



#### San Francisco Bay Regional Water Quality Control Board

March 15, 2019 WDID No. 2 43I006687 (MRF)

Stevens Creek Quarry Inc.
Attn.: Jason Voss
12100 Stevens Canyon Road
Cupertino, CA 95014
Sent electronically to jvoss@scqinc.com

Subject: Report of December 7, 2018, Inspection and Notice of Violations of the

Industrial Stormwater General Permit and Technical Report Requirement, Stevens Creek Quarry, Inc., 12100 Stevens Canyon Road, Cupertino, Santa

**Clara County** 

Dear Mr. Voss:

On December 7, 2018, Water Board staff inspected the subject site (Quarry) and found violations of the Industrial Stormwater General Permit (Permit). Though numerous improvements and modifications had been recently implemented at the Quarry, staff observed violations of the following Permit sections, as discussed in the attached inspection report:

- Good Housekeeping (section X.H.1.a)
- Material Handling and Waste Management (section X.H.1.d)
- Erosion and Sediment Controls (section X.H.1.e)
- Monitoring Implementation Plan (section X.I)
- Monitoring (section XI.B)

The Quarry must improve management practices and monitoring plans to correct Permit violations and amend the Quarry's SWPPP as appropriate.

In addition, the Quarry must submit a standalone, comprehensive plan, acceptable to the Executive Officer, for removing total suspended solids (TSS) and related pollutants using measures located outside of waters of the U.S. and waters of the State, as required by the May 30, 2017, Notice of Violation and Technical Report Requirement. The plan must include an

DR. TERRY F. YOUNG, CHAIR | MICHAEL MONTGOMERY, EXECUTIVE OFFICER



<sup>&</sup>lt;sup>1</sup> General Permit for Storm Water Discharges Associated with Industrial Activities, State Water Board Order No. 2014-0057-DWQ, NPDES Permit No. CAS000001, as amended.

overall facility design plan, descriptions and designs of individual components of the plan, and the dates that the components were implemented or are scheduled to be implemented. The plan must expand on the Level 2 Exceedance Response Action (ERA) Action Plan for TSS by addressing the comments provided below.

To avoid continuing violations and risk of increasing penalties, the Quarry should take immediate steps to comply with the Permit and Technical Report Requirement.

#### **Comments on Level 2 ERA Action Plan for TSS**

On December 31, 2018, the Quarry submitted a Level 2 ERA Action Plan for TSS (Level 2 Action Plan) that was required to comply with the Permit. The Level 2 Action Plan includes additional minimum BMPs and advanced BMPs targeted at reducing TSS. As noted above, the Quarry remains required to submit a comprehensive plan to remove TSS and other pollutants using measures located outside waters of the U.S. and waters of the State. The Action Plan does not satisfy that requirement.

Several facility modifications were made to the drainage areas on the Upper Quarry Floor to reduce stormwater discharge at the current Outfall No. 1. Sediment Pond No. 5 was expanded through removal of accumulated sediment, and the volume was compared to the volume of runoff produced from an 85<sup>th</sup> percentile 24-hour storm event. In addition, a permanent floating 300 gallon per minute well pump was installed in Sediment Pond No. 5 to pump water to the Pit Pond, which was stated to have the capacity to infiltrate all runoff without discharging. However, the expected TSS removal rate in Sediment Pond No. 5 was not presented, the capacity of the Pit Pond was not discussed (and whether and how the capacity will change), and the total capacity of the ponds was not compared to the historical in-stream sediment ponds.

The Level 2 Action Plan also discusses a new settling pond on the Middle Quarry Floor, stating that the facility has contracted with Bay Area Geotechnical Group (BAGG) Engineering to design, engineer, and build the new settling pond. It states that the new settling pond will be designed to comply with design storm standards for volume-based BMPs, as specified in the Permit, which is containment of the 85<sup>th</sup> percentile 24-hour storm event based on local, historical rainfall records. While this is the minimum design standard required by the Permit, as noted above regarding Sediment Pond No. 5, expected TSS removal rates should be considered and the capacity should be compared to the historical in-stream sediment ponds. As we communicated during the December 7, 2018, inspection and in our email sent on December 21, 2018, a new settling pond may not be the best or only solution needed to manage the Quarry's stormwater. Thus, it is important that the full design is submitted and discussed in advance of implementation. Per your email on January 18, 2019, the Quarry planned to submit a geotechnical report by BAGG at the end of February 2019 that will include a recommendation on the proposed design and constructability considerations. We have not yet received it. We hope to discuss plans to implement solutions with you shortly, consistent with the Permit and addressing issues raised in the 2017 NOV.

