher facility with a particular focus on the loading dock. Only basic details were constructed in the acoustic model as this was to be a preliminary investigation to determine feasibility of a 24-hour operating loading dock. The predicted noise levels were compared to local ambient noise and the Novi Noise code. **Exhibits 4 through 10** provide various basic scenarios of truck noise related to driving, idling, backing up and pneumatic brake pressure release. All but 1 of these examples exceeds the nighttime residential noise limit of 55 dB(A). The scenario with the highest level is that of a truck backing up with a pneumatic brake pressure release. In this scenario, Exhibit 6, the components contributing to the highest level at the property line of 77 dB(A) are; pneumatic brakes - 76 dB(A), engine - 62 dB(A), exhaust- 51 dB(A), backup alarm - 49 dB(A). The pneumatic brake pressure release is a momentary noise event that varies in level based on design and performance variations within the system and will vary from truck to truck.

Noise Control of Trucks

Based on these predicted levels, obtaining a variance is not likely. However, noise controls can reduce these levels. The question is, how much effort would be required to reach the ordinance criterion? Noise controls are usually most effective, that is provides the greatest noise reduction, when applied directly to the source. However, this is not always practical. Requiring venders to

apply silencing devices to trucks coming on site is not a likely solution. Alternately, interrupting the noise path with a sound barrier between the trucks and the residents is likely a more practical solution. Due to a wide area the trucks will move in, an effective sound barrier will have to be wide, extending the areas the trucks will be located. Additionally, the barrier will need to be tall in order to reduce the low frequency noise associated with the trucks.

To demonstrate the effectiveness of a sound barrier wall, we conducted a second evaluation of the loading dock with an expansive sound barrier wall. The results of this modeling are provided in Exhibits 11 through 15. While this specific example is not likely a complete solution for this site, it demonstrates that it is possible to achieve the noise reduction needed with the use of a sound barrier wall. In a similar fashion, a building extension could also serve as a sound barrier.

Conclusion

With the current configuration of the Eberspaecher Novi facility, we don't expect that a petition for a variance to the ordinance *Sec. 22-100. Idling, standing, and loading/unloading of motor vehicles* to be successful. With expected sound levels well above the nighttime limit, we anticipate a request for variance to be denied without the addition of noise control measures.

Noise controls that are most likely to be effective in this scenario will consist of a sound barrier, either a wall or building addition, which will shield noise from the residential properties. The design of such a barrier needs to take into account the height and locations where trucks will travel as well as sound reflections from the adjacent building to the north. Alternately, it may be possible to conduct loading operations at a portion of the building that is greater than 400 feet from residential structures.

Mr. Coleman, we appreciate being of service to Eberspaecher. Don't hesitate to call with any questions you may have regarding this work or if you would like to pursue noise control options.

