

BULLETIN

News from *SubTerra, Inc.*[®]

Blasting Analysis at Mats Mats Quarry Port Ludlow, Washington

*Mats Mats Quarry, near Port Ludlow, Washington, is one of the largest rock quarries in Jefferson County. Operations began during the 1930's; since then, many residences have been built in close proximity to the quarry, prompting the current owner to contract **SubTerra, Inc.** for an independent review of the quarry's blasting operations.*

SubTerra undertook an evaluation of current blasting practices at Mats Mats Quarry. This involved examining existing blast vibration records and reports, and conducting a blasting and vibration study that focused on:

- The potential for possible flyrock hazards and mitigation recommendations, as needed;
- Effects on local residents, their homes, and other structures;
- Possible effects on fish and wildlife;
- Blast related noise and ground vibration.

Based on the study, **SubTerra** offered a number of technical recommendations. Among these were the following:

- a. Continued monitoring by quarry personnel of all blasts at the site boundaries and at locations close to residences and other structures.



- b. Appropriate precautionary measures when lifters (sub-horizontal blast-holes for trimming horizontal surfaces) are used.
- c. Precautions such as blast mats (to minimize fly-rock) for certain blast configurations.
- d. A safety threshold for peak particle velocities due to the proximity of residential homes.

In addition, **SubTerra** suggested that quarry representatives actively participate in open houses and community meetings.

Restructuring of current blasting practices as suggested by **SubTerra**, along with the recommended increased community involvement, has positively influenced the Mats Mats Quarry operation.