Lastly, we consider the proposed additional BMPs on the Lower Quarry Floor to be required minimum BMPs (i.e., cleanout of check dams, reducing the driving speed of street sweepers, and using straw wattles around stockpiles). A more detailed explanation of the secondary

containment for Sediment Trap 3 pump is needed for us to comment. Moreover, additional measures are necessary as discussed in the attached inspection report and supported by the recent sampling results (The annual Numeric Action Level (NAL) of 100 mg/L for TSS was exceeded on December 17, 2018, and January 15, 2019, at all outfall locations on the Lower Quarry Floor. The instantaneous maximum NAL of 400 mg/L for TSS was exceeded on January 15, 2019, at Outfall Nos. 3, 4, and 6).

#### **Consequences for Not Correcting Violations**

The Quarry is in violation of the Permit and may be subject to a monetary penalty (administrative civil liability). Pursuant to California Water Code (Water Code) section 13385, the Water Board may impose civil liability of up to \$10,000 per day for each violation and up to \$10 per gallon discharged in excess of 1,000 gallons. Days of violation for penalty calculations may run from the date the violation was initially observed, and continue until there is a return to compliance with the Permit.

The Quarry is also in violation of the May 30, 2017, Notice of Violation and Technical Report Requirement pursuant to Water Code section 13267. Pursuant to Water Code section 13268, the Water Board may impose civil liability of up to \$1,000 per day for failure to submit timely and acceptable technical reports. Days of violation start with the date the report was due and continue until an acceptable report is received. This correspondence describes the specific issues that still need to be addressed.

When determining whether to pursue enforcement action for noncompliance, we consider how promptly corrective action is taken and the effectiveness of the correct measures.

If you have any questions regarding this letter, please contact Michelle Rembaum-Fox at (510) 622-2387 or by email to michelle.rembaum@waterboards.ca.gov.

Please respond by email to let us know that you received this correspondence.

Sincerely,

Keith H. Lichten, Chief Watershed Management Division

Attachment: December 7, 2018, Inspection Report

Cc (via email): Lisa Horowitz McCann, <u>Lisa.McCann@waterboards.ca.gov</u>

Michelle Rembaum-Fox, Michelle.Rembaum@waterboards.ca.gov

Maggie Monahan, Margaret.Monahan@waterboards.ca.gov

Jack Gregg, <u>Jack.Gregg@waterboards.ca.gov</u>

Julie Macedo, Office of Enforcement, Julie.Macedo@waterboards.ca.gov

Steve Beams, County of Santa Clara, <a href="mailto:steve.beams@pln.sccgov.org">steve.beams@pln.sccgov.org</a>

### STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT

SITE INFORMATION							
2 431006687	Stevens Creek Quarry, Inc	1429 – Crushed stone 3272- Recycle material/concrete 4212- Trucking 1442- Sand					
WDID NUMBER	FACILITY NAME	SIC CODE AND CODE DESCRIPTION					
12100 Stevens Creek Quarry ADDRESS			Cupertino	95014 ZIP			
	perations Manager	408.253.2512 PHONE NUMBER	jvoss@scqinc.com				

INSPECTION LOGISTICS							
December 7, 2018	9:00 AM	1:30 PM	Clear/sunny	INSPECTION PRE- ANNOUNCED: YES	Michelle Rembaum-Fox Jack Gregg Maggie Monahan		
DATE	ARRIVAL TIME	DEPARTURE TIME	WEATHER CONDITIONS		INSPECTOR NAMES		