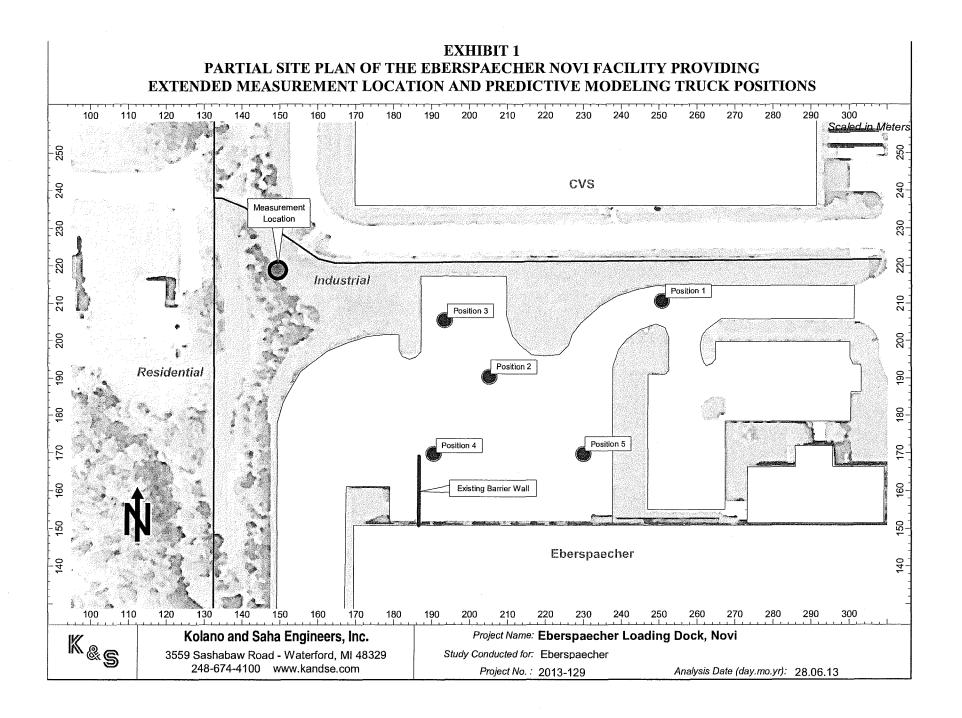
Sincerely.

KOLANO AND SAHA ENGINEERS, INC.

Darren Brown, P.E. INCE Board Certified

INCE Board Certine

Consultant

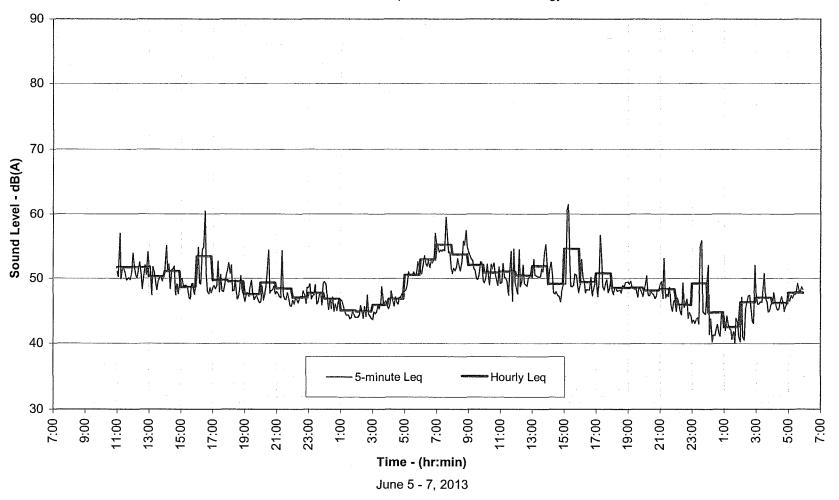


Project No.: 2013-129

EXHIBIT 2

Ambient Sound Level Measurements at an Eberspaecher Facility on Gen Mar Drive in Novi, MI Measurement Location in the Northwest Corner of the Site Adjacent to Residential Zoning

5-minute and 1-hour Averaged Sound Level Data
Measurements Conducted for: Eberspaecher Exhaust Technology of the Americas

