



November 16, 2021

Clayton, CA - On Thursday, November 11<sup>th</sup> at approximately 12:40 pm an unanticipated result from a regularly scheduled blast affected the clayton community around our quarry operations. We understand the concerns from the community. CEMEX's top priority is the safety and wellbeing of our neighbors, our employees and visitors, and broader communities like Clayton and Concord.

What happened. The CEMEX Clayton Quarry provides a unique benefit to the region. At the quarry we mine hard rock material. Controlled blasting increments are used to break up and displace the rock so that it can be processed. The controlled blasting or detonation displacement of quarry material is managed and performed by a professional, licensed, third-party company with expertise in explosives and placement, and heavily regulated by the federal, state and county agencies. Each controlled blasting event is monitored and recorded also by a professional, licensed, third-party company to ensure all proper procedures are followed in accordance with the law and within the parameters of our permits. Dynamite is not used, nor has it been used in decades, rather a commonly used blasting agent for dry conditions called ammonia nitrate and fuel oil (ANFO) is utilized in this process. Each section of the quarry identified for displacement is engineered for safety, efficiency, and quality and taken with the utmost care in preparation. A standard section of the quarry slated for displacement, on average, is less than a quarter of an acre with the total detonation lasting less than 2-3 seconds in time. The CEMEX quarry performs a blast 2-3 times per month and is driven by market demand so this timing can vary. Additionally, CEMEX has invested in dust monitors that are reviewed regularly by our environmental team and the BAAQMD as an extra measure of compliance.

The event on November 11<sup>th</sup> was prepared with the same care as we do for every controlled event and in fact had a smaller pattern than blast events in the past. However, once the detonation commenced, the contracted company and our operations staff immediately concluded something was irregular and took direct action to investigate what occurred and how this event was different. There were a few factors that aligned to create the louder than normal sound and shaking the community experienced on that day.

- The information compiled by Alpha Explosives confirms that there were irregularities in the rock formations that were undetectable during preparation of the detonation "there was an unnoticed seam that blew out, causing excessive noise." Meaning there was an unforeseen seam in the geologic formation or a void space that was not detected in the preparation of the drilled pattern. Once the detonation occurred, energy exited the seam creating over-pressure that moved through the air that could be physically felt, similar to a boom of thunder following a lightning strike.
- What occurred on the 11<sup>th</sup> was an anomaly. In extremely rare instances there can be a seam in the geologic formation that can go undetected when preparing a blast. CEMEX has been blasting in this particular area since January 2021 with no incident. As many in the local community have communicated to us, this quarry has been in operation for many years and there never has been a similar incident.
- The area where the blast occurred is located above the visual/acoustic barrier of the East Rim which otherwise attenuates (blocks) the air pressure waves from the site.



To prevent a similar event from occurring in the future, we have developed the following process to be put in place:

1. We will continue to work with the same level of diligence with our third-party contractors to identify any irregularities in the geology prior to drilling and blasting.
2. As the quarry progresses lower into the pit, the east rim should provide more containment of the air waves and minimize sound.
3. We will avoid where possible blasting activities on holidays and low cloud-cover days.

We have received numerous inquiries from community members and city and county officials about this event. Our team is collaboratively working with them and we want to ensure the community that CEMEX is taking the concerns of the public very seriously. There were no safety protocols compromised during this event nor were there any injuries. The safety and wellbeing of our employees and community will continue to be CEMEX's priority.

We appreciate and value our neighbors and the communities in which we serve. We hope this memo has provided answers to the many questions we have received regarding this incident. We do apologize for the concerns or inconveniences this incident may have caused. Please feel free to contact me for any additional question you may have regarding our facility. Additional contact information below.

Sincerely,

A handwritten signature in black ink, appearing to read "Debbie Wells", set against a light blue rectangular background.

Debbie Wells  
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