### **Facility Description and Operations**

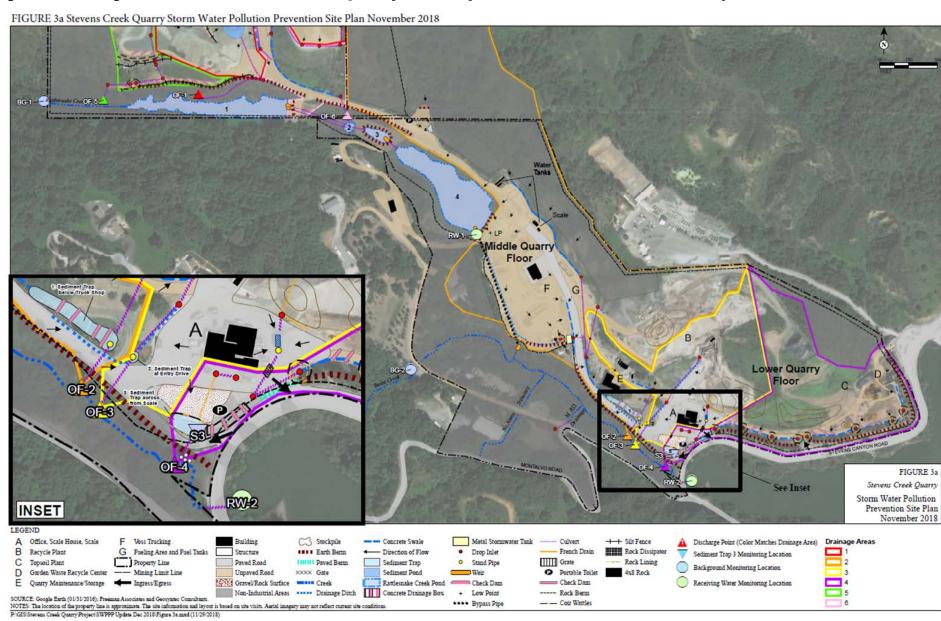
Stevens Creek Quarry (Quarry) is covered under the Industrial Stormwater General Permit (Permit). 
The 147.85-acre Quarry is an existing hillside mining operation located within the City of Cupertino. 
The Quarry includes several operations: a rock plant, sand plant, and topsoil plant; a recycling plant for broken asphalt and concrete, and trucking. Rattlesnake Creek and Swiss Creek merge within the facility and discharge to Stevens Creek Reservoir. As discussed in the facility's November 2018 stormwater pollution prevention plan (SWPPP), the Quarry operation has three levels: the Lower, Middle, and Upper Quarry Floors. The Quarry began accepting aggregate material in May 2018 for processing from Lehigh Permanente Quarry, which is located north of the facility.

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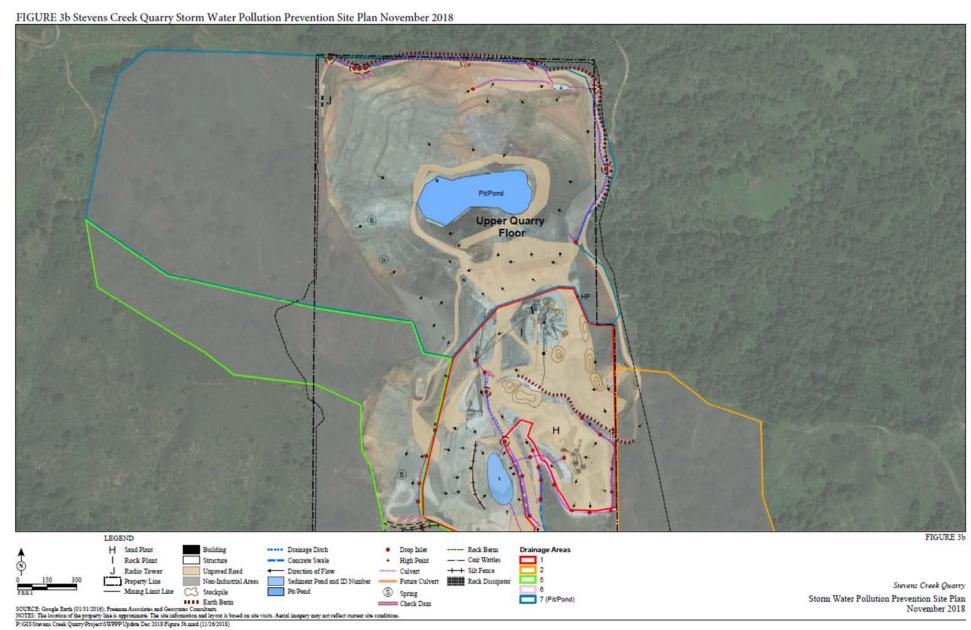
<sup>&</sup>lt;sup>1</sup> General Permit for Storm Water Discharges Associated with Industrial Activities, State Water Board Order No. 2014-0057-DWQ, NPDES Permit No. CAS000001, as amended.

