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September 19, 2017

W.A.T.E.R.
P.O. Box 873
Mt. Shasta, CA 96067

Gateway Neighborhood Association
724 Butte Ave.
Mt. Shasta, CA 97067

Subject: Crystal Geyser Final Environmental Impact Report (FEIR) – Comments on Noise Issues

Ms. Ryan Sawyer
Analytical Environmental Services,
1801 7th Street Sacramento, CA 95811
crystalgeyser@analyticalcorp.com

Dear Ms. Sawyer:

W.A.T.E.R. and the Gateway Neighborhood Association asked me to review the Crystal Geyser FEIR responses to comments I submitted on the DEIR noise section and the noise technical report by Bollard Acoustical Consultants, Inc. (Bollard; revised report, September 7, 2017, included in the FEIR as Revised Appendix T). As a consultant in environmental air quality and acoustics, I have more than 20 years of experience in the preparation and review of environmental technical reports for a wide variety of commercial, transportation, and urban development projects in California.

Regarding CEQA Consultant's Responses to DEIR Comment Letter P77 (GEOFFREY HORNEK)

(Note: Geoffrey Hornek's counter-response shown in red below with special emphasis to underlined portions of the Consultant's text)

Response to Comment P77-1

Audibility is not the threshold of significance under CEQA (please refer to Draft EIR, Section 4.10.4, Thresholds of Significance subsection). The CEQA guidelines are clear that the increase in noise resulting from a project must be “substantial” for the finding of a significant noise impact, not merely audible. Ambient noise level data collected in the community indicates that the **project area noise environment is defined by background noise from I-5 with periodic increases due to local traffic and railroad passages.** (pg 3-299)

Audibility is an important factor in determining a sound’s capacity to cause community annoyance, sleep disturbance, speech disruption, etc. and it underlies the thresholds of significance chosen/adopted for CEQA noise analysis. Also, the key characteristic of sound considered in most CEQA studies is relative audibility (i.e., the average sound pressure level and/or the sound pressure levels in each octave bands of the potentially disruptive sound relative to the average sound pressure level and/or the sound pressure levels in each octave band of the existing background) not absolute audibility (i.e., whether the sound pressure is above the accepted threshold of human hearing – 20 micropascals @ 1000 Hz).

For the most common forms of environmental noise (i.e., motor vehicle traffic and train/aircraft operations), there is usually some existing exposure of sensitive receptors to noise from these sources, as is the case for the existing residential receptors surrounding the subject Crystal Geyser plant. For these sources, the CEQA incremental impact thresholds can allow some elevation of ambient noise level unless the existing background level is already high. But in cases where a new industrial noise source producing especially disruptive sound on a continuous basis is introduced near an existing residential area, a more restrictive CEQA threshold is needed to assure continuing tranquility of that community. This must be assured by requiring that average sound pressure level and the sound pressure levels in each octave band of the intruding industrial sound be reduced substantially below ambient levels. Thus, making it relatively inaudible, especially during noise-sensitive periods (i.e., evening, night and early morning hours when most people sleep).

The noise generation of the **project was evaluated relative to both Siskiyou County and City of Mt. Shasta noise policies**, as well as the CEQA Guidelines Appendix G Checklist. Because the project noise-generation will be **broadband in nature, and overlaid on a fairly broadband background noise environment, the FICON thresholds** for determining whether a significant increase in noise would result from the project are suitable for this project. While project-generated noise will be audible at some of the residences in the project vicinity, noise impacts evaluated relative to these widely used FICON thresholds were determined to be less than significant. (pg 3-299)

The County and City standards used in the DEIR are long-term (i.e., 24-hour) averages meant to define generally acceptable noise exposures for new sensitive land uses exposed to noise from existing sources commonly found in County and/or City. They can rightly be applied to judge the acceptability of noise impacts from project traffic sources on existing residential uses near the site and its access roads. But they are not appropriate to judging the severity of noise impacts from project on-site industrial sources (i.e., rooftop ventilation fans, air conditioners, generators, etc.). Noise from such on-site machinery is a new type of noise source that did not affect the local residents before the CG plant was built. It must be inaudible to its residential neighbors as

demonstrated by modeling and reduced by installing noise attenuation features to assure that it will be substantially below local ambient background levels at all hours of the day with special attention to nighttime hours to avoid sleep disturbance its residential neighbors

The FICON thresholds used in the DEIR to determine incremental significance for all project noise sources are out-of-date and inappropriate for industrial noise sources. They have been superseded for by incremental thresholds developed by the Federal Transit Administration (FTA) for transportation noise sources, which are more stringent than the FICON thresholds at noise exposure levels common in most environmental circumstances, as shown by comparison in the table below.