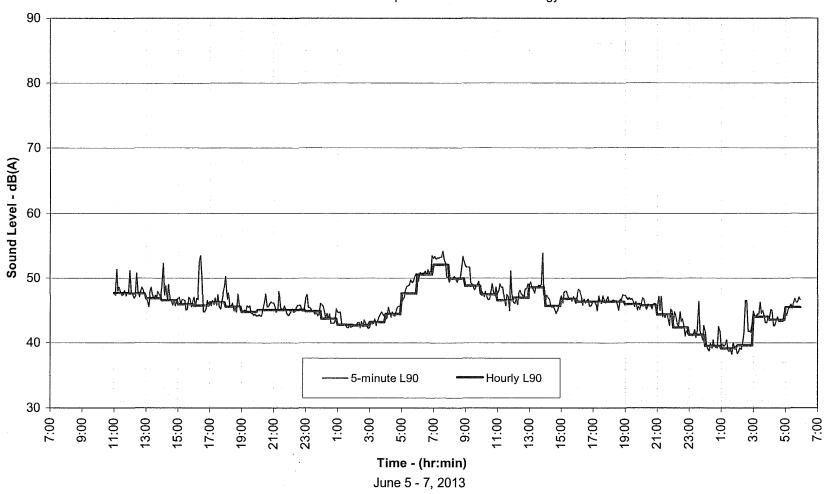


Project No.: 2004-254

EXHIBIT 3

Ambient Sound Level Measurements at an Eberspaecher Facility on Gen Mar Drive in Novi, MI Measurement Location in the Northwest Corner of the Site Adjacent to Residential Zoning

5-minute and 1-hour L_{90} (statistical minimum) Sound Level Data Measurements Conducted for: Eberspaecher Exhaust Technology of the Americas



EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; CURRENT SITE LAYOUT TRUCK APPROACHING LOADING DOCK - POSITION 1 150 170 180 190 200 210 220 230 240 140 160 270 280 290 300 Scaled in Meters 250 CVS 240 230 230 220 210 210 200 200 190 190 65 8 **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) Existing Barrier Wall > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) 55 > 55.0 dB(A) $> 60.0 \, dB(A)$ Eberspaecher > 65.0 dB(A) 46 > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) 120 150 190 200 250 270 280 Kolano and Saha Engineers, Inc. K_&s Project Name: Eberspaecher Loading Dock, Novi 3559 Sashabaw Road - Waterford, MI 48329 Study Conducted for: Eberspaecher 248-674-4100 www.kandse.com Project No.: 2013-129 Analysis Date (day.mo.yr): 21.06.13

EXHIBIT 4

EXHIBIT 5 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; CURRENT SITE LAYOUT TRUCK APPROACHING LOADING DOCK - POSITION 2 180 300 100 110 150 160 190 200 210 220 230 240 260 270 280 290 Scaled in Meters CVS 240 240 230 230 220 220 210 210 -50-200 96 8 70 180 **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) 160 > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) > 55.0 dB(A) > 60.0 dB(A) Eberspaecher > 65.0 dB(A) > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A)> 85.0 dB(A) 120 160[°] 180 190 240 280 K_&s Kolano and Saha Engineers, Inc. Project Name: Eberspaecher Loading Dock, Novi 3559 Sashabaw Road - Waterford, MI 48329 Study Conducted for: Eberspaecher 248-674-4100 www.kandse.com Analysis Date (day.mo.yr): 21.06.13 Project No.: 2013-129

EXHIBIT 6 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; CURRENT SITE LAYOUT TRUCK BACKING UP WITH PNEUMATIC BRAKE PRESSURE RELEASE - POSITION 3 Scaled in Meters CVS **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) > 40.0 dB(A)> 45.0 dB(A) > 50.0 dB(A) > 55.0 dB(A) > 60.0 dB(A) Eberspaecher > 65.0 dB(A) > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) Kolano and Saha Engineers, Inc. Project Name: Eberspaecher Loading Dock, Novi K_{&S} 3559 Sashabaw Road - Waterford, MI 48329 Study Conducted for: Eberspaecher 248-674-4100 www.kandse.com Project No.: 2013-129 Analysis Date (day.mo.yr): 21.06.13

EXHIBIT 7 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; CURRENT SITE LAYOUT TRUCK; LOW IDLE AT LOADING DOCK - POSITION 4 100 110 140 150 160 170 180 190 200 210 220 230 240 260 270 280 290 300 Scaled in Meters 22 CVS 240 230 230 220 220 210 210 200 200 9 190 180 180 **Sound Level Contours** 170 > 30.0 dB(A) > 35.0 dB(A) 160 > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) 150 > 55.0 dB(A) > 60.0 dB(A) Eberspaecher > 65.0 dB(A) 140 > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) 120 160 190 280 K_&s Kolano and Saha Engineers, Inc. Project Name: Eberspaecher Loading Dock, Novi 3559 Sashabaw Road - Waterford, MI 48329 Study Conducted for: Eberspaecher 248-674-4100 www.kandse.com Project No.: 2013-129 Analysis Date (day.mo.yr): 21.06.13