### **Site Maps**

### Map 1 - Site Map of the Middle and Lower Quarry Floors (from November 2018 SWPPP)



### Map 2 - Site Map of the Upper Quarry Floor (from November 2018 SWPPP)



### STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT

# Areas Where We Observed SWPPP and Monitoring Implementation Plan Violations

Lower Quarry Floor (Topsoil Plant)
Lower & Middle Quarry Floors (Portable Toilets)

### **Required Corrective Actions**

#### 1. <u>Update SWPPP Best Management Practices (BMPs)</u>

Update the SWPPP BMPs to provide an effective combination of erosion and sediment controls in the Lower Quarry Floor. In the Lower Quarry Floor, Area C, staff observed lack of containment of the topsoil piles and the dirt road, which is an ongoing violation of Permit sections X.H.1.d, Material Handling and Waste Management, and X.H.1.e, Erosion and Sediment Controls. Staff also observed evidence of material being tracked offsite, a violation of Permit section X.H.1.a, Good Housekeeping. In the debriefing meeting after the December 7, 2018, inspection, the Quarry indicated that 9" wattles would be installed at the base of the topsoil piles along the road on the Lower Quarry Floor, Area C. This was completed on December 11, 2018. However, additional BMPs need to be implemented to protect the dirt road from eroding. In addition, appropriate site entrance and exit control BMPs must be installed to prevent sediment from being tracked into streets. See specific required corrective actions described in the Photo Log.

**Install secondary containment for all the portable toilets.** The portable toilets observed at the facility were not equipped with secondary containment to capture spills or leaks. Containment trays, as shown in "Sanitary/Septic Waste Management WM-9" CASQA Construction BMP Handbook, are a best practice and industry standard. Containment of industrial materials and wastes is a requirement of Permit section X.H.1.d, Material Handling and Waste Management.

#### 2. Update SWPPP Monitoring Implementation Plan

Update the SWPPP Monitoring Implementation Plan to reflect the full field sampling plan and team (Permit section X.I.1). Stormwater samples must be collected and analyzed from two qualifying storm events in the first half of the reporting year (July 1 to December 31) and two events from the second half of the reporting year (January 1 to June 30) (Permit section XI.B.2). All sampling results must be submitted to SMARTS within 30 days of obtaining the results (Permit section XI.B.11.a). In addition, our November 8, 2018, Water Code section 13267 Technical Report Order (November 2018 Order) requires additional monitoring information to evaluate the nature and extent of potential impacts to Rattlesnake Creek, Swiss Creek, and waters downstream from the Quarry. The SWPPP should reflect the full field sampling plan that is being implemented to comply with both the Permit and our November 2018 Order.

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#### 3. Submit Plan for Removal of Total Suspended Solids (TSS)

A written plan for alternate means of removing of TSS and related pollutants outside of waters of the U.S. and waters of the State is required by the May 30, 2017, Notice of Violation and Technical Report Requirement. Our inspection found that the Quarry has begun to construct measures intended to help accomplish this. However, the Quarry has not submitted a plan for our review demonstrating the measures are appropriately designed. In the debriefing meeting after the December 7, 2018, inspection, and in our email sent on December 21, 2018, we communicated that a written plan is required, including the current design work for a new settling pond on the Middle Quarry Floor. While this could have been fulfilled as part of updating the SWPPP, the complexity warrants that the plan be submitted as a standalone, comprehensive document, described further in the cover letter accompanying this inspection report.

### **Inspection Summary**

Water Board staff inspected the Quarry on December 7, 2018, to evaluate compliance with the Permit and preparations for the monitoring required by our November 2018 Order. We observed numerous facility improvements and modifications that had been implemented since our previous inspection on September 8, 2017, but we also observed violations of the Permit and found that the Quarry was not prepared to complete the Permit-required 2018-2019 stormwater monitoring and the additional monitoring requirements in our November 2018 Order. See Site Maps 1 and 2 for the locations of the areas discussed below.

### **Updated SWPPP and BMPs**

The Quarry's November 2018 SWPPP was an update of the entire document to utilize the CASQA SWPPP template and respond to our November 2018 Order. The November 2018 SWPPP includes detailed site maps that show drainage areas and BMPs implemented (see Site Maps 1 and 2).

Per the SWPPP, facility-wide soil and erosion control BMPs were implemented, including placement of straw wattles, clean-out of sediment in storm drain inlets, and build-up of the gravel check dams. We observed these BMPs in the Lower Quarry Floor (Photographs 1-3) and the Middle Quarry Floor (Photograph 4).