Comparison of FICON and Federal Transit Administration (FTA) Incremental Noise Standards		
Ambient Noise Level without Project (Ldn)	Noise Increase Required for Significant Impact (FICON)	Noise Increase Required for Significant Impact (FTA)
< 60 dB	+ 5.0 dB or more	+ 3.0 dB or more
60 – 65 dB	+ 3.0 dB or more	+ 2.0 dB or more
65 – 75 dB	+ 1.5 dB or more	+ 1.0 dB or more
> 75 dB	+ 1.5 dB or more	0 dB

The FTA noise criteria (but not FICON's) are well founded in regulatory agency guidance and scientific studies, including:

- *US Environmental Protection Agency Levels Document*
- *CHABA Working Group 69, Guidelines for Preparing Environmental Impact Statements on Noise*
- *American Public Transit Association Guidelines*
- *Synthesis of Social Surveys on Noise Annoyance (Schultz 1978)*
- *US Department of Housing and Urban Development Standards*

But the FTA and FICON standards not are applicable to judging the severity of incremental noise impacts from project on-site industrial sources (i.e., rooftop ventilation fans, air conditioners, generators, etc.). Noise from industrial sources is not "broadband in nature." It has a completely different frequency spectrum than background levels that in most cases are dominated by transportation sources. To be less than significant for CEQA purposes, project machinery noise levels must be low enough, or made low enough, on average and in each octave band, to be inaudible to its residential neighbors throughout the day, especially during nighttime hours.

Long-term exposure to excessive noise levels can cause hearing damage. However, the long-term noise generation of the project is clearly identified in Draft EIR, Section 4.10, Table 4.10-12 as being approximately 50 dBA at the nearest potentially affected residences, which is consistent with existing ambient noise environments and well below acknowledged thresholds required for the onset of hearing damage.

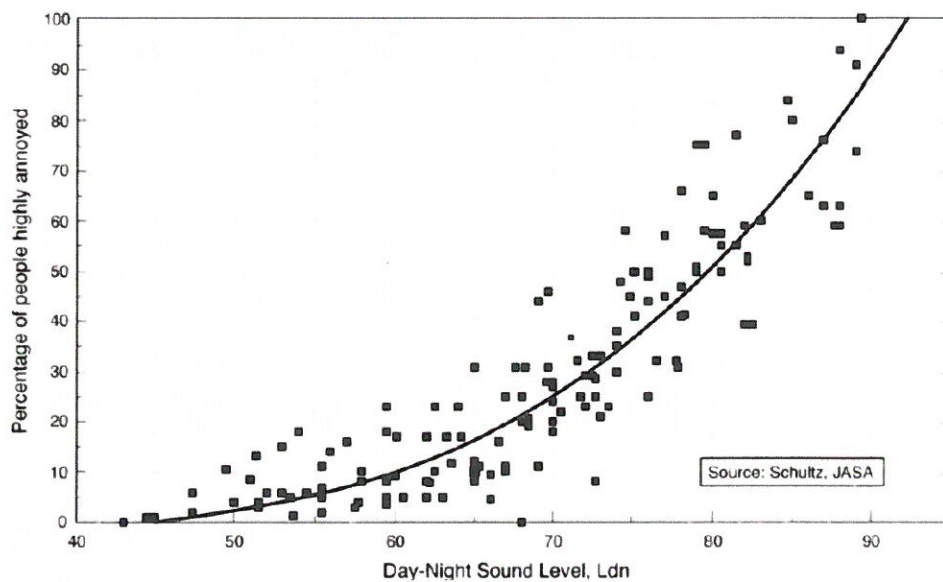
The logarithmic scale was developed by Alexander Graham Bell to provide a convenient means of describing the effects of sound pressure on the eardrum. While sound pressure is not logarithmic in

itself, the decibel system is used to conveniently describe the ratios of sound pressure relative to a reference pressure to keep the numbers in a practical range.