EXHIBIT 8 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; CURRENT SITE LAYOUT TRUCK; HIGH IDLE AT LOADING DOCK - POSITION 4 Scaled in Meters CVS **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) > 55.0 dB(A) > 60.0 dB(A)Eberspaecher > 65.0 dB(A) > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) K_&s Kolano and Saha Engineers, Inc. Project Name: Eberspaecher Loading Dock, Novi Study Conducted for: Eberspaecher 3559 Sashabaw Road - Waterford, MI 48329 248-674-4100 www.kandse.com Analysis Date (day.mo.yr): 21.06.13 Project No.: 2013-129

EXHIBIT 9 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; CURRENT SITE LAYOUT TRUCK; LOW IDLE AT LOADING DOCK - POSITION 5 Scaled in Meters CVS **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) > 55.0 dB(A) > 60.0 dB(A) Eberspaecher > 65.0 dB(A) > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) K_&s Kolano and Saha Engineers, Inc. Project Name: Eberspaecher Loading Dock, Novi Study Conducted for: Eberspaecher 3559 Sashabaw Road - Waterford, MI 48329 248-674-4100 www.kandse.com Project No.: 2013-129 Analysis Date (day.mo.yr): 21.06.13

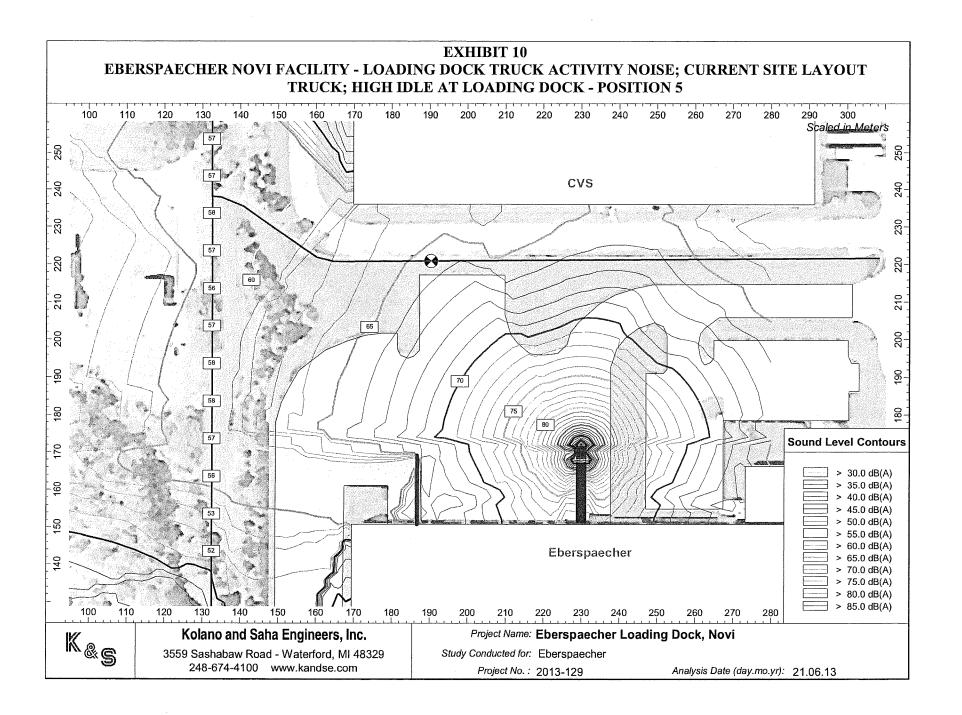


EXHIBIT 11 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; THEORETICAL SITE LAYOUT TRUCK APPROACHING LOADING DOCK - POSITION 1 Scaled in Meters Sound Barrier Wal **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) > 55.0 dB(A) > 60.0 dB(A) > 65.0 dB(A) > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) K_&s Kolano and Saha Engineers, Inc. Project Name: Eberspaecher Loading Dock, Novi 3559 Sashabaw Road - Waterford, MI 48329 Study Conducted for: Eberspaecher 248-674-4100 www.kandse.com Project No.: 2013-129 Analysis Date (day.mo.yr): 20.06.13