In the Lower Quarry Floor, Area C, we observed a lack of containment of the topsoil piles and a lack of effective erosion and sediment controls on the dirt road, which is an ongoing violation of Permit sections X.H.1.d, Material Handling and Waste Management, and X.H.1.e, Erosion and Sediment Controls (Photographs 3 and 5-6). We also observed evidence of material being tracked offsite, a violation of Permit section X.H.1.a, Good Housekeeping.

The portable toilets observed at the facility were not equipped with secondary containment measures to capture spills or leaks. Containment trays, as shown in "Sanitary/Septic Waste Management WM-9"

### STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT

CASQA Construction BMP Handbook, are a best practice and industry standard. Containment of industrial materials and wastes is a requirement of Permit section X.H.1.d, Material Handling and Waste Management.

#### **Modifications to Drainage Areas**

The Quarry modified the drainage areas in the Upper Quarry Floor area as described in the November 2018 SWPPP. We observed that maintenance work had been done on Sediment Pond No. 5 (Photograph 7) and a floating well pump was installed to pump water from Sediment Pond No. 5 to the Pit Pond in the Upper Quarry Floor (Photograph 8). Sediment Pond No. 5 is reported to have a capacity of 15 times the 85<sup>th</sup> percentile storm event (calculations provided in November 2018 SWPPP, Appendix F).

Sediment Pond No. 6, which had been used for runoff detention in the Upper Quarry, was no longer present, and the November 2018 SWPPP no longer shows that pond. We observed that the area north of former Sediment Pond No. 6 location and north of the Rock Plant had been regraded to direct all flow towards the Pit Pond (Photograph 8). We were told by Mr. Voss that drainage to the Pit Pond does not discharge offsite, and either infiltrates or evaporates. These changes decreased the areas draining to Outfall Nos. 1 and 5.

The slope that had failed and discharged sediment into Rattlesnake Creek in late 2017 was also significantly changed. A plan for stabilizing this area was never submitted, as required in the April 2, 2018, Notice of Violation and Technical Report Requirement, but work was completed prior to the 2018 rainy season and a draft geotechnical assessment was submitted on December 6, 2018 (currently under review). The slope that previously drained towards Sediment Pond No. 1 in Rattlesnake Creek had been mined and regraded to drain towards Sediment Pond No. 5. The area of slope failure between the lower road and Rattlesnake Creek had been stabilized with coconut jute mesh (Photographs 9-11). We did not observe rilling or gullying in the road above Sediment Pond No. 1 and sediment check dams were adequately maintained with no new sediment build-up above the dams. Photograph 12 shows the lower road above Sediment Pond No. 1 and a view of the orange slope beyond that previously drained towards Sediment Pond No. 1 and now drains to Sediment Pond No. 5. These changes appear to have significantly reduced the area that drains down the slope to Rattlesnake Creek and, in combination with the slope stabilization work, reduced the threat of future slope failures at this location.

We observed aggregate material piled against a quarry wall in the Upper Quarry areas (Photograph 13) that was pink-gray in color (distinct from the adjacent quarry wall) and that appeared to be one type of aggregate material, not a mixture of different rock types. Mr. Voss said that it was greenstone overburden recently mined at Lehigh Permanente Quarry and transported to Stevens Creek Quarry for processing and sale. He said that runoff from the area containing this material drains to Sediment Pond No. 5. He also said that the rock and sand processing area drains to Sediment Pond No. 5.

## STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT

### **Photo Log**



Photograph 1

<u>Notes:</u> Photograph of new BMP (pea gravel) placed along a portion of the dirt road.

Staff recommended that the pea gravel be extended along the full length of the dirt road to minimize sediment discharges into drop inlets (DIs) and tracking off-site. See required corrective actions needed in Photograph 3.



Photograph 2

<u>Notes</u>: Closeup of DI in Photograph 1 showing good BMPs in place around the DI.

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Photograph 3

Notes: Sediment discharging from topsoil piles and dirt road to stormwater conveyance ditch was observed. This stormwater conveyance ditch leads to Outfall No. 4 (We also observed this in our 9-8-17 inspection). No sediment control BMPs were along the bases of the topsoil piles. These discharges are likely to continue due to the lack of adequate erosion and sediment control BMPs. Sediment will continue to be subject to wind erosion, sloughing, and sheet flow across the road and into the ditch and DIs.