Please refer to Response to Comment P62-33 regarding the significance thresholds for evaluating increases in ambient conditions. It should be noted that the Proposed Project will be increasing noise relative to ambient noise levels, which is not comparable to the commenter's speculative scenario involving two lawn mowers added separately to the ambient noise.

The Draft EIR, Section 4.10 does not state that noise generated by the project would be inaudible. Rather, it concludes that the A-weighted increase in ambient noise levels resulting from the project would be less than significant relative to CEQA and locally-accepted thresholds. As noted previously, **perceptibility, audibility, and annoyance do not determine significance under CEQA. Annoyance is highly subjective and can vary widely from person to person.** The Draft EIR, Section 4.10 does not state that A-weighted sound level increases must be at least in the mid- to high-single digit range before it can be "readily" perceived. The specific text pertaining to this topic can be found on Draft EIR, Section 4.10.2. The author's statement that **"The report dismisses the possibility of meaningful single-event noise standards", is incorrect. According to the ANSI methodology, a single pass-by of a heavy truck during nighttime hours for which an interior SEL of 48 to 59 dB is registered within a sleeping room would result in a probability of awakening of 0.9 to 1.4 percent.** Please refer to the Master Response 22 Noise Analysis regarding sleep disturbance. As stated therein, the Proposed Project has been revised to limit truck deliveries and loading dock operations to the hours of 7:00 am to 10:00 pm (refer to Final EIR, Volume I, Section 1.3). Other than truck movements and loading dock operations, which will be limited to the hours stated above, operation of the Proposed Project would not produce "single-event" noise, but rather continuous operation of Plant equipment would be associated with increases in the ambient noise level. Ambient noise produced from the operation of on-site equipment (which is not considered single-event noise) was analyzed in the Final EIR, Volume II, Section 4.10, Impact 4.10-3, with Mitigation Measures 4.10-1, 4.10-2, and 4.10-3 reducing potential impacts to less-than-significant levels. Therefore, because the Proposed Project would be in compliance with City and County ambient noise standards, nighttime sleep disturbance is not expected to occur with operation of the Proposed Project. (pg 3-300)

Personal perceptivity and sensitivity to noise and resulting personal annoyance from noise are not relevant to CEQA significance criteria, but community perceptivity and sensitivity to noise and resulting community annoyance from noise most certainly are. In fact, data from surveys of annoyance levels in different communities exposed to varying 24-hour average levels of ambient noise (see figure below) are the basis of FTA's incremental noise impact criteria are commonly used in CEQA analysis.



FTA criteria should be universally used for transportation noise sources since the basis for their development is compelling. In contrast, other incremental criteria are unsupported by scientific evidence, particularly the criteria below recommended by Caltrans and cited by BAC on page 3 of the project noise technical report.

- *“Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dBA;*
- *“Outside such controlled conditions, the trained ear can detect changes of 2 dBA in normal environmental noise;*
- *“It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA;*
- *“A change in level of 5 dBA is a readily perceptible increase in noise level; and*
- *“A 10-dBA change is recognized as twice as loud as the original source.”*

The BAC response toward “single-event” noise still does not acknowledge the important effect of multiple occurrences on “single-event” noise impact severity. Even if the probability of sleep disruption at a residence by one nighttime truck pass is only 1.5%, if there are 10 truck pass-bys per night, the probability of the resident being awakened at least once that night is 14%, over 25% with 20 pass-bys, and higher with more. 1.5% awakening may seem small, but this is hard to maintain once the nightly awakening percent reaches double digits.

Response to Comment P77-4

The noise standards of significance were not arbitrarily chosen. Rather, they were applied consistent with the respective General Plan Noise Elements of both Siskiyou County and the City of Mt. Shasta. Please refer to Response to Comment P62-27, Master Response 21 Existing Noise and Noise Complaints, and Master Response 22 Noise Analysis.

