

June 22, 2016

Hiller West
Director, Island County Planning and Community Development
PO Box 5000
Coupeville, WA 98239-5000

Subject: MDNS for Real Ice, LLC (086/14 SPR, 087/14 VAR, 088/14 S-VAR, 089/14 SDP)

As a consultant, I conducted environmental noise studies for 20 years, so I acknowledge the challenges NBBB faces in its current location. As a neighbor for nearly 28 years, I generally support NBBB's request for on-site modifications to allow its business to be more competitive. However, I strongly object to any expansion of operating hours because the noise problem cannot be solved with a 26-foot high noise barrier covering a small fraction of the perimeter and the proposed noise condition is too lenient and too loosely worded to be effective.

While the facility may have been a boat builder in its early years, it is now capable of building ships and has done so a number of times. A larger vessel results in more noise because more people, tools, and equipment can be employed at the same time. Aside from a higher level of activity, a larger vessel means the activity occurs higher above ground. Many of the projects NBBB takes on result in work occurring much higher than the noise barriers, rendering them completely ineffective at reducing noise. This has been evident as NBBB constructs the ferry superstructures, which are elevated way above ground in the final weeks before launch. Virtually all the activity is higher than the noise walls, and the north end of the enclosure is wide open.

Although the existing and proposed noise walls are worthwhile for properties very near the facility where impacts are greatest, their benefits are limited. Noise barrier effectiveness is determined by the difference in path length between a direct line of sight and the path that goes over the wall. When either the noise source or the noise receiver is very close to the barrier, the path length is relatively large and the noise attenuation is significant. When either the noise source or the noise receiver is far from the barrier, the path length difference and noise attenuation are much reduced and the barrier is not effective. Consequently, the wall is not particularly effective for many of the sources of noise at the yard (even those at ground level) and for most residential receivers.

The NBBB Consolidated Permit Narrative (August 2015) refers to a December 2011 noise analysis and a March 2011 addendum conducted for NBBB by the Greenbusch Group. I am aware of the December 2010 and subsequent correspondence between NBBB and the County, and prepared a detailed analysis of the noise analyses in comments submitted on an earlier expansion proposal (my comments attached and incorporated by reference). Although the request for Sunday work has been dropped from NBBB proposal, most of the concerns I had with the noise analysis and conclusions remain.

That said, the Greenbusch report identified a number of noise reduction measures that were to ensure the increase in sound levels would not be considered a significant noise impact to the community. Many of the recommendations initially agreed to were subsequently abandoned, claiming infeasibility; these

measures included providing noise attenuation blankets or lead curtains on the enclosures (so they would be effective in reducing noise transmission), mufflers on cranes, and placing compressors in buildings.¹

Instead, NBBB offered use of localized barriers for noise activities, an offer that is virtually impossible for the County to enforce.² There was no further mention of the objective of reducing the increase in noise to levels that could be deemed a minimal impact to the neighborhood.

The concept of having an increase in noise that EPA would characterize as a minimal impact is also dropped from the current MDNS approval conditions. Now we're set back 10 years to the days when only compliance with the state noise code is required.³ This may be appropriate for a compliance test but is not appropriate for an analysis under SEPA that assesses noise impacts to residential areas. Island County should establish more specific neighborhood sound level limits such that the increase in sound levels is no greater than 5 dBA, as recommended by NBBB's consultant in 2010.

Island County should also further define what constitutes the non-production activities that are currently authorized between 7 a.m. and 8 a.m. and between 7 p.m. and 8 p.m.

Because Island County has no effective enforcement of state environmental noise limits or the county nuisance regulation, an approval condition requiring compliance with these regulations is meaningless. I ask that the County deny further expansion of operating hours until a new noise analysis presents technically feasible mitigation measures that ensure the increase in noise levels in residential areas is less than 5 dBA. Such measures must be enforceable, meaning they are physical modifications that do not depend on field measurements by county compliance staff.

Thank you for considering my comments.



Eric Hansen
5133 Bercot Road
Freeland, WA 98249

¹ NBBB claimed placing compressors in buildings would lead to dangerous levels of carbon monoxide in the building but it is very common to enclose engines in buildings and have the exhaust stack exit a roof or wall.

² For example, NBBB employed a portable vacuum system to collect grit during abrasive blasting of the last ferry superstructure. It was very loud (for the workers too, as acknowledged by NBBB workers I spoke with), and was the dominant noise source at my house for too many days. There was no barrier or any other noise mitigation measure applied to the vacuum system.

³ The proposed conditions also require compliance with the County's nuisance regulation but the Greenbusch report correctly acknowledges that established businesses are exempt from that code (9.60.30(b)(4)). Therefore, it's not clear whether this requirement would stand.