<u>Violation</u>: Lacking adequate erosion or sediment control BMPs to prevent buildup of sediment in the ditch and DIs, and subsequent discharge to the storm drain and receiving waters.

#### **Required Corrective Actions:**

Implement year-round erosion and sediment control BMPs for all erodible areas (including topsoil piles and dirt roads) to minimize sediment transport and/or dispersion by wind, track-out, and stormwater sheet flow. Keep unpaved dirt road capped and maintained with pea gravel (as shown in Photo 1, or other nonerosive material) to prevent sediment discharges into DIs (which discharge to Swiss Creek at OF-4) or sediment discharges via tracking off-site. Install site entrance and exit control BMPs to prevent sediment being tracked out into streets.



Photograph 4

<u>Notes:</u> No violations observed at the DIs and check dams along the road above Pond 1.

## STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT



Photograph 5

**Notes:** Photograph of active topsoil piles.

<u>Violation</u>: No erosion, sediment, or containment control BMPs. This was a violation noted in the previous inspection report.

#### **Required Corrective Action:**

Staff recommended that 1) the pea gravel located along a portion of the dirt road (as seen in Photo 1) should be extended along the full length of the dirt road to minimize sediment discharging into DIs and being tracked off-site. The unpaved dirt road continues to be a source of sediment discharges into the DIs (which discharge to Swiss Creek at Outfall No. 4 (see Site Map 1, OF-4); and 2) site entrance and exit control BMPs be installed to prevent sediment being tracked out onto streets.



Photograph 6

<u>Notes:</u> Staff observed rilling on topsoil piles. No erosion or sediment control BMPs were observed. This was a violation noted in the previous inspection report.

In response to our concerns, on December 11, 2018, the Quarry installed some 9" wattles along one edge of the topsoil piles.

## STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT



Photograph 7

<u>Notes:</u> We observed that Sediment Pond No. 5 (center foreground) had been deepened and that a floating pump (circle) had been added to the pond. Mr. Voss said that the pond was used to detain runoff from a portion of the Upper Quarry and that overflow from this pond would discharge at Outfall No. 1 to Rattlesnake Creek. Per the November 2018 SWPPP, the pond was cleaned out in the summer of 2018 and expanded to a capacity of 15 times the 85<sup>th</sup> percentile storm event. Mr. Voss said that the floating pump that was installed to pump water from this pond to the Pit Pond in the Upper Quarry Floor (Photograph 8). The aggregate processing area can be seen in the upper left of the photo and a pond previously used for sediment detention within Rattlesnake Creek (Sediment Pond No. 4) is visible beyond Sediment Pond No. 5 (arrow).

## STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT



Photograph 8

<u>Notes</u>: We observed the Pit Pond from the southwest rim of the main Upper Quarry Pit. Mr. Voss said that the Pit Pond does not discharge offsite and that the water retained infiltrates or evaporates. Staff did not observe a discharge outlet. The Upper Quarry Floor had been regraded to direct additional flow to this pond, decreasing the areas draining to Outfall Nos. 1 and 5.

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Photograph 9

Photograph 10

<u>Notes:</u> Photographs 9 and 10 show coconut jute netting and vegetation growth on the hill slope. The slope appeared to be stable.



Photograph 11

Notes: Closeup of coconut jute netting shown in Photographs 9 and 10.

## STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT



Photograph 12

<u>Notes:</u> The dirt road (lower left) is between the south side of the Upper Quarry area (above the road) and the former Sediment Pond No. 1 in Rattlesnake Creek (below the road and out of the photo). We observed that the road did not have rills or gullies and that the sediment check dams were well-maintained. The black storm drain inlet pipe (orange circle) is in the general area where stormwater and mud discharged down the slope, across the road and into Rattlesnake Creek in late 2017. The slope previously above the black pipe (orange arrow) was mined and regraded so that runoff above the pipe drains towards Sediment Pond No. 5 behind the foreground hill (black arrow).

## STEVENS CREEK QUARRY, CUPERTINO INSPECTION REPORT



Photograph 13

<u>Notes</u>: Aggregate material piled against the quarry wall (between orange brackets) was pink-gray in color (distinct from the quarry wall) and appeared to be one type of aggregate material, not a mixture of different rock types. Mr. Voss said that it was greenstone overburden transported from Lehigh Permanente Quarry to Stevens Creek Quarry for processing and sale. The loader was taking the material to the rock or sand plant for processing.