

AGENDA

Alpine Meadows Community Advisory Group on Gazex

Wednesday, December 5, 2018

Squaw Valley Public Services District Board Room, 5:30-7:30 pm

1.) Opening Remarks- Placer County

a. Meeting Purpose

- i. Convene, get to know each other, talk about decision making, and processes with the group. We are also here to discuss the monitoring process/system. Feel free to interrupt and make comments/questions. This is conversational. We're discussing the monitoring proposal and the notifications, communications, etc. Ideally at this meeting we will identify desired outcomes.

b. Advisory Group Purpose

- i. We are here to be conduits (voices/ears) for our communities. This group is not a publically authorized or Brown Act committee. It is ad hoc for the topic of the Gazex alone. It is not technically public. Public comment should come through us (the advisory committee), this is not a formal committee.

c. Ground rules

- i. Speak your peace. Consensus building approach.

2.) Monitoring Program

a. Consultant approach-

- i. Leigh Chavez, Environmental coordinator. We had a number of people who wanted to be involved in the RFP process, however, we wanted to find a solution that allowed us to act quickly. The talked to 3 different firms. Paul Bollard was chosen (<http://www.bacnoise.com/>). He has been in business since 1987. Good at conveying technical information to lay people. Good at data collection, analysis, and peer review. We will also use Jim Brennan's firm in Truckee to perform a peer review. All firms would provide comparable data.

1. Q: Does TAS have any data they can share?

b. Consultant introduction and Scope of Work- Paul Bollard

- i. Paul has watched some YouTube videos to become familiar with the Gazex. The idea is that we start with 5 testing sites. We may have issues with equipment due to weather, so 5 is a good number. There will also be a vibration transducer. The db mic will also measure pressurization. Continuous wave file recordings. SVAM will provide information to Bollard so that Paul knows when the Gazex will fired. A tech will be sent into the field to obtain data thereafter. Any extraneous variables will be limited. They are ready to get in the field next week. As soon as we have

statistically relevant data, they can begin an analysis. They will determine that they've tested enough. More data is better. Noise and vibration, over a long period of time. And be prepared to be flexible. Accessibility is important for choosing the sites. Choice of different terrain will be taken into consideration.

c. Feedback/discussion- Group (ANSWERS IN BOLD)

- i. Does Squaw have a preference for where we place the receptors? Red, blue, or white zones? **No.**
- ii. Is there a way to factor in the response to structures? The shaking of the homes? Can we compare sound signatures of hand charges, howitzers, compare to traditional means of avalanche control? Does Paul have experience with this? **Yes, SVAM has some data on hand charges. The transducer in the ground will monitor ground vibration, but not home vibration. TBD on structural response. Paul does not have experience with Gazex. No one has experience with Gazex. There are 2 types of vibration. Ground born, and air pressure and the impact. A microphone will capture the over pressurization.**
- iii. Are 5 receptors sufficient? **5 is appropriate to start. If we have issues we will bring in others as well. We want to collect as much data as we can. There is strictly acoustical data of the howitzer and hand charges, that was done for the base to base. If you want your own monitor, you can get a type 2 instrument. Will Paul be able to correlate this data with atmospheric monitoring, for example, the weather, the snow depth, etc. The data will be collected on a weekly basis.**
- iv. Will a year be enough to get sample size? **The tighter the data set, the more confidence we can have. But if we have wide spread, then we need to get a handle on it.**
- v. Can Squaw tamp it down? How does it impact avalanche control? **Ron is looking into this. This is not something that has been easy to get information on. Ultimately, the question was, can we change the force of the Gazex. There are 2 settings: 1 at the device that sets the mix of propane and oxygen; and 2, is the software that drives how long the Gazex fills with gas. He wants us to know, that was hard. It's a time adjustment, that makes the pipe filling with gas shorter. This makes it possible that you won't trigger a slide and it could cause harm to patrol or personnel. They were able to successfully fire the Gazex with different fill times. Standard fill time is 13 seconds. They were able to fire it as low as 4 seconds. They're optimistic that a lower fill will still meet the goal. They registered 110 db @13 seconds, and 94 decibels @ 4 seconds. Ron and Casey tested it, and they felt like it was fine, it was encouraging. The software automatically records the fill time for the blast—so they can share that with Paul. 30 minutes of 110 decibels would be damaging according to OSHA. Different damage to structures, versus annoying levels. Last year there were 30 gazex "missions" across**

the year, mostly in March. But that was a drought. The most recent 4 have not been tested yet for operational use. They will likely be tested in the next week or so, a representative from TAS needs to be on site.

- 3.) Operations (includes group discussion on each topic)
 - a. Notification system- Squaw/Alpine and Placer County
 - i. The county has a notification system, called everbridge that is run through Placeralert.org, you can get email, phone, or text alerts. This is the emergency system. They are going to work with Squaw in the event the Gazex notification system will be used. Casey is learning more about everbridge. It has 2 types of information: emergency (a reverse 911 that will only go through for fire, avalanche, etc), what we're talking about is a placer alert system. It is an opt-in system. They can outreach to you through this system. It can email you, text, you, whatever. **BUT IT IS OPT IN. And there is no Gazex box to check.** We can create such a page, so we can get notifications. The warning could come a day before, or moments before. There is a service called dial-my-calls which will allow us to give SVAM our information and we can use this independent of placer county. This might be a stop gap measure while Placer Alert gets up to speed. They have tried to create positive contact with residents. Placer County can geo-fence to the residents. So, we should use the Placer Alert system.
 - ii. How do we gather a list of email address and phone numbers to provide to Squaw.
 - iii. We need to outreach to the HOAs to encourage people to sign up for placer alert and they will be geo-fenced
 - iv. The name of the system shouldn't be Gazex, it should be Alpine Meadows Avalanche Road Mitigation
 - b. Gazex equipment adjustability- Squaw/Alpine
 - i. See above notes on successful shortened fill times
 - c. Operations timeframe- Peter Kraatz
 - i. Operations will match what the traditional Squaw use operations has been. County code is 7am to 10pm, SVAM will run control from 6am-6pm which has been the traditional timeframe for running those operations. There is a possibility operations could run earlier or at night.
 - d. Bear Creek Association EVA Road- Squaw/Alpine: emergency access through the gate? Is this possible? Bruce Olson says he's going to talk to the board.
 - e. Vandalism- Squaw/Alpine: there was an episode of vandalism on the gazex.
- 4.) Wrap Up (Agreed-to Actions) and Next Steps
 - a. Get out email to send people to sign up for the Placer Alert.
 - b. Squaw is going to follow up with bear creek about access through the EV
 - c. Committed to conference call after first round of data
 - d. Follow up with OES on getting an alert system in place that is geo-
 - e. Ensure people give the data recording devices a wide berth

- f. Report on the data of the number of times that it has slid across the road
- g. What's the big picture? ...