The Draft EIR correctly interpreted the City's noise standards, where existing noise exceedance of the **thresholds are to be increased by 5 dB until the threshold encompasses the ambient noise measurement. As appropriate, the City's noise threshold was increased to encompass the ambient noise measurements in order to determine the significance** of the addition of project-related noise. (pg 3-300)

It is the City's policy to increase its noise exposure standard by 5 dB if existing noise levels at a receptor already exceed that threshold by a lesser amount. But it makes no sense to use this policy in CEQA analysis. The purpose of CEQA is to inform the public and protect it from adverse environmental impacts whenever possible. If the existing noise levels at a particular receptor near the GC plant exceeds the City standard by 1 dB, how can it be justifiable to say that a project noise source can increase the noise level by another 4 dB before it can be called significant in the CEQA analysis?

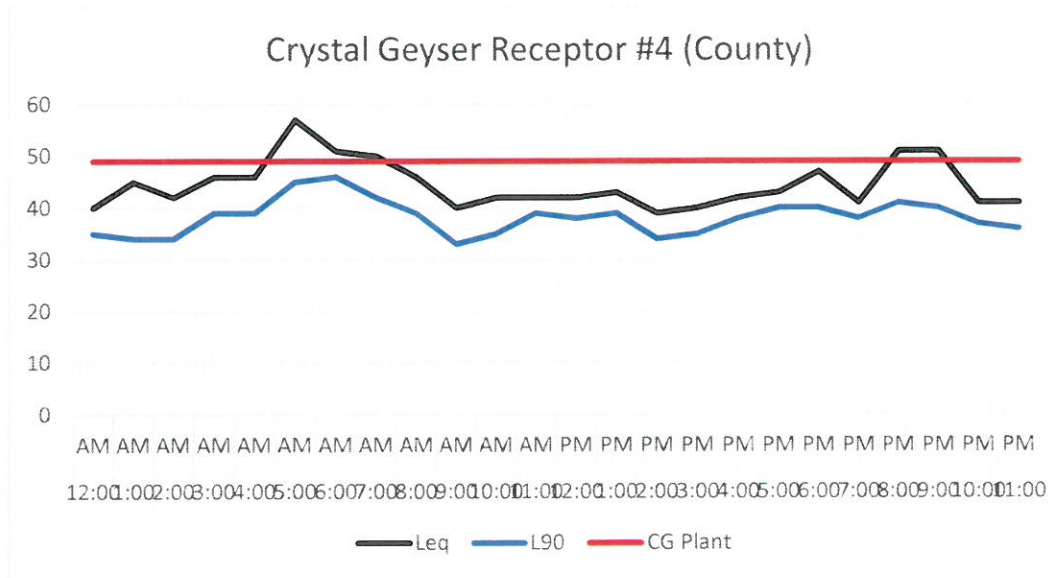
The FTA standards are more restrictive than the FICON standards. **However, there is no mandate to use one over the other and the FICON standards were selected based on the judgement of the noise consultant as being appropriate for the Proposed Project.** (pg 3-300)

There is an overarching CEQA mandate to inform and protect the public from adverse environmental impacts from new development. The FTA standards have by far the stronger scientific basis and greater support among regulatory agencies. They are more restrictive than the FICON standards and, therefore, are more protective from incremental noise from transportation sources.

The commenter's suggested revisions to the project's standards of significance deliberately ignore the adopted noise level standards of the Lead Agency, Siskiyou County. However, because the noise analysis did not solely rely only on the adopted noise standards for the project's significance criteria by utilizing the FICON recommendations, the noise standards applied to both jurisdictions effectively were very similar. Examination of project noise exposure predicted in the Final EIR, Volume II, Section 4.10, Table 4.10-12, as revised, reveals that **there would have been only a 1 dB exceedance of the City's daytime noise level standards if they had been applied to the County residences as well (Receiver 4)**. As a result, evaluation of impacts consistent with the commenter's recommendations would not have led to any appreciable additional findings of adverse noise impacts for this project. (pg 3-301)