EXHIBIT 12 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; THEORETICAL SITE LAYOUT TRUCK APPROACHING LOADING DOCK - POSITION 2 180 190 Scaled in Meters **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) > 55.0 dB(A) > 60.0 dB(A) > 65.0 dB(A) > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) K_&s Kolano and Saha Engineers, Inc. Project Name: Eberspaecher Loading Dock, Novi 3559 Sashabaw Road - Waterford, MI 48329 Study Conducted for: Eberspaecher 248-674-4100 www.kandse.com Project No.: 2013-129 Analysis Date (day.mo.yr): 20.06.13

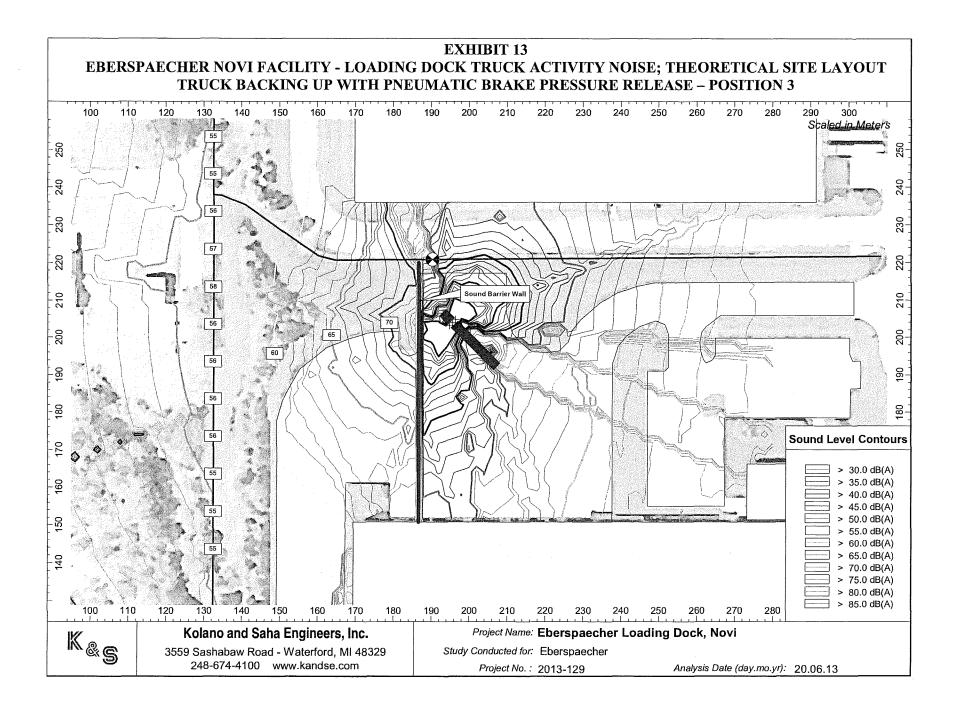


EXHIBIT 14 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; THEORETICAL SITE LAYOUT TRUCK; HIGH IDLE AT LOADING DOCK - POSITION 4 180 100 110 120 130 140 150 170 190 200 210 220 230 240 250 260 270 280 290 300 Scaled in Meters 240 230 230 220 210 210 200 200 6 190 180 **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) -86 > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) 120 > 55.0 dB(A) > 60.0 dB(A) > 65.0 dB(A) 140 > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) 160 150 190 250 270 Kolano and Saha Engineers, Inc. K_&s Project Name: Eberspaecher Loading Dock, Novi Study Conducted for: Eberspaecher 3559 Sashabaw Road - Waterford, MI 48329 248-674-4100 www.kandse.com Analysis Date (day.mo.yr): 20.06.13 Project No.: 2013-129