It is inappropriate to apply Siskiyou County and City of Mount Shasta 24-hour average (Ldn) residential land use compatibility standards and the FICON incremental standards to industrial source noise coming from the CG plant (i.e., many rooftop vents, four boilers, HVAC equipment, two propane generators, an emergency generator, etc.). No industrial noise sources of this scale or complexity were on the project site or in its vicinity before the CG plant was proposed. The existing adjacent/nearby residents should not be subject to any audible intrusions of industrial source noise, particularly those that have potential for sleep disturbance during nighttime hours. This is best accomplished by assuring that CG plant noise levels at the surrounding residences be reduced to or below existing background levels (L90) by the installation of noise attenuation devices as necessary and/or limiting plant operation to daytime and early evening hours (i.e., 7 am to 10 pm). The graph below shows BAC ambient noise monitoring and estimates of CG plant noise impacts at a residential receptor (#4 in Figure 4.10-1 of the BAC technical report). During most hours of the day, the plant equipment would be clearly audible (i.e., the CG plant noise

level is substantially above ambient average and background levels during most hours of the day) and potential disruptive to sleep during nighttime and early morning hours in homes facing the CG plant with windows open (which may be necessary for comfort in homes without air conditioning during hot Summer periods).



Response to Comment P77-6

Please refer to Master Response 22 Noise Analysis and Response to Comment P77-1 regarding noise impacts from on-site equipment and sleep disturbance. The majority of the mechanical equipment to be utilized by the Proposed Project involves the transfer of heat with the environment in order to cool the plant processes, equipment, and workspaces. As a result, the heat transfer requirements of the equipment will vary depending on ambient temperature. Therefore, it will not be necessary to operate all of the plant equipment 24-hours per day, and it is likely that nighttime operations would require less equipment than daytime operations. Nonetheless, the analysis of noise impacts for this project assumed all equipment operating 24-hours per day.

The commenter’s assertion in this comment that “any project equipment operating at night must be inaudible to the nearby residents at all times to avoid sleep disturbance” is incorrect. **Many noise sources in the project vicinity are audible at night, including I-5 traffic, train operations on the UPRR line, and natural sounds. Audibility is not a test of significance under CEQA or the Siskiyou County and City of Mt. Shasta Noise Elements. Furthermore, the suggestion that average (Leq) plant noise generation should be compared against ambient L90 values is not supported either by industry convention or local noise policy.** (pg 3-301)

Noise from traffic on I-5 and other local streets, trains on the UPRR line and other “natural” sources currently affect the residents around the CG plant. And these sources (or most of them) were present long before the homes were built or the current residents lived in them. But the CG plant is not a “natural” source and its neighborhood was predominantly residential a long time previous to the plant’s construction. The case for audibility as a significance criterion applicable

to the CG plant's industrial source noise has been made above. It is not unusual for new industrial noise sources sited adjacent to residential areas to install noise attenuation features to avoid or remediate adverse impacts to their neighbors. The proper standard to determine the degree of attenuation needed is not some number set by City/County code, but the measured ambient noise levels particular to the specific residential uses affected by the intruding industrial noise.

Regarding CEQA Consultant's Master Response 22 Noise Analysis

(Note: Geoffrey Hornek's counter-response shown in red below with special emphasis to underlined portions of the Consultant's text)

Operational Equipment Noise Impacts: New significant impacts were identified associated with operation of the rooftop HVAC equipment and chillers (refer to detail under the subheading Supplemental Noise Testing of Mechanical Equipment and Revised Noise Analysis below). The previously proposed Mitigation Measure 4.10-1 from the Draft EIR related to operation of the propane generators has been revised based on the updated noise analysis, including the relocation of the proposed propane generators and revised generator specifications identified in Final EIR, Volume III, Appendix X, Attachment 5. New Mitigation Measures 4.10-2 and 4.10-3 have been proposed within the Final EIR to reduce operational noise by installing sound barriers or low-dB producing exhaust fans on the Plant building rooftop HVAC equipment, and installing in-line duct silencers at exhaust vents on the east side of the Plant building. These measures will sufficiently reduce operational noise to less-than-significant levels; therefore the conclusion that noise impacts related to operational activities at the Plant would less-than-significant with mitigation provided in the Draft EIR remains accurate. (pg 3-46)

The County/City average standards and the FICON incremental standards used in the project noise analysis are insufficient to guarantee that the sound barriers, duct silencers, etc. proposed to reduce plant noise impacts to surrounding homes would assure the tranquility of their residents during nighttime hours. The plant noise modeling needs to be extended to consider plant hourly impacts over the course of a full day and to evaluate noise reduction features to assure that plant impacts would be substantially below ambient during nighttime hours.