EXHIBIT 15 EBERSPAECHER NOVI FACILITY - LOADING DOCK TRUCK ACTIVITY NOISE; THEORETICAL SITE LAYOUT TRUCK; HIGH IDLE AT LOADING DOCK - POSITION 5 180 290 300 190 200 210 220 230 240 250 260 270 280 100 110 Scaled in Meters 250 240 230 230 220 Sound Barrier Wal 210 210 200 96-75 180 **Sound Level Contours** > 30.0 dB(A) > 35.0 dB(A) 9 > 40.0 dB(A) > 45.0 dB(A) > 50.0 dB(A) 150 > 55.0 dB(A) > 60.0 dB(A) > 65.0 dB(A) 40 > 70.0 dB(A) > 75.0 dB(A) > 80.0 dB(A) > 85.0 dB(A) 110 120 160 230 250 260 180 190 200 220 Kolano and Saha Engineers, Inc. Project Name: Eberspaecher Loading Dock, Novi K_&s Study Conducted for: Eberspaecher 3559 Sashabaw Road - Waterford, MI 48329 248-674-4100 www.kandse.com Project No.: 2013-129 Analysis Date (day.mo.yr): 20.06.13

COURTESY NOTICE SENT TO PROPERTIES WITHIN 300 FEET



CITY COUNCIL

Mayor Bob Gatt

Mayor Pro Tem Dave Staudt

Andrew Mutch

Justin Fischer

Wayne Wrobel

Laura Marie Casey

Gwen Markham

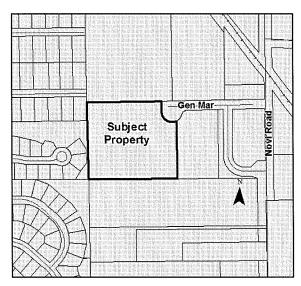
City Manager Clay J. Pearson

City Clerk Maryanne Cornelius Re: City Code Variance Request from Eberspaecher North America Inc. (43700 Gen Mar)

To Whom it may concern:

The City of Novi has received a request for a variance from the City Code for Eberspaecher North America, Inc. located at 43700 Gen Mar to allow loading and unloading activities to take place outside of the normally permitted hours within 400 feet of a residential structure.

Per Section 22-100(d)(1) of the City Code loading and unloading of any commercial vehicle is not permitted between the hours of 8:00 p.m. and 7:00 a.m. (the following day) within 400 feet of a



residential structure. The applicant has requested the variance to permit loading and unloading activities to take place between the hours of 5:00 a.m. and 11:00 p.m. on the site within 210 feet of the adjacent residential development (i.e. loading may take place two hours earlier and three hours later than allowed by the City Code).

This letter serves as a courtesy notice of the request. The variance request will be considered by the City Council at an upcoming meeting. City Council meetings begin at 7PM and are held in the Council Chambers at the Novi Civic Center (45175 Ten Mile Rd.). City Council agendas are posted on the City's website (www.cityofnovi.org) the Friday prior to all City Council meetings.

Written comments are preferred and should be directed to the Community Development Department. Members of the public are also welcome to comment during the Audience Participation portion of the scheduled City Council meeting. Questions and comments can be directed to Barbara McBeth (248.347.0587 or bmcbeth@cityofnovi.org) or Kristen Kapelanski (248.347.0586 or kkapelanski@cityofnovi.org) in the City of Novi Community Development Department.

Sincerely,

Kristen Kapelanski

Gith Jun.

City of Nov! 45175 W. Ten Mile Road Novi, Michigan 48375 248.347.0460 248.347.0577 fax

cityofnovi.org