City and County Noise Standards

It is understood that compliance with a General Plan policy does not conclusively establish there are no significant noise impacts. CEQA guidelines not only require compliance with the adopted noise standards of a particular jurisdiction, but also require that impacts be identified if the project would result in substantial temporary or permanent increases in ambient noise levels relative to noise levels present without the project. The noise analysis prepared for the Proposed Project addressed both locally adopted standards as well as the CEQA guidelines.

Both the City of Mt. Shasta and Siskiyou County noise standards are provided in terms of averages. Siskiyou County utilizes weighted 24-hour averages described in terms of Ldn, while the City of Mt. Shasta utilizes hourly averages (Leq) to define acceptable noise exposure. The CEQA guidelines require the consideration of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. As a result, the Draft EIR analysis appropriately evaluated both existing ambient conditions and the noise-generation of the project in terms of average sound levels. (pg 3-46)

The project noise analysis has failed to comply with the CEQA mandate to identify all substantial noise impacts from CG plant equipment that could affect the surrounding residents. This is because the standards used only consider the plant's 24-hour average or daytime/nighttime average levels, and not hourly (or shorter period) Leq or L90 during the nighttime periods when most people sleep.

Removal of Nighttime Trucks. The second change is the removal of nighttime truck trips and redistribution of trips to daytime hours (7:00 am to 10:00 pm; please refer to Master Response 9 Hours of Operation). This limitation would extend to the use of all other on-site mobile equipment utilizing backup warning devices (backup beepers), and all on-site truck circulation at the loading dock area and usage of the private access route. This change results in a much lower computed day/night average level (Ldn) for the project. (pg 3-51)

Bravo! The single best thing that could be done to assure that noise from nighttime truck movement, loading dock activity, and backup beepers will not affect the residential neighbors. Now do the same for noise from plant stationary sources by requiring sufficient noise reduction measures for the plant equipment to assure that their nighttime noise impacts will not disturb sleep of the residents.

New Ambient Noise Measurement Results. The third change is the inclusion of railroad noise as part of the baseline ambient noise levels. In the Draft EIR analysis, changes in traffic noise levels were evaluated strictly by comparing predicted traffic noise levels for baseline conditions against traffic noise exposure which would occur with the project, without including existing railroad noise as part of the baseline. In response to comments received on the Draft EIR, railroad noise levels were monitored and those levels are included in the updated evaluation of the environmental setting. Where the Draft EIR analysis previously identified baseline noise levels as being 65-66 dB Ldn /Leq at the nearest residence to Mount Shasta Boulevard, the supplemental noise monitoring results indicate that, with consideration of the effects of railroad noise exposure on existing ambient conditions, the true baseline noise exposure at those nearest residences are 78 dB Ldn and 71 dB Leq. When the predicted project-generated traffic noise exposure is added to these ambient conditions, the increase in ambient noise levels resulting from the project is negligible; well below the thresholds of significance. As a result, previously identified significant traffic noise impacts would now be considered less than significant. (pg 3-51)

It has already been explained above why the FICON incremental noise standards used in the project noise analysis are not sufficiently protective. Had the more stringent FTA incremental standards been used, the project traffic noise impacts at the residential receptors closest to the railroad line would have been significant because of their high existing noise exposure. At this level, FTA includes no tolerance for further increases without labeling the impact significant.

Regarding the *Updated Environmental Noise & Vibration Assessment Crystal Geyser Bottling Plant EIR* (BAC August 7, 2017) (Appendix T) - Beginning on Page 35 of the BAC report

(Geoffrey Hornek's counter-response shown in red below with special emphasis to underlined portions of the Consultant's text)

Mitigation for Impact 2:

Although the 1-4 dB exceedances of the project's standards of significance are relatively minor, a 5 dB decrease in rooftop exhaust vent fan noise levels and a 10 dB decrease in sound output from the blow molder chiller exhaust vents would be required to ensure that project plus ambient conditions do not exceed the applicable noise standards of significance. The following noise mitigation options should be employed to reduce overall project noise generation to a state of compliance with the project standards of significance:

These 1-4 dB exceedances are not relatively minor. The City/County noise standards and the FICON incremental significance thresholds are either 24-hour averages or long-term averages over all daytime/nighttime hours. A noise source that increases a 24-hour average ambient noise level by 3 dB would broadcast as much acoustical energy as from all the existing noise sources. Even a 1 dB increase in 24-hour levels represents a potentially substantial impact to local sensitive receptors that may require mitigation. BAC needs to redo their modeling of CG plant noise levels at local residential receptors, this time determining the impact severity at each receptor relative to existing average hourly and background levels (L90) over the course of a full day and mitigate plant noise so that it is substantially below ambient levels during the quietest nighttime hours.

MM 2A: Replacement of Existing Rooftop Exhaust Vent Fans with Quieter Models. Noise level data collected by BAC staff on the roof of the CG facility indicate that the existing exhaust vent fans generate 53 dBA at a distance of 100 feet. **Replacing the 15 existing rooftop exhaust vent fans with models generating a sound level of 48 dBA at a reference distance of 100 feet** would reduce the noise impact associated with these fans to a level of insignificance.

OR

MM 2B: Construction of Localized Noise Barrier around Exhaust Vent Fans. **The existing exhaust vent fans located on the rooftop of the bottling building could be screened from view of the nearest receptors through the use of localized noise barriers around each of the 15 exhaust vent fans.** A noise

barrier provides approximately 5 dB of attenuation once it intercepts line of sight between the noise source and receiver. Therefore, provided the exhaust vent fans are shielded from view of Receptors 1, 2, 4 and 11 by localized noise barriers, noise generated by these fans would be reduced to less than significant levels at those receivers. To provide access to the fans for routine maintenance or replacement, the barriers could be constructed of pre-fabricated galvanized metal panels which could be temporarily removed as needed. Aside from being removable, an advantage of such barriers is they can also provide sound absorption on the interior side of the barrier, while providing sound transmission loss on the exterior side. Appendix H provides an example of such barriers.

AND

MM 2C: Installation of In-Line Duct Silencers for Blow Molder Chiller Exhaust Vents. Although the air inlet openings for the blow molder chiller equipment located near the east side of the CG building has been acoustically treated through use of sound absorbing louvers, it does not appear that the exhaust vents have been acoustically treated. As a result, **in-line silencers should be installed within the ductwork leading from the chiller equipment to the exhaust vents on the east side of the building. Silencers capable of reducing the sound output of these vents by 10 dB** would reduce chiller sound levels to acceptable limits. A company specializing in the specification of duct silencers should be consulted to ensure the proper silencers are selected to achieve the desired sound reduction without adversely affecting system performance.

AND

MM 2D: Selection of Quieter Generators. Manufacturer-provided sound level test data for the proposed generators (3 x Caterpillar G3412C LE – See Appendix I), indicates that, even with the proposed sound attenuation package, the combined mechanical, exhaust and radiator noise levels would be approximately 63 dB Leq at a distance of 100 feet from the three operating generators. To mitigate this impact to a level of insignificance, **additional sound controls could be applied to the proposed generators which result in levels 5 dB lower than the proposed generators**, or 58 dB Leq at a distance of 100 feet from the operating generators.

OR

MM 2E: Construction of Localized Noise Barrier around Generators. **The proposed propane generators to be located near the southeast corner of the bottling building could be screened from view of the Receptors 2 - 6 & 12 through the use of a localized noise barrier.** A noise barrier provides approximately 5 dB of attenuation once it intercepts line of sight between the noise source and receiver. Therefore, provided the proposed generators are shielded from view of Receptors 2 - 6 by such barriers, noise generated by the generators would theoretically be reduced to less than significant levels at those receivers. Nonetheless, to provide an additional margin of safety, it is recommended that the noise barrier extend three (3) feet above the height of the generators. To provide access to the generators for routine maintenance or replacement, the barriers could be constructed of pre-fabricated galvanized metal panels which could be temporarily removed as needed. Aside from being removable, an advantage of such barriers is they can also provide sound absorption on the interior side of the barrier, while providing sound transmission loss on the exterior side. Appendix H provides an example of such barriers.

Significance after Mitigation: Less than Significant

BAC needs to evaluate the need for additional noise attenuation to reflect the finding of the updated CG plant noise modeling. The mitigations need to be sufficient to reduce impact severity at each receptor relative to lowest existing nighttime average hourly and background levels (L90).

And that is all I have to say at this time.

Sincerely,

A handwritten signature in black ink, appearing to read 'Geoffrey H. Hornek', written in a cursive style.

Geoffrey H